Exporting Agrarian Expertise

Development Aid at the Swedish University of Agricultural Sciences and Its Predecessors, 1950–2009

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Outer cover: The 1954/55 international FAO/Sweden course in animal reproduction visits Trolmen manor, Skaraborg County. Professor Nils Lagerlöf (fifth from right) and his students are hosted by the owner of Trolmen, Fredrik Wehtje (fourth from right).

Photo: Lars Drejare, from the collections of the Swedish Veterinary Museum

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Abstract

Agrarian expertise has been employed in the context of Swedish development aid since the 1950s. Throughout this time, the Swedish institutions of higher agrarian education—the Agricultural College, the College of Forestry, and the Veterinary College, in 1977 merged to form the Swedish University of Agricultural Sciences—have played important roles. In this dissertation I consider three problems with respect to these institutions' involvement in development aid: (1) How and why did actors at the three colleges begin framing their expertise in a development context? (2) How did Swedish agrarian experts approach the problem of development in contexts about which they had little prior knowledge? (3) How and why did a long-term institutional collaboration evolve between the agrarian institutions of higher learning and the Swedish development aid authorities, and what were its characteristics?

The study follows actors and their standpoints through three different aid projects: international courses in animal reproduction at the Veterinary College first planned and held in the mid-1950s; the planning and implementation of the Chilalo Agricultural Development Unit in the 1960s and 1970s; and SLU's support to higher forestry education in Ethiopia in the 1980s, 1990s, and 2000s. It also examines the growth and subsequent decline of a continuous institutional collaboration between the institutions of higher agrarian education and SIDA, the Swedish government agency responsible for development aid. Based on my findings, I argue that the framing of Swedish agrarian expertise as relevant to the developing countries—particularly at the Agricultural College in the 1960s—was part of a broader attempt to widen the scope of agrarian science in Sweden in response to social change at home. At the same time, the development strategies proposed by the Swedish experts were anchored in the particulars of the Swedish agrarian context. This made them attuned to the local adaptation of technologies and to the value of practical knowledge but less sensitive to the societal contexts and social effects of their interventions. Their attempts to bring their knowledge to bear on the developing world also helped create a long-lasting institutionalized relationship between SLU (and the three colleges before it) and the Swedish development aid authorities, through which SLU exercised influence on much of Sweden's agrarian development aid from the mid-1960s to the early 1990s.

Keywords: animal reproduction, Chilalo Agricultural Development Unit, development aid, Ethiopia, forestry education, India, rural development, Swedish University of Agricultural Sciences, technology transfer, Wondo Genet

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I have written this dissertation as part of a larger research project on the history of SLU, the Swedish University of Agricultural Sciences ("The Swedish University of Agricultural Sciences—in the Service of the Sector and of the Sciences"). My supervisor Per Lundin initiated this project, and his forthcoming book on SLU's development into a research university will make up the second half of its results. Project funding has been provided by SLU's vice-chancellor and faculties, and their generous support has been a precondition of its realization. This means the project has been sponsored and hosted by the organization that is also the object of its research. As project researchers, Per Lundin and I have, however, retained full responsibility for the selection and formulation of our research problems. To further safeguard our independence, the project also included a scientific reference group that we have been able to draw on. It was decided from the outset that the project should result in two book-length studies, each dealing with a clearly delimited and scientifically motivated problem. My dissertation on development aid at SLU is one of them; it will be complemented by Per Lundin's upcoming book.

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Acronyms

These are the most central organizational acronyms used in the text. For a full list, see appendix B.

AUA Alemaya University of Agriculture
CADU Chilalo Agricultural Development Unit

CHE Commission for Higher Education (Ethiopian

Ministry of Education)

EPID Extension and Project Implementation Department

(Ethiopian Ministry of Agriculture)

FAO Food and Agriculture Organization of the United

Nations

IRDC International Rural Development Center (SLU)

LANT Agricultural Division (SIDA)

NATUR Natural Resources Management Division (SIDA)
NIB Swedish Agency for International Assistance

NRCD-MD Natural Resources Conservation Development, Main

Department (Ethiopian Ministry of Agriculture)

SAREC Swedish Agency for Research Cooperation with

Developing Countries

SIDA Swedish International Development Authority

Sida Swedish International Development Cooperation

Agency

SLU / SUAS Swedish University of Agricultural Sciences

CHAPTER ONE

Introduction

IN AUGUST 1962, the Congress of the International Association of Agricultural Students was held at the Agricultural College of Sweden. Arne Björnberg, secretary-general of the newly founded Swedish Agency for International Assistance (Nämnden för internationellt bistånd, NIB), gave the opening address. Speaking about the risk of a global food crisis, something widely feared at the time, Björnberg stated that agricultural productivity would have to increase throughout the world. While he also suggested that population control would be a necessary part of any solution to the world's nutrition problems, his talk primarily called on current and future agricultural expertise to act. Dealing with the looming food crisis was in a sense, Björnberg argued, "the responsibility of all of us," but in particular, it was a problem to be solved by a certain group of specialists: "agronomists and agricultural experts of aidgiving and aid-receiving countries."

Western-trained and Western-funded agriculturalists and other agrarian experts did descend upon Africa, Latin America, and Asia in the years before and following Björnberg's speech. The most well-known instance is the large-scale application of plant breeding, fertilization, and irrigation knowledge and techniques that later became known as the Green Revolution. It brought mixed results. The new technologies and methods produced large, if uneven, yield increases, and global food production rose markedly. But social unrest often followed in the wake of increased production, and while growing harvests of wheat and rice made a number of hitherto food-importing states self-sufficient, rural poverty and hunger remained. New scientific and technological approaches to agricultural development were developed in response to these equivocal early results, but malnutrition and hardship are still common characteristics of rural life throughout many parts of the world.²

¹ Arne Björnberg, "Opening Address at the Congress of the International Association of Agricultural Students," p. 4, 4 August 1962, Swedish Agency for International Assistance archives, series FIII a, vol. 2, National Archives of Sweden (hereafter cited as NIB).

² There is a large body of literature that examines the Green Revolution and its effects. A fairly recent review, positive but with some qualifications, can be found in R. E. Evenson and D. Gollin, "Assessing the Impact of the Green Revolution, 1960 to 2000," *Science* 300, no. 5620 (2003). A very useful historical summary, which cites most if not all relevant literature, is Jonathan Harwood, *Europe's Green Revolution and Others Since: The Rise and Fall of Peasant-Friendly Plant Breeding* (Abingdon: Routledge, 2012), chapters 6–7. For an important work that directly

Conceptually, the notion of the Green *Revolution* suggests a radical break, indicating that, as John H. Perkins puts it, "a fundamentally new relationship" came to exist "between people and their major food plants." As the term tends to be applied specifically to postwar, science-driven interventions in developing-country agricultures, it also suggests that this radical break took place only after World War II. But both Perkins and, more explicitly, historian of science and technology Jonathan Harwood argue that the Green Revolution is better understood as part of a longer historical trajectory of agricultural technoscience, starting in the late nineteenth century and extending to the present. Harwood also contends that the green revolutionaries of the 1960s themselves were largely unaware of their history and accordingly set about reinventing approaches to and methods for agricultural change. Their solutions often proved less successful than those employed by an earlier generation of developers. In particular, they were much less peasant-friendly, and many smallholders found themselves worse off after the introduction of the new technologies.4

Harwood uses plant breeding (in Germany between 1870 and 1939) as his empirical case, but the historiographical insight that undergirds his argument has ramifications beyond this domain and the other techniques associated with the Green Revolution. His understanding in fact suggests that most of the history of postwar agrarian development aid can be seen as an integrated part of the longer history of the agricultural and forestry sciences.⁵ This makes the promotion of agricultural science and modern agricultural technology in new areas come across more as evolution than revolution, reflecting intrascientific continuities as well as discontinuities and changes.

This perspective informs the present dissertation. My aim is to contribute to the history of science- and technology-driven agrarian development, situated in the context of the history of agricultural, forestry, and veterinary science. More

addresses the Green Revolution's social effects, see Andrew Pearse, Seeds of Plenty, Seeds of Want: Social and Economic Implications of the Green Revolution (Oxford: Clarendon Press, 1980).

³ John H. Perkins, Geopolitics and the Green Revolution: Wheat, Genes and the Cold War (Oxford: Oxford University Press, 1997), v.

⁴ Jonathan Harwood, "Has the Green Revolution Been a Cumulative Learning Process?," *Third World Quarterly* 34, no. 3 (2013); Harwood, *Europe's Green Revolution*.

⁵ Agrarian development in this sense encompasses changes in agriculture and forestry technology broadly defined. I find Deborah Fitzgerald's broad, process-focused definition of agricultural technology useful: she suggests that "agricultural technology refers to the process of systematically cultivating plants and animals, including the economic, mechanical, human, scientific, and institutional forces that support such activity." Deborah Fitzgerald, "Beyond Tractors: The History of Technology in American Agriculture," *Technology and Culture* 32, no. 1 (1991): 115.

specifically, my purpose is to analyze why and how Swedish agrarian experts engaged in postwar development work abroad. The dissertation is thus not about the Green Revolution as such. Though two chapters deal with the Green Revolution's techniques, problems, and successes, it also considers other kinds of agrarian development, including in the fields of forestry and veterinary medicine, as conceived of and carried out by Swedish experts.

The study is organized around the central institutions for the agrarian sciences in postwar Sweden: the Agricultural College, the Veterinary College, and the College of Forestry, which later merged to form the present-day Swedish University of Agricultural Sciences (SLU). They all played prominent roles in Swedish development aid. As early as the mid-1950s, the Veterinary College became involved in an aid project supporting veterinary education in the developing world. The Agricultural College, where Björnberg gave his speech in 1962, became a crucial actor in Swedish agricultural development aid in the mid-1960s, supporting a major science-driven rural development project in Ethiopia as well as becoming an institutional consultant to the Swedish development aid authorities. The College of Forestry also began to engage in forestry development abroad shortly thereafter. The three colleges were thus not only key institutions for agrarian research and education in Sweden during the first postwar decades but also began to turn their attention to the developing world at an early stage.⁶ My study investigates how and why their leaders and scientists began to demonstrate an interest in applying their knowledge in new settings as well as some of the consequences of these applications.

Based on my findings, I will argue that the framing of Swedish agrarian expertise as relevant to the developing countries was part of a broader attempt to widen the scope of agrarian science in Sweden beyond the boundaries of its traditional role. At the same time, the development strategies proposed by the Swedish experts were anchored in the particulars of the Swedish agrarian context. This made them attuned to the local adaptation of technologies and to the value of practical knowledge but less sensitive to the societal contexts and social effects of their interventions. I will also argue that the long-lasting institutionalized relationship that developed between SLU (and the three colleges before it) and the Swedish development aid authorities came to undergird much of Swedish agrarian aid from the mid-1960s to the early 1990s. In parallel to, and sometimes in conflict with, this relationship, the experts at SLU also attempted to academize their contribution to development aid, and attempted to introduce academic studies in rural development at their university.

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⁶ As a point of reference, Sweden got its first official aid policy and first state agency for development aid in 1962, with volumes of aid beginning to increase distinctly after 1968.

Research Problems and Questions

The overarching objective of this dissertation is to understand how and why Swedish agrarian expertise engaged in postwar development aid. A central concept is thus expertise, which in its most general sense refers to specialized skill or knowledge. More specifically, I am concerned with how such specialized knowledge is connected to decision-making, authority, and control. This means I understand expertise not only as a specific way of knowing, but also as a means of exercising authority through knowledge. Sociologist Zygmunt Bauman has pointed out how such expert authority is based on the assumption that there are correct ways to solve social and technical problems but that the knowledge required to do so is unevenly distributed in society. Being recognized as an expert essentially means being acknowledged as having privileged access to the correct way to frame and solve problems within a particular domain. When exercising their authority, experts tend to act as mediators: they draw on this access to knowledge that they then apply to concrete problems.⁷

Modern expertise is closely linked to science and technology. Historians of science Joris Vandendriessche, Evert Peeters and Kaat Wils argue that, during the late nineteenth century, "the private and public institutions of technoscience transformed traditional expert crafts," and "expert performances became loaded with . . . scientific ideals." This process also made expert, technoscientific knowledge a cornerstone of the concept of societal development throughout the twentieth century, and this in turn made it central to the project of Western postwar nation-building as well as to development aid. In the words of political scientist Timothy Mitchell,

[f]rom the opening of the twentieth century to its close, the politics of national development and economic growth was a politics of techno-science, which claimed to bring the expertise of modern engineering, technology and social science to improve the defects of nature, to transform peasant agriculture, to repair the ills of society, and to fix the economy.⁹

It was thus no coincidence that Arne Björnberg singled out agronomists and agricultural experts as crucial groups in combating malnutrition when he spoke

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⁷ Zygmunt Bauman, *Modernity and the Holocaust* (Cambridge: Polity Press, 2000), 196. On experts as mediators, see Nico Stehr and Reiner Grundmann, *Experts: The Knowledge and Power of Expertise* (Abingdon: Routledge, 2011), 39–41.

⁸ Joris Vandendriessche, Evert Peeters, and Kaat Wils, "Introduction: Performing Expertise," in *Scientists' Expertise as Performance: Between State and Society, 1860–1960*, ed. Joris Vandendriessche, Evert Peeters, and Kaat Wils (London: Pickering & Chatto, 2015), 7.

⁹ Timothy Mitchell, *Rule of Experts: Egypt, Techno-Politics, Modernity* (Berkeley: University of California Press, 2002), 15.

at the Agricultural College in 1962. The general assumption that the colonies and new states could only be brought into the modern world through improvements, transformations, and repairs meant that various kinds of experts and expert organizations were afforded center stage. Modernity, the final objective of development aid, was inconceivable without them.

The expertise I study in this work is not of one kind but rather encompasses a variety of expertises tied to particular domains. Since they nonetheless had a lot in common, I group them together with the composite term agrarian expertise, in which agrarian refers to sectors of production directly tied to the use of biological resources. 10 For the purposes of this analysis, I exclude seabased activities such as fishing and comparatively minor pursuits like hunting and reindeer herding, and thus understand agrarian expertise as expertise in agriculture, including animal production, and forestry. While a wide range of people could conceivably lay claim to specialized knowledge in these fields, my concern is specifically with the scientific or technical experts who were seen as central to the projects of development and modernization. Accordingly, the vast majority of those employed as development experts in the contexts I study here were academics, familiar with the methods of the agrarian sciences and the principles of modern agrarian technology. If not college professors outright, they were at least trained as agronomists or agricultural managers, veterinarians, or academic foresters or forest engineers. Many came from rural backgrounds and perhaps still identified strongly with farmers or forest workers, but through their education they had tapped into specific forms of technoscientific expertise, held at and guarded by the institutions of higher agrarian education and research. It is such expertise and, by extension, the role of these institutions that I examine in the study.

Simply being a recognized expert or expert institution was not enough to secure a role in development aid. The application of expert knowledge always involves negotiations and struggles over the definition of knowledge objects. More concretely, specific expertise had to be established as valid and legitimate in the context of a development problem that decision-makers accepted as relevant and fundable. As I will discuss below, the relevance of agrarian and rural development was not always self-evident to major donor agencies and development thinkers during the first years of postwar development aid, and even after it became more accepted, there were—and still are—many conflicting views on what sort of agrarian development to stimulate

¹⁰ This is a definition grounded in a Swedish conceptualization, where these sectors of the economy are collectively known as *areella näringar*.

¹¹ See Vandendriessche, Peeters and Wils, "Performing Expertise," 1–4.

and how to best go about it. Those who wanted to play a role had to maneuver in relation to these views and to the norms of funding bodies.

In light of this, my first research problem considers questions of why and how actors at the three colleges under the Swedish Ministry of Agriculture began attempting to frame their expertise in the context of development aid. How did the Veterinary College, the Agricultural College, and the College of Forestry obtain roles in Swedish development aid? Who were the leading actors interested in such a role? Why were they interested? I will identify these actors and explain how they could formulate problems of development that were simultaneously congruent with their institutionalized expertise and convincing to funders and policymakers. Once firmly established, such problem formulations could also be used as a tool to further other organizational goals, and I will show how in particular the Agricultural College attempted to do so.

This leads naturally on to the question of how actors at the three colleges approached development problems and expertise. When the veterinary project began in 1954, and indeed still when experts from the Agricultural College began to work in Ethiopia a decade later, there was scarcely any experience of Asian or African agriculture at hand in Sweden. It is thus reasonable to assume that knowledge and experiences from Sweden were used as starting points and that Swedish experts tried to learn from other countries. More of an open question is *what* they were interested in learning, or more generally, how the involved experts related to the problem of putting knowledge to use in new surroundings.

My second research problem considers such questions of how the Swedish agrarian experts approached and related to the problem of development in different contexts. Did the involved actors problematize their lack of local knowledge, and if so, how? Which development strategies did they advocate? Why did they choose these strategies? How, and why, did this change over time? What effects did the strategies have when implemented? How did the experts react to these effects? I will approach these questions by studying three agrarian development projects. They were widely separated in time and space, but the strategies they were based on nonetheless expressed a common ideology of agrarian modernization, seemingly shared by most Swedish agrarian expertise active abroad over a period of at least four decades. Parts of it were common to Swedish development experts more generally, while other parts were rooted directly in agrarian conditions and experiences.

To some extent, Swedish agrarian experts could engage in development aid as individuals, chiefly by applying for expert positions at the United Nations (UN) or the national aid authorities. But the realization of more significant

development projects necessitated some sort of institutional cooperation with funders and policymakers. For Sweden, by far the most significant such partner was the Swedish International Development Authority (SIDA), the government agency chiefly responsible for Sweden's development aid.¹² All three colleges worked with SIDA and/or its predecessors, signing long-term agreements on institutional cooperation. This cooperation deepened further with the creation of SLU in 1977 and its International Rural Development Center (IRDC) in 1978, the latter being an organization created with the explicit purpose of facilitating SIDA's access to agrarian expertise.

This is the area of my third research problem, which considers the purpose, characteristics, and effects of this collaboration between experts at the agrarian university and the development aid authority. How and why was the long-term institutional collaboration created? What characterized it? Which activities did it enable and which did it constrain? How did it develop over time? I will make clear that this collaboration was on occasions unbalanced and the parties' goals at times divergent, sometimes explicitly so. Nonetheless, it was also characterized by considerable mutual trust. It shaped activities both at SLU and SIDA, and it served as a foundation for Swedish rural development aid for several decades before eventually disintegrating. Playing on a term introduced by historian of technology Mats Fridlund, I will label the cooperation a rural development pair.

These problems are relevant to several fields of historical scholarship. The dissertation contributes to the history of the Swedish agrarian sciences in general and to the history of their application in development aid in particular. As it studies institutions of higher education as development aid agents, it also contributes to Swedish university history. Furthermore, it adds to our knowledge of the history of Swedish development aid, especially of the continuities and discontinuities (in the agrarian sector) between the domestic context and the foreign aid context. But there is also some relevance beyond the scope of historical research. Many of the topics and tension points of the history presented here are still being discussed and contested. This means that many questions which the historical actors I study asked themselves, such as how to best support the development of peasant agriculture, or which skills to impart to would-be agrarian experts in developing countries, are still being posed by their present-day counterparts. Examining the historical answers and

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¹² SIDA was created in 1965 to replace the short-lived NIB. Later, several other government agencies were also created to take responsibility for particular tasks within the overall framework of Swedish development aid. Most central to the topic at hand is the Swedish Agency for Research Cooperation with Developing Countries (SAREC), which was first created in 1975 and became a government agency in its own right in 1979.

some of their consequences should thus be interesting not just to other historians but also to today's policymakers at Sida¹³ and other aid agencies. It should also interest those at SLU presently engaged in development cooperation in theory and practice.

The Geopolitics of Development Aid

Development is a complex concept with multiple meanings and connotations. ¹⁴ In the contexts of relevance for the present study, it refers broadly to a process of socioeconomic change in the form of modernization (in itself understood in various ways and not always explicitly conceptualized as such). Such change is something people do, be they technical experts, state officials, or peasants, and engaging in development aid amounted to engaging in activities intended to facilitate actions that would lead to development. To most of the actors I study, this was—either self-evidently or with some degree of reservation—seen as something positive. In parallel with the practice of development, there has also developed a large number of studies that criticize the notion and its associated activities. ¹⁵ To me, the concept is not an analytical category as such, and I remain agnostic about its valuation: as will become clear, I consider the instances of development aid that I study to have had both positive and negative consequences.

International development assistance in the sense of support to what would-be developers envision as positive social change long predates this study's start in 1950. Examples abound of earlier economic development projects (although not always labeled as such) in the West and in the colonies, linked both to states and to mission societies. High-ranking colonial administrators often advocated investment and development, such as British colonial secretary Joseph Chamberlain and his policy of constructive imperialism, or his interwar French counterpart Albert Saurat's plan for the mise en valeur of the French empire. In the African colonies, the Great Depression ushered in what historian of science Christophe Bonneuil calls

¹³ In 1995, SAREC and a number of other public aid organizations were merged into SIDA, which changed its name to the Swedish International Development Cooperation Agency and its acronym to the lowercase Sida.

¹⁴ For a review of various understandings of the concept with a focus on the postwar period, see H. W. Arndt, *Economic Development: The History of an Idea* (Chicago: University of Chicago Press, 1987).

¹⁵ See e.g. Arturo Escobar, *Encountering Development: The Making and Unmaking of the Third World* (Princeton: Princeton University Press, 2012); Gilbert Rist, *The History of Development: From Western Origins to Global Faith*, 4th ed. (London: Zed Books, 2014); Wolfgang Sachs, ed. *The Development Dictionary: A Guide to Knowledge as Power*, 2nd ed. (London: Zed Books, 2010).

the "developmentalist state," with unprecedented government initiatives for the development not only of colonial economies but also of the welfare of colonial populations. The United States, which would become a global leader in development aid after World War II, could likewise draw on a long history of technical assistance. It supported both colonies like the Philippines and states within its sphere of interest, to the extent that historian Michael Adas suggests that "development assistance was a fixture of America's global interventionism" already at the start of the Cold War. 16

The intellectual origins of development assistance lay in the ruminations about progress and development that had been a mainstay of Western intellectual history since the Enlightenment. Starting in the nineteenth century, thinkers in the West also began to explicitly link the concept of development to a process of social progress through modernization. Their understanding was fundamentally ethnocentric and left no room to challenge the idea that development, in this sense, implied a process of improvement and even civilization which was to be brought about by science and technology imported from the West.¹⁷ The early twentieth-century American development program in the Philippines is a case in point. Filling its administration with engineers, the Americans were convinced that massive investments in technology could bring prosperity and democracy to the Philippines. However, the American administrators were unconcerned with social reform. Though improving infrastructure and education, their development efforts exacerbated social inequalities and resulted in a torn and conflict-ridden society postindependence.¹⁸

Such early experiences did little to change the fundamentally ethnocentric, androcentric, and technocentric nature of development assistance. After World War II, it instead took on global ambitions, involving both the responsibility of the "underdeveloped countries" to strive for modernization and the responsibility of the "developed countries" to assist

¹⁶ On Chamberlain, see Helen Tilley, *Africa as a Living Laboratory: Empire, Development, and the Problem of Scientific Knowledge, 1870–1950* (Chicago: University of Chicago Press, 2011), 64–68; on Saurat, see Monica M. van Beusekom, *Negotiating Development: African Farmers and Colonial Experts at the Office du Niger, 1920–1960* (Portsmouth: Heinemann, 2002), 2–4; Christophe Bonneuil, "Development as Experiment: Science and State Building in Colonial and Postcolonial Africa, 1930–1970," *Osiris* 15 (2000): 259–60; Michael Adas, *Dominance by Design: Technological Imperatives and America's Civilizing Mission* (Cambridge: Belknap Press of Harvard University Press, 2006), 215.

¹⁷ Francis X. Sutton, "Development Ideology: Its Emergence and Decline," *Daedalus* 118, no. 1 (1989): 36.

¹⁸ Adas, *Dominance by Design*, chapter 3.

them in this process. 19 If imposition from colonial or hegemonic powers had earlier been explicitly integrated into the concept of developmentdevelopment requiring, in the words of historian Frederick Cooper, "authority as well as expertise,"—this now became less visible as development began to be posited as something more like a natural process.²⁰ This helped prevent the notion of development from being too tainted by its historical link with imperial pursuits. It increasingly appealed to nationalist elites in the colonies and new states, who often took over both development thinking and development administration from the departing colonizers. The idea of development also became embedded in the radically new geopolitical framework of East-West polarization, and development aid became one part of the superpower struggle for global hegemony. This allowed for the creation of aid programs of new scales and scopes, generally tied to explicit foreign policy considerations and often linked to military aid. It was in this setting that development aid took on much of the meaning it then retained through much of the second half of the twentieth century.

The roots of this postwar Western development aid ideology are normally traced to the immediate end of World War II and in particular to the position of the United States in 1945.²¹ Propelled by the war to superpower status and near-hegemony in its sphere of influence, the United States faced two major problems in the devastation covering much of continental Europe at the end of the hostilities. First, hunger and poverty might lead European populations astray ideologically. Second, the still-intact American industry needed paying customers. Accordingly, the Marshall Plan was launched in 1948 and very quickly succeeded in its aims of reconstructing and modernizing the Western European economies. But America also looked beyond Europe. When President Truman presented four points of foreign policy in his 1949 inaugural address, the fourth one dealt with so-called "underdeveloped areas," whose

¹⁹ Sutton, "Development Ideology," 37–39. On the androcentric nature of postwar development, see Adas, *Dominance by Design*, 260–66.

²⁰ Frederick Cooper, "Modernizing Bureaucrats, Backward Africans, and the Development Concept," in *International Development and the Social Sciences: Essays on the History and Politics of Knowledge*, ed. Frederick Cooper and Randall Packard (Berkeley: University of California Press, 1997), 64.

²¹ See e.g. Bertil Odén, *Biståndets idéhistoria: Från Marshallhjälp till millenniemål* (Lund: Studentlitteratur, 2006); Rist, *History of Development*. I will not discuss the history of development theory here, but I will bring it up in my empirical account to the extent that it relates to my analysis. For useful summaries, see Beniamin Knutsson, *Curriculum in the Era of Global Development: Historical Legacies and Contemporary Approaches* (Gothenburg: University of Gothenburg, 2011), chapter 4; Odén, *Biståndets idéhistoria*; Olav Stokke, "Foreign Aid: What Now?," in *Foreign Aid Towards the Year 2000: Experiences and Challenges*, ed. Olav Stokke (London: Frank Cass, 1996).

poverty was described as "a threat both to them and to more prosperous areas." Speaking in the context of the Cold War, Truman referred to the same threats that had prompted the Marshall Plan, thus extending its basic motivation beyond Europe. With the concept of development still infused with ethnocentrism and technoscience, Truman very clearly delineated the West from "them" and took for granted that the modern, industrialized Western state was both the goal and the recipe of development.

The "them" in Truman's worldview would soon come to be lumped into the broad category of the Third World, a term coined by French demographer Alfred Sauvy in reference to the Third Estate of prerevolutionary France. Contrasted with the First and Second Worlds of the Western and Eastern blocs. the notion was intended to draw attention to the political potential of the states and soon-to-be states that were as of yet not aligned with either superpower.²³ It also grouped together a large number of political entities with vastly different backgrounds, problems, and goals, something that did not stop the term from becoming a much-used catchphrase for all developing countries. But even if it was an inappropriate term in the sense that it downplayed immense differences between the included countries, the notion of a Third World nonetheless helped create a powerful conceptual framework that could be used by political leaders who sought a path separate from superpower domination. In 1955, leaders from twenty-nine nonaligned countries met in Bandung, Indonesia and laid down principles of anticolonialism and solidarity that later evolved into the Non-Aligned Movement which explicitly rejected alignment with major powers. The proceeding decolonization helped increase the number of states embracing this stance.²⁴

The ideology of nonalignment had its analog among those industrialized countries that were neither superpowers nor colonial overlords. If the United States and the Soviet Union saw development aid above all as a means to secure global influence and thus national security, and the colonial powers provided most of their foreign aid within the framework of continuing (post)colonial relationships, then policymakers and aid administrators in countries like Sweden, with no territorial colonial past, tended to see themselves as occupying a distinctly different position. Sweden was itself ostensibly nonaligned and drew heavily on this in its aid rhetoric, and its noncolonial credentials and position of freedom from alliances arguably increased its ability to choose partners based on self-determined criteria.

²² Rist, History of Development, 71.

²³ Rist, *History of Development*, 80–81.

²⁴ See Christopher J. Lee, ed. *Making a World after Empire: The Bandung Moment and Its Political Afterlives* (Athens: Ohio University Press, 2010).

Development scholar Olav Stokke suggests that all the Scandinavian countries had aid programs rooted in norms of international solidarity associated with the dominance of Social Democratic parties in their national politics, and thus that the aid they gave had basic altruistic features.²⁵

That a country had had no colonial territories to administer might well have helped increase the maneuvering room in terms of foreign aid policy during and after decolonization. But not having colonies should not be confused with a lack of colonial interests or taken to indicate the absence of a colonial mindset among rulers and social elites. The established narrative of noncolonial countries, Sweden being a case in point, is now beginning to be challenged by historians.²⁶ Furthermore, Stokke's thesis on Scandinavian altruism should not obscure the fact that the phenomenon of development aid as such derived, and still derives, much of its meaning and coherence from colonial relationships. This has been demonstrated most poignantly by scholars working in a postcolonial tradition, and there is an extensive critical literature on Western, including Scandinavian, development aid that explicitly takes postcolonial theory as its starting point. Such studies have done much to point out crucial historical continuities from colonialism to development aid, in which attitudes and understandings within the aid sector emanated, and still emanate, from colonial structures. These structures can often be discriminatory and oppressive, as well as counterproductive to the stated purpose of aid, even if not to other underlying motives.²⁷

Some Characteristics of Expert Authority

One starting point of this study is that the importance of expert authority is a central defining characteristics of modern social order and thus also of a development aid aiming to create and recreate modernity. Zygmunt Bauman suggests expertise to be a "specifically modern form of authority," an idea

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²⁵ Stokke, "Foreign Aid: What Now?," 22. For a critical account of the Social Democratic aid ideology, see Ann-Sofie Nilsson, *Den moraliska stormakten: En studie av socialdemokratins internationella aktivism* (Stockholm: Timbro, 1991).

²⁶ See David Nilsson, "Sweden-Norway at the Berlin Conference 1884–85: History, National Identity-Making and Sweden's Relations with Africa," *Current African Issues* 53 (2013): 8–10.

²⁷ Some examples of studies that apply an explicit postcolonial perspective to Scandinavian development aid are Maria Eriksson Baaz, *The White Wo/Man's Burden in the Age of Partnership: A Postcolonial Reading of Identity in Development Aid* (Gothenburg: University of Gothenburg, 2002); May-Britt Öhman, *Taming Exotic Beauties: Swedish Hydropower Constructions in Tanzania in the Era of Development Assistance, 1960s–1990s* (Stockholm: Royal Institute of Technology, 2007); Terje Tvedt, *Norske oppfatninger om den ikke-europeiske verden på 1970- og 1980-tallet: Et eksempel på krysskulturell representasjon* (Bergen: University of Bergen, 1993).

going back at least to Max Weber, who observed how a society characterized by a far-driven rationalization—that is, an advanced modern society—would not be able to function without the mobilization of cadres of experts.²⁸ In Weber's theorizing, these experts would tend to gather in bureaucratic structures that, though formally separated from political power, constitute the real basis of modern authority.

In modern society, expert knowledge becomes necessary not just to solve problems but also to identify and define them as well as to legitimize the methods needed for their solution. This is particularly closely bound up with access to, and control over, modern science and technology. Bauman notes that "technology does not serve the solution of problems; it is, rather, the accessibility of a given technology that redefines successive parts of human reality as *problems* clamouring for *resolution*." In the hands of experts, technology thus often becomes a resource seeking its utility through the problematizing of new areas.

This is not an uncomplicated process. Expertise remains socially constructed and requires constant negotiating work. Vandendriessche and his coauthors discuss how the expansion of expert authority, resulting in the renegotiating of the boundaries between experts, state, and society, hinges not on abstractions but on performances of expertise.³⁰ It is also important to recognize the active role played by experts in such renegotiations. Experts are generally not neutral mediators but tend to transform knowledge in the process of performing expertise. Sociologists Nico Stehr and Reiner Grundmann highlight this aspect in discussing expert mediation as comprising "an active element," and they rightly point out that "it is just this activity that must be very precisely investigated, for this transformative activity is one of the keys to understanding the function of experts in contemporary societies."³¹ The same, I would suggest, holds true for investigations into the past.

Limitations of Expertise

Analyses of modernity-making expertise applied in development contexts are often quite critical. For one thing, as anthropologist James Ferguson has argued, expertise tends to depoliticize: what originally were social or political problems become redefined by experts as technical ones, whose solution

²⁸ Bauman, *Modernity*, 196. For Weber's take, see, e.g., his discussion of "legal authority" in Max Weber, *Economy and Society: An Outline of an Interpretive Sociology* (Berkeley: University of California Press, 1978), 217–26.

²⁹ Bauman, Modernity, 220.

³⁰ Vandendriessche, Peeters, and Wils, "Performing Expertise," 2.

³¹ Stehr and Grundmann, Experts, 41.

requires nothing but the appropriate expertise and its technical interventions. As Ferguson and other critics of such expert interventions point out, this tends to obscure social injustice and ensures that decision-making does not factor in anything beyond the expert-defined problem, with its solution rarely overlapping with the full needs of the affected people. Certainly contributing to this outcome, as Bauman draws attention to in his analysis, is that the experts' personal responsibility is subjugated to the knowledge they represent.³²

More insights into why experts sometimes tend to formulate problems in ways that make them less relevant to intended beneficiaries can be found in a branch of feminist scholarship. Since the 1980s, feminist philosophers of science and knowledge have, inspired by earlier constructivist approaches to the study of science, emphasized the social and historical situatedness of knowledge and suggested that all knowledge depends on the knower's position and perspective.³³ From this premise of all knowledge being knowledge from somewhere, Sandra Harding makes the case that being, as experts are, in a central position in a society means there are certain things one cannot know:

[I]n societies stratified by race, ethnicity, class, gender, sexuality, or some other such politics shaping the very structure of a society, the activities of those at the top both organize and set limits on what persons who perform such activities can understand about themselves and the world around them.³⁴

While Harding's text does not refer to development as such, her insights are easily extended to development aid and can help us understand why development aid projects sometimes fail or at least commonly produce unanticipated effects. All development projects are motivated by a difference of some sort between the would-be developer and the intended developees. However, this difference also tends to imply a power relation that, following Harding, becomes an intrinsic obstacle to the creation and utilization of knowledge relevant to and productive for the intended beneficiaries. This obstacle takes the form of what we, with environmental philosopher Val Plumwood, can call centrist thought. Through centrist thinking, "the experiences of the dominant 'centre' are represented as universal, and the experiences of those subordinated in the structure are rendered secondary or

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³² James Ferguson, *The Anti-Politics Machine: "Development," Depoliticization, and Bureaucratic Power in Lesotho* (Cambridge: Cambridge University Press, 1990); Bauman, *Modernity*, 196

³³ See e.g. the very influential Donna Haraway, "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective," *Feminist Studies* 14, no. 3 (1988).

³⁴ Sandra Harding, "Rethinking Standpoint Epistemology: What is 'Strong Objectivity'?," in *Feminist Epistemologies*, ed. Linda Alcoff and Elizabeth Potter (New York: Routledge, 1993), 54.

'irrational.''35 As a mode of understanding, it can potentially lead to various biases in development as well as in society more generally. I have already mentioned that, on a macro level, ethnocentrism, androcentrism, and technocentrism were characteristic features of development aid, particularly during the first postwar decades. Another form of centrist thought, a variation on ethnocentrism, is what anthropologist Johannes Fabian calls allochronism. He uses the term to criticize the tendency of anthropological writing to portray the "Other"—those studied by the anthropologist—as being temporally distanced; located in the past. ³⁶ But allochronism prevails outside of anthropological discourse as well. Much development aid, in particular in its first decades, was based implicitly or explicitly on allochronic understandings; on the use of modern expertise as a kind of bridge between the present in the West and the past elsewhere.

Agrarian Expertise in Development

The notion that modern expertise has inherent limitations has also been discussed by many authors with an explicit interest in agrarian development. A prominent example is political scientist and agrarian historian James C. Scott's book *Seeing Like a State*, which analyzes modernity and social development.³⁷ Scott's work has become an oft-cited take on expertise and is interesting to consider in the present context because he devotes a comparatively large portion of the book to rural modernization and agricultural development. He also formulates something like a general thesis on the nature of agrarian expertise. In the following, I will argue that while Scott draws attention to important characteristics of such expertise, he and others working in the same tradition tend to overlook its historical connection to agricultural practice, leading them to draw problematic conclusions.

Destructive Development: The High-Modernist Thesis and Agrarian Development

In Seeing Like a State, Scott identifies a number of failed development schemes and argues that these diverse failures share a common background. Most importantly, they are the results of what he labels a "high-modernist" ideology, in which modern science is uncritically understood to be able to

³⁵ Val Plumwood, *Environmental Culture: The Ecological Crisis of Reason* (London: Routledge, 2002), 99.

³⁶ Johannes Fabian, *Time and the Other: How Anthropology Makes Its Object*, reprint ed. (New York: Columbia University Press, 2014).

³⁷ James C. Scott, *Seeing Like a State: How Certain Schemes to Improve the Human Condition Have Failed* (New Haven: Yale University Press, 1998).

improve most, if not all, aspects of human life. This ideology is often coupled with the willingness to use the power of a centralized or centralizing state to back up the large-scale science-based interventions that high modernism tends to advocate. They become tools for the state's attempts to establish control over its territory. Scott further suggests that technical experts are key players in such processes. As the agents of high modernism, they formulate problems in a manner that detaches them from local conditions as well as from local people's concerns, and then help put the immense weight of the state in play to "solve" them. But, argues Scott, solutions proposed on the basis of high-modernist thinking are often untenable due to their inherent reductionism: they abstract away the complexities of particular social and geographic contexts.

The latter point is central to the chapter in which Scott discusses agricultural development. He makes the case that modern agriculture, of the kind implemented around the world by Western experts particularly during the first three postwar decades, is characterized by radical simplification. "Actual farming," Scott claims, is "an inventive, practiced response to a highly variable environment." By contrast, "the logic of scientific agriculture is . . . one of adapting the environment as much as possible to its centralizing and standardizing formulas." While acknowledging the power of agricultural science's formulas to produce impressive crop yields, he argues that

[t]he simple 'production and profit' model of agricultural extension and agricultural research has failed in important ways to represent the complex, supple, negotiated objectives of real farmers and their communities. That model has also failed to represent the space in which farmers plant crops—its microclimates, its moisture and water movement, its microrelief, and its local biotic history.³⁹

What Scott suggests here is that agricultural science has little room to represent the complexity of real farming conditions or real farmers' knowledge and thus cannot easily adapt its models to the realities of agricultural practice. This creates problems, particularly when it is applied in areas whose conditions are a bad fit for its models, and for which its techniques are not well adapted. Agricultural scientists then become forced to pursue problems of agricultural development at, as Paul Richards, one of Scott's inspirers, puts it, "too high a level of abstraction and generalization." Often, this tends to produce a range of outcomes that go from failure and a waste of resources in the best case to environmental and humanitarian disasters in the worst.

³⁸ Scott, Like a State, 301.

³⁹ Scott, Like a State, 262.

⁴⁰ Paul Richards, Indigenous Agricultural Revolution: Ecology and Food Production in West Africa (London: Hutchinson, 1985), 12.

Scott's work has a number of forerunners. 41 His discussion of agricultural modernization is linked to an earlier postcolonial research tradition in 1970s and 1980s anthropology and history that emphasized the failures and destructive potential of Western agricultural science in colonial contexts and sought to highlight the efficacy of the knowledge already held by local populations in colonized areas. 42 There are also other authors who share these starting points but have gone even further in depicting a monolithic and inherently destructive Western agricultural science. A good example is an essay by environmental activist and critic of the Green Revolution Vandana Shiva. She denounces "reductionist science" as implying little but destruction, even self-destruction. Whereas traditional agricultural practices "created stable local conditions," Shiva claims that "scientific farming" has upset the balance by its applications of chemical fertilizer, its monocultures, and its mechanization, effectively creating a vicious circle where only ever more fertilizers and pesticides can keep productivity up.⁴³ The imposition of a science with reductionist, universalizing ambitions on traditional systems of agriculture has not only failed. Shiva argues, but has constituted a direct act of violence.

Scott's and Shiva's respective criticisms have different starting points. Shiva attacks modern science and scientific thinking as such. To her, science is a deeply flawed and unreformable Western intellectual project.⁴⁴ Scott's

⁴¹ A seminal work on the theme of potentially destructive domination of nature as a centerpiece of modern thinking from the Scientific Revolution and onwards is William Leiss, *The Domination of Nature* (New York: George Braziller, 1972). From a similar starting point, Carolyn Merchant has argued for the gendered nature of this conceptualization of nature as open to human manipulation, suggesting that the domination of nature is closely linked to the domination of women: Carolyn Merchant, *The Death of Nature: Women, Ecology and the Scientific Revolution* (San Francisco: Harper & Row, 1980).

⁴² The above-cited Paul Richards was one of the proponents of this tradition, and Scott acknowledges an intellectual debt to him in his preface. See further the discussion in Tilley, *Living Laboratory*, 117–23. For examples of the anthropological perspective, see, e.g., the contributions in Mark Hobart, ed. *An Anthropological Critique of Development: The Growth of Ignorance* (London: Routledge, 1993).

⁴³ Vandana Shiva, "Reductionist Science as Epistemological Violence," in *Science, Hegemony and Violence: A Requiem for Modernity*, ed. Ashis Nandy (Tokyo: United Nations University, 1988), 247–50. Shiva's criticism of the Green Revolution is expanded in Vandana Shiva, *The Violence of the Green Revolution: Third World Agriculture, Ecology and Politics* (London: Zed Books, 1991). Another interesting take, less harsh but with many of the same starting points, is Kenneth A. Dahlberg, *Beyond the Green Revolution: The Ecology and Politics of Global Agricultural Development* (New York: Plenum Press, 1979).

⁴⁴ This essentialist stance on science is often taken by postcolonial theorists. As historian Joseph Morgan Hodge puts it in a historiographical overview, "'[s]cience' is portrayed [by post-colonial thinkers] as an all encompassing 'knowledge-power regime' located in a vaguely defined 'West' and based exclusively on the 'modern Western' knowledge system." But as Hodge also acknowledges, not all postcolonial work fall into this dualist trap. Joseph Morgan Hodge, "Science and Empire: An Overview of the Historical Scholarship," in *Science and Empire*:

criticism of agricultural science is, on the other hand, integrated into his more general analysis of state power and the methods states employ to make people and environments controllable. He is less eager to attack science as such, and in fact explicitly recognizes the value of "modern agronomic science" and states that he does not intend a "general offensive" against it.⁴⁵ His concern is specifically with the limits of agronomic expertise, and especially with what he sees as its inability to recognize other knowledge as valid and potentially useful for agriculture.

While their scope thus differs, Scott's and Shiva's analyses are still similar in how they highlight the limits of what they see as the hegemonic paradigm of agricultural science. To them, this paradigm is characterized by abstraction, universalization, and reductionism, and this removes the interventions of agricultural experts from more ecologically stable and ethically superior traditional practices. This is what gives agricultural science its power to increase yields when applied in suitable contexts but also what tends to make it inflexible and possibly even violent and destructive.

This way of thinking, grounded in very valid concerns about the nature and effects of agricultural science, opens up for criticism that in many ways is relevant. I submit, however, that Scott's and Shiva's emphasis on universalism and reductionism as defining characteristics of agricultural science is problematic. In the next section, I will discuss how historical research has demonstrated that agricultural scientists often have been preoccupied with agricultural practice and with the concerns both of particular contexts and of particular farmers.

Between Theory and Practice: The History of Agricultural Science

In reviewing the literature on the history of the agricultural sciences, the most salient feature is a recurrent highlighting of the ambiguity that results from these sciences' particular position between scientific theory and agricultural practice. ⁴⁶ Historian of technology Deborah Fitzgerald has observed that, from

Knowledge and Networks of Science Across the British Empire, 1800–1970, ed. Brett M. Bennett and Joseph Morgan Hodge (Basingstoke: Palgrave Macmillan, 2011), 11.

⁴⁵ Scott, Like a State, 264.

⁴⁶ See e.g. Jonathan Harwood, *Technology's Dilemma: Agricultural Colleges between Science and Practice in Germany, 1860–1934* (Bern: Peter Lang, 2005); Ulrich Lange, *Experimentalfältet: Kungl. Lantbruksakademiens experiment- och försöksverksamhet på norra Djurgården i Stockholm 1816–1907* (Stockholm: Royal Swedish Academy of Agriculture and Forestry, 2000); Erland Mårald, "Knowledge in the Service of Agriculture: Knowledge on the Borderline between Academe and Farming," in *Agriculture and Forestry in Sweden since 1900: Geographical and Historical Studies*, ed. Hans Antonson and Ulf Jansson (Stockholm: Royal Swedish Academy of Agriculture and Forestry, 2011); Alan I. Marcus, *Agricultural Science and the Ouest for Legitimacy: Farmers, Agricultural Colleges and Experiment Stations* (Ames: Iowa

a history of science point of view, agricultural science is "particularly interesting precisely because of its ambiguous role as a scientific discipline engaged in the practical application of scientific knowledge to social and economic problems."⁴⁷ To be sure, similar tensions between the theoretically interesting and the practically useful exist to some degree in any scientific field, and all expertise is, as Vandendriessche and his colleagues contend, an "inherently unstable form of authority" on account of its need for recognition both "within and outside the academy."⁴⁸ But there are grounds to argue that such tensions have been particularly prominent in the development of the agrarian sciences. This is related to an intrinsic paradox of theirs: it is characteristic of modern science that it strives for universal theories, and it is equally characteristic of agriculture and forestry that they are localized activities, directly dependent on ecological and social particulars which vary widely from place to place. On one level, agricultural science is thus almost a contradiction in terms.⁴⁹

This contradiction has characterized the agricultural sciences since their early beginnings in the nineteenth century. At that time, the existence of practical, place-bound agricultural problems and the promise of solutions to these problems were the preconditions both for the establishment of agricultural science as a field of its own and for its social acceptance. However, those who took on the role of agricultural scientists were often motivated more by theoretical interests and ambitions. This caused a strain that was also built into the new scientific institutions established during the nineteenth century. Historian of science Margaret Rossiter writes about the situation in the United States during the second half of the century:

Trying to reconcile the complexities of agricultural science with the public demand for practical benefits became a continuing problem for agricultural scientists. These dual pressures were institutionalized into the experiment stations in the 1870s and 1880s, and after a period of great frustration and

State University Press, 1985); Margaret W. Rossiter, *The Emergence of Agricultural Science: Justus Liebig and the Americans, 1840–1880* (New Haven: Yale University Press, 1975).

⁴⁷ Deborah Fitzgerald, *The Business of Breeding: Hybrid Corn in Illinois, 1890–1940* (Ithaca: Cornell University Press, 1990), 2–3.

⁴⁸ Vandendriessche, Peeters, and Wils, "Performing Expertise," 2. Considerations of social relevance and utility extend even to the humanities at present. For a broader discussion, see Janken Myrdal, *Spelets regler i vetenskapens hantverk: Om humanvetenskap och naturvetenskap* (Stockholm: Natur och Kultur, 2009), 60–66.

⁴⁹ See also the interesting analysis of the nineteenth-century discussions about the relationship between local and universal in agricultural research in Erland Mårald, *Jordens kretslopp: Lantbruket, staden och den kemiska vetenskapen* (Umeå: Umeå University, 2000), 83–86. The same problem remains a fundamental concern for the agrarian sciences today.

tension, the stations eventually lived up to the early hopes of scientists and became a source of fruitful agricultural innovation as well.⁵⁰

The American experiment stations Rossiter discusses were mainly linked to the land-grant universities, which were likewise established in the late nineteenth century to teach the practical arts of agriculture and engineering and later developed into broad centers of education and research.⁵¹ In Europe, agricultural higher education and research developed under different circumstances, but the tensions between theory and practice were prevalent here as well. Jonathan Harwood has studied agricultural colleges in late nineteenth- and early twentieth-century Germany, and shows how they were torn between practical and scientific ideals. According to Harwood, each college initially had either a science-oriented or a practice-oriented profile. but over time, many of those committed to practice increasingly began to define themselves more in relation to the academic and scientific community. Harwood terms this academic drift, which he defines as a "process whereby knowledge which is intended to be useful gradually loses close ties to practice while becoming more tightly integrated with one or other body of scientific knowledge."52

Both Harwood and Rossiter highlight how agricultural scientists historically have had to struggle for legitimacy in the face of conflicting demands from, on the one hand, natural scientists, who judged them on scientific merits, and, on the other hand, agriculturalists and policymakers, who wanted science to have direct practical utility. Many scientists and institutions drifted academically in response, but far from all. The demands for concrete practical benefits did in fact turn parts of the agricultural sciences, and parts of the agrarian sciences more generally, into what historian of science Robert Kohler calls service sciences. Kohler suggests that "practical field sciences like horticulture, agricultural extension, or forestry sustain roles for career scientists that are

⁵⁰ Rossiter, Agricultural Science, xiii.

⁵¹ On the land-grant system, see e.g. Willard W. Cochrane, *The Development of American Agriculture: A Historical Analysis*, 2nd ed. (Minneapolis: University of Minnesota Press, 1993), 240–48; Roger L. Geiger and Nathan M. Sorber, eds., *The Land-Grant Colleges and the Reshaping of American Higher Education* (New Brunswick: Transaction Publishers, 2013). The colleges were provided with funding to establish experiment stations through the Hatch Act of 1887. The history behind this legislation is analyzed in Marcus, *Agricultural Science*.

⁵² Such academic drift is identifiable in many professional fields besides agriculture, but Harwood cautions against seeing it as a universal phenomenon. He argues that it is historically specific and suggests a model by which it might be explained, using factors such as geographic location and political context. Jonathan Harwood, "Understanding Academic Drift: On the Institutional Dynamics of Higher Technical and Professional Education," *Minerva* 48, no. 4 (2010): 413. The full-length study of the German agricultural colleges is published as Harwood, *Technology's Dilemma*.

both expert and vernacular—because these are service sciences. Such mixed practices become two-way streets of influence."⁵³ While I believe that it is possible to combine the function as a service scientist with the unambivalent role and identity of the expert, Kohler's point that successful service science experts must have a connection of mutual influence with the vernacular remains very important.

This is not only visible in historical analyses, but is also something that many agrarian experts have explicitly argued throughout history. In early twentieth-century Russia, economist A. V. Chaianov argued strongly for the relevance of peasant experience to agricultural science; his views inspired many agronomists and remained influential in precollectivization USSR. Agrarian historians Lourenzo Fernández Prieto and Daniel Lanero identify a similar understanding of agricultural science in Galicia in Spain at around the same time. Explicitly labeling it a Chaianovian approach, they argue that the task of the state's experts was to achieve a "fusion of scientific or educated agronomy with unschooled peasant agrarian knowledge." Highly concerned with the peasants' own knowledge and objectives, the Galician "[algronomists studied and understood the social and productive conditions of agriculture in order to propose practical solutions that would be acceptable to farmers." The above-cited Jonathan Harwood makes similar points for plant-breeding research in pre-World War II Germany.⁵⁴ And such connections between scientists and farmers are not limited to examples from the first half of the twentieth century but have arguably remained important within the field of agricultural extension as it has developed since then. A more contemporary illustration can be found in the work of sociologist Christopher Henke, who did field work with University of California farm advisors in the 1990s and found a partly "interactional" scientist-farmer relationship in which "scientists and users co-produce the form of research and the meaning of its results."55

With this in mind, we can return to Scott's and Shiva's analyses. In light of the history of agricultural science presented above, it becomes apparent that

⁵³ Robert E. Kohler, "History of Field Science: Trends and Prospects," in *Knowing Global Environments: New Historical Perspectives on the Field Sciences*, ed. Jeremy Vetter (New Brunswick: Rutgers University Press, 2011), 216.

⁵⁴ On Chaianov, see Katja Bruisch, "Contested Modernity: A. G. Doiarenko and the Trajectories of Agricultural Expertise in Late Imperial and Soviet Russia," in Vandendriessche, Peeters, and Wils, *Scientists' Expertise as Performance*, 103–06; on Galicia, see Lourenzo Fernández Prieto and Daniel Lanero, "Patterns of Technological Change in Agriculture in the 20th Century: From Agrarian Engineering to Social Engineering" (paper presented at the Rural History 2015 conference, Girona, Spain, September 2015); on Germany see Harwood, *Europe's Green Revolution*, chapters 1–4.

⁵⁵ Christopher R. Henke, "Making a Place for Science: The Field Trial," *Social Studies of Science* 30, no. 4 (2000): 506.

they are linked to the recurring tensions between the universal and the local. Given the importance of site-specific conditions for agriculture, any attempt at applying results from the agricultural sciences without due attention paid to local environments risks producing unwanted outcomes that could eventually undermine the legitimacy of the entire enterprise—which is precisely what Scott and Shiva argue has happened in the contexts they discuss.⁵⁶ However, they fail to recognize the significance of the service science dimension of agrarian expertise, and this undermines their shared assumption that agricultural science ignores peasants' knowledge and reduces the practice of farming to excessively simple models. There are too many counterexamples available for this to be generally valid. However, this is not to argue that theirs and others analyses of distanced, abstracting experts acting as forceful makers of modernity are irrelevant. There are, as Sandra Harding suggests, limits on what one can take into account when acting from a position of power, and centrist thinking is a constant constraint. In drawing attention to this, Scott and Shiva highlight what undoubtedly is a very important aspect of expertise in postwar agricultural development. But findings from the history of agricultural science suggest that the strong version of their high-modernist thesis will be challenged when one looks closer at actual instances of agrarian development.

Productive Development: The Practice of Expert-Led Colonial Agrarian Development

There is research that provides this challenge in the specific context of Western-led agrarian development abroad, most prominently in a strand of the recent historiography of imperialism and science. These studies draw attention to the important roles historically played by cross-cultural exchanges, non-metropolitan knowledge production, and intermediary actors for the development of the agrarian sciences.⁵⁷ This work makes it clear that colonial experts, and later development aid experts, have had the potential to be more than just representatives of an oppressive modernity. They have

⁵⁶ For a recent interesting take on this issue from the perspective of environmental history, see Cameron Muir, *The Broken Promise of Agricultural Progress: An Environmental History* (Abingdon: Routledge, 2014). Note also that while this problematic is very prominent in relation to the agrarian sciences, it has also been discussed in many other contexts as well.

⁵⁷ A number of examples could be adduced. See e.g. William Beinart, Karen Brown, and Daniel Gilfoyle, "Experts and Expertise in Colonial Africa Reconsidered: Science and the Interpenetration of Knowledge," *African Affairs* 108, no. 432 (2009); Joseph Morgan Hodge, *Triumph of the Expert: Agrarian Doctrines of Development and the Legacies of British Colonialism* (Athens: Ohio University Press, 2007); Joseph Morgan Hodge, "The Hybridity of Colonial Knowledge: British Tropical Agricultural Science and African Farming Practices at the End of Empire," in Bennett and Hodge, *Science and Empire*; Tilley, *Living Laboratory*; van Beusekom, *Negotiating Development*.

attempted to understand the local environments they have encountered, have learned from their experiences, have acted as transnational mediators and gobetweens, and have, if sometimes grudgingly, employed local knowledge and tried to adapt their own knowledge to local conditions. In her study of a French colonial rural development scheme known as the *Office du Niger*, historian Monica M. van Beusekom shows that "[a]longside Western scientific/technical approaches to ensuring the sustainability of farming at the project, [the project's] managers made conscious use of local knowledge and local agricultural practices."58 Her research demonstrates that the boundary between scientific farming and traditional practices can be rather blurry and further suggests that at times Western experts have gone beyond just seeing like a (Western) state.⁵⁹

In her broader study of colonial science in Africa, historian Helen Tilley directly addresses Scott's thesis of high modernism and argues that his

analysis . . . takes inadequate account of the history of European empire building, especially in tropical Africa, and of the rise of scientific disciplines that considered complexity and interrelations their key problematics. These significant trends occurred during precisely the period in which Scott is most interested 60

Tilley's point is not that Scott is wholly mistaken in his characterization of the developmental state or that there have never been instances of high modernism such as he describes it, but rather that the application of high modernism needs to be understood historically and that we must be open to the possibility that it manifested different features in different contexts. She argues in particular that British colonial scientists and experts, unlike what Scott suggests that they were wont to, in fact "paid a great deal of attention to local conditions and environments." While they undoubtedly set out on the high-modern task of transforming Africa, "they envisaged ways of doing so that stressed site specificity and even local knowledge."

Even development projects that clearly were more or less oppressive interventions from above could have productive dimensions. Christophe Bonneuil's essay "Development as Experiment" illustrates the latter point well.

⁵⁸ van Beusekom, Negotiating Development, 119.

⁵⁹ Related work, of which Kapil Raj is probably the best-known proponent, explicitly challenges the category of Western science itself by drawing attention to its repeated co-construction in non-Western contexts. See Kapil Raj, *Relocating Modern Science: Circulation and the Construction of Knowledge in South Asia and Europe, 1650–1900* (Basingstoke: Palgrave Macmillan, 2008); also Lissa Roberts, "Situating Science in Global History: Local Exchanges and Networks of Circulation," *Itinerario* 33, no. 1 (2009).

⁶⁰ Tilley, Living Laboratory, 20.

⁶¹ Tilley, Living Laboratory, 5.

In his discussion of state interventions in African agrarian societies, Bonneuil highlights the unequal power relations between the experts and the local population and does not shy away from the failures of the rural settlement schemes he studies. But the governing he sees in the period 1930-1970 is not "governing, thanks to the light of science," but rather "governing as an experimental activity," and while this experiment mostly failed in achieving its goal of opening up the target societies to Western knowledge systems, it nonetheless "played a central role in gaining a better knowledge of the conditions of farming in tropical Africa, of agrarian societies, and of the way that development experts should intervene."62 His study can thus be said to foreground the complexity and friction generated when people and objects, along with theories and practices, move between different contexts. The concept of friction has been employed by anthropologist Anna Lowenhaupt Tsing as a metaphor for what can happen when knowledge moves between different contexts, and it is meant to signify that such movement has both constructive and destructive potential.⁶³

Localism or Universalism; Theory or Practice: Agrarian Expertise in Development Aid

Tilley's reading of Scott as taking inadequate account of important trends in imperial history evokes intellectual historian Nils Gilman's work on modernization theory, an American social science approach to development that became a paradigmatic ideology for the first decades of development aid and is presently often invoked as a symbol of the naiveté of this early aid. In particular, it is lambasted for its alleged simplistic understanding of the world, said to build on the dichotomy of modernity contra tradition, with the former assumed to unavoidably be displacing the latter. However, Gilman argues that modernization theory actually came in two main variants, of which only the more revolutionary strand emphasized the need for a "radical rupture" with tradition. The second variant, which Gilman labels "technocosmopolitan," insisted instead that modernity must build on existing social practice. Scott's description of high modernism maps, as Gilman explicitly suggests, well onto a revolutionary modernization ideology if it is also backed up by state power but is less congruent with the technocosmopolitan understanding. 64

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⁶² Bonneuil, "Development as Experiment," 281.

⁶³ Anna Lowenhaupt Tsing, Friction: An Ethnography of Global Connection (Princeton: Princeton University Press, 2005).

⁶⁴ Nils Gilman, *Mandarins of the Future: Modernization Theory in Cold War America* (Baltimore: Johns Hopkins University Press, 2003), 9–11. Even when backed up by a state with modernizing ambitions, the application of science could in fact be a very complicated affair which, as Joseph

In light of the work of Tilley and others, it seems very relevant to move from Gilman's analysis of intellectual trends to the actual implementation of agrarian expertise in postwar development aid, a topic comparatively less considered by historical research. The above discussion demonstrates that an understanding of modern science and technology as strictly Western affairs, inherently reductionist and universalistic and imposed by force on the rest of the world both in the context of imperialism and of development aid, needs to be qualified by way of empirical examination. It highlights the need for more studies of expert planning and expert practice in development aid; studies that should be open to possible new perspectives on the agrarian development expert. While mindful of the limitations of expert knowledge and authority, they should recognize that through history people in expert positions have not simply imposed ready-made knowledge and technology on new environments. It has often been possible for them to adapt their knowledge to new contexts, linking different systems of knowing together. They have, at least at times and to some extent, encountered new settings rather than forced themselves on them, often learning new things and communicating them back home as a consequence.65 My work examines such issues in the context of Swedish agrarian development aid.

To help with the conceptualization of my inquiry, I have used a recent, discourse-oriented study of Swedish research aid, authored by Veronica Brodén Gyberg, that contrasts two struggling discourses at the Swedish Agency for Research Cooperation with Developing Countries (SAREC). The two discourses can be said to each represent a particular ideology of technoscientific development: *universalism*, which emphasizes knowledge transfer and ideas of universal knowledge, and *localism*, which highlights the importance of local knowledge production and indigenous capacities. These terms connect well with the discussion of the universal and the local in the agrarian sciences and will also be used in this study.

Brodén Gyberg further notes that at SAREC both discourses remained firmly embedded in a technoscientific understanding of development. They differed only in their understanding of *how* research and expertise could and ought to aid.⁶⁷ This draws attention to an important point: a localist

Morgan Hodge has noted, "often posed difficult questions and intractable problems regarding the nature and legitimacy of colonial power." Hodge, *Triumph of the Expert*, 116.

⁶⁵ But note that these encounters were always coproduced by the people and environments encountered, and that they had limits set by historical and economic circumstances. See also Sandra Harding's line of thinking which I cite at note 34 above.

⁶⁶ Veronica Brodén Gyberg, Aiding Science: Swedish Research Aid Policy 1973–2008 (Linköping: Linköping University, 2013), 136.

⁶⁷ Brodén Gyberg, Aiding Science, 136–38.

orientation can, but does not necessarily, imply openness to change as a result of contact with vernacular knowledge. It is very possible, for example, for an agricultural scientist to pay close attention to local environments and agricultural practices, and indeed to be dependent on local farmers for crucial knowledge inputs, without being interested in modifying his own understanding of agriculture. Arguing for localist interventions can, but does not necessarily, imply a questioning of Western science and modernity, as will also be apparent from my work.

Related to, but distinct from, the tension between universalism and localism is a tension between what I will call theoretical and practical knowledge. In the last part of Seeing Like a State, Scott turns to this topic and suggests that the high-modernist ideology has room only for codifiable, theoretical knowledge. It thus loses sight of the crucial "practical skills that underwrite any complex activity." There is certainly some truth to this and in particular to Scott's underlying insight that the distinction between theoretical and practical knowledge tends to become part of a "struggle for institutional hegemony by experts and their institutions."68 In the agrarian domain, however, Scott's downplaying of the service science ideal means that he fails to recognize that experts who in other respects are committed to high-modernist ideals can still have professional self-understandings in which a significant degree of practical knowledge and vernacular understanding is paramount. For example, in order to function as an effective extension agent or farm veterinarian, not only scientific training but also solid practical skills and the ability to relate directly to farmers' problems are needed.⁶⁹ The historically long-standing demands for practical experience before and as part of higher agrarian education in Sweden (see below) even suggest that many have held the view that all agrarian expertise rests partially on a kind of tacit knowledge only practical experience can generate. 70 When such professional ideals are widespread, as they were in Sweden, they can also contribute to the formation of a practice-oriented development ideology. in particular with regards to education. I will later empirically analyze the extent to which an emphasis on practice became embedded in development strategies promoted by Swedish agrarian experts, as well as how this approach worked in new natural and sociocultural environments.

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⁶⁸ Scott, Like a State, 311.

⁶⁹ For an elaboration of the close interaction between extension agents and farmers, and the kinds of skills—theoretical, practical and relational—that this interaction require, see Henke, "Place for Science."

⁷⁰ Tacit knowledge is a term first used by Michael Polanyi to refer to knowledge contents that are hard to explicate or verbalize, and thus also to directly teach to others.

Experts across Organizational Boundaries

I do not only examine development strategies and practice in this study, but also look at the nature of the institutional collaboration between SLU and SIDA, particularly the latter's agricultural division. I will therefore also discuss some work that focuses on the role of experts in organizations and the provision of expertise across organizational boundaries. My premise here is that the long-term and highly personal nature of the SLU-SIDA relationship in the agrarian domain means that it shares certain characteristics of what Mats Fridlund calls a development pair. Fridlund's dissertation work was on the relationships that sometimes developed between Swedish public authorities and major Swedish engineering firms during the twentieth century, and he defines a development pair as "a long-term relationship between a manufacturing industrial company and one of its major public customers around the joint development of several new technologies."⁷¹ While this concept might seem to have little relevance to the present study, which is concerned neither with industrial companies nor with technological development as such, some of the characteristics Fridlund highlights in this type of relationship map very well onto the relationship that developed between SLU (and its predecessors) and the Swedish aid authorities.

First, it is central to Fridlund's notion of a development pair that the relationship is relatively stable over time. For two organizations to qualify as a development pair, their collaboration has to span a considerable period and extend beyond particular projects. This was one of the main characteristics of the SIDA-SLU collaboration, which lasted approximately three decades in its institutionalized form. While not as long-lasting as the coupling between the Swedish State Power Administration and the electrical company Asea that Fridlund analyzes, it was still long enough to make a number of successive joint projects realizable. Second, Fridlund highlights the importance of close social relations and a high degree of mutual trust to the work in development pairs, in turn often building on close-knit interpersonal networks developed during engineering studies at one of Sweden's technical colleges. This, too, was a main defining characteristic of the SIDA-SLU collaboration, which, to a considerable extent, drew its strength from personal networks created through shared experiences. Finally, Fridlund also suggests that development pairs are a characteristically Swedish phenomenon. Many of his arguments to this end are hard to extricate from the technological context he studies, but even so, it is intriguing to consider the possibility that something in the way Swedish public

⁷¹ Mats Fridlund, *Den gemensamma utvecklingen: Staten, storföretaget och samarbetet kring den svenska elkrafitekniken* (Eslöv: Brutus Östlings bokförlag Symposion, 1999), 13.

administration was organized tended to facilitate the creation of long-term couplings between government agencies and outside organizations for the realization of joint projects.⁷²

The development in development pair primarily refers to the creation of new technologies and technological systems, whereas development in the present work refers to a process of social change.⁷³ Terminologically, the concept of a development pair is nonetheless apt to use also in the present context, since SIDA and SLU clearly functioned as development partners—not in a process of industrial development, but in a process of stimulating socioeconomic change in Third World countrysides that they knew as rural development. I will thus describe the SIDA-SLU collaboration as a *rural development pair*.

In order to get closer to the practice of organizational collaboration I will use the notion of a *boundary organization*, a concept employed by political scientist David Guston to describe organizations with the goal of facilitating cooperation and flows of information between the academy and external stakeholders.⁷⁴ The International Rural Development Center at SLU, the topic of my chapter 5, was intended to fulfill such a function. Guston's theory has a number of limitations, such as its assumption that boundary organizations serve only two clearly separated principals, or its assumption that there are equivalent relations of accountability to each stakeholder.⁷⁵ Even so, I find the concept of a boundary organization to be useful in drawing attention to the particular organizational niche occupied by IRDC, as it functioned as an interface between SLU and SIDA, and the difficulties inherent in that position. In chapter 5, I will discuss the problems encountered by IRDC in balancing between SLU's, SIDA's, its own, and other stakeholders' interests and consider what they implied for the long-term collaboration.

Earlier Research

No earlier historical research has directly looked at the subject of Swedish agrarian experts involved in foreign development. In this respect, the present study is thus heading into uncharted territory.⁷⁶ However, Jonathan Harwood's

⁷² Fridlund, Den gemensamma utvecklingen, 13; 37–38; 218–19.

⁷³ See also Fridlund's own discussion of the concept (p. 15).

⁷⁴ David Guston, *Between Politics and Science: Assuring the Integrity and Productivity of Research* (Cambridge: Cambridge University Press, 2000).

⁷⁵ John Parker and Beatrice Crona, "On Being All Things to All People: Boundary Organizations and the Contemporary Research University," *Social Studies of Science* 42, no. 2 (2012): 265–66.

 $^{^{76}}$ To some extent there is earlier work that touches on the topics of the individual chapters, and I will present this in the respective chapter introductions.

compelling argument about foreign agricultural development being a part of the general history of the agricultural sciences suggests that the study can fruitfully be positioned in relation to earlier research examining the goals, practices, and institutions of the agrarian sciences in Sweden. Furthermore, Swedish development aid has been the subject of a number of historical studies on both policy and on the practices of particular aid projects or areas. These can tell us something about the general political and ideological framework within which the agrarian aid also was situated.

From Practical Agriculture to Fundamental Biology: The History of the Agrarian Sciences in Sweden

In line with the general history of the agrarian sciences, their history in Sweden has been characterized by a tension between science and practice. That they ought to contribute to Swedish agriculture and forestry has never been in question, but there has been an ongoing debate about the means to that end: should it take practice as its starting point or take, as historian of ideas Erland Mårald puts it, a more "detached, in-depth and long-term approach"?⁷⁷

Detailed accounts of the nineteenth-century history of agricultural science in Sweden have been provided by Mårald and by agrarian historian Ulrich Lange. 78 Both are concerned with the establishment of Swedish agricultural science and its shaping through recurring science-practice tensions. They are also interested in its institutional development and discuss how agrarian science was first established under the auspices of the Royal Academy of Agriculture. The state soon became its main principal, however, and by 1906, a state-run center for agricultural research, the Central Institute for Agricultural Experimentation, had been established on the outskirts of Stockholm. It consisted of both more theoretically oriented and more practical sub-divisions, complemented by a nationwide network of regional and local experiment stations, which performed applied research on farming under a variety of environmental conditions.⁷⁹ A few years earlier, the National Forestry Research Institute had also been created. Academic education in veterinary medicine, forestry, and agriculture was then added to this system through the creation of three professional colleges in the early twentieth century. While the other higher education establishments in the country were the responsibility of the Ministry of Education, these colleges were organizationally subordinate to

⁷⁷ Mårald, "Knowledge," 105.

⁷⁸ Mårald, *Jordens kretslopp*; Lange, *Experimentalfältet*.

⁷⁹ Mårald, Jordens kretslopp, 139–45.

the Ministry of Agriculture.⁸⁰ This ensured their close links with the agricultural sector and shaped much of their later development.

The continuing developments through the twentieth century have been described by Lennart Hjelm, the first vice-chancellor of SLU. Hjelm's account is more of a chronicle of events than a historical analysis but is nonetheless useful for its description of the general developments. Of importance is the account of how the weight of the agrarian research system gradually shifted to the colleges. After the establishment of the Agricultural College in Ultuna outside Uppsala in 1932, most of the Central Institute for Agricultural Experimentation was transferred there. The institute's units for practical agricultural and animal husbandry trials retained formal independence, but from 1948 they were located with, and shared their board of directors with, the Agricultural College. A similar organizational solution was adapted for forestry research, and the National Forestry Research Institute was colocated with the College of Forestry in Stockholm. The Veterinary College had been partly research-oriented since its creation, and its sister organization, the National Veterinary Institute, functioned mostly as a veterinary service organ, though it also performed some research of its own.81

Erland Mårald has also written an overview article that takes a more analytical approach to twentieth-century developments of Swedish agricultural science. He points out that while the three agrarian colleges were academic institutions, their position under the Ministry of Agriculture and the prevailing social and political conditions in Sweden ensured that there was no immediate academic drift. By the mid-1900s, Mårald argues, the two main goals of statefunded agricultural research in Sweden were "helping in adapting agriculture to the industrialized welfare society and in maintaining a high level of contingent preparedness."82 These goals implied what I describe as a service science ideal and a close attention to agricultural practice. They also implied a focus on local conditions, and the extensive network of experiment stations was utilized to produce and disseminate site-specific knowledge. The education imparted at the colleges was likewise closely tied to practice. Despite an ongoing debate, analyzed by historian of technology Per Lundin, over whether agronomical instruction should produce theoretical specialists or practical generalists, extensive experience of practical work in agriculture remained a prerequisite for

⁸⁰ Mårald, "Knowledge," 95–96.

⁸¹ Lennart Hjelm, *Lärdom på Ultuna: Lantbruksvetenskapernas utveckling i Sverige* (Uppsala: Uppsala Municipality, 1986), 91–93.

⁸² Mårald, "Knowledge," 105.

admission to the Agricultural College until the early 1960s. 83 After this requirement was abolished, long practical preparatory courses were integrated into the study programs instead. Similar requirements were in effect for the College of Forestry, and at the Veterinary College, all students were taught the repertoire of practical skills needed to work as a farm veterinarian. 84

Postwar Swedish public agricultural research and education took place in the context of the national agricultural policy, first established in 1947, which has been discussed by agrarian historians Iréne Flygare and Maths Isacson, and others. These authors note how the policy was strongly focused on increasing and rationalizing agricultural production for the purposes of freeing up labor, safeguarding high levels of self-sufficiency, and guaranteeing farmers a fair income. Administered by growing ranks of bureaucrats at the National Board of Agriculture, at county-level boards, and within agricultural societies, this policy became known as somewhat heavy-handed and insensitive to the adverse social consequences it led to in rural communities on account of an increasing number of farms being taken out of production. Mårald suggests that the colleges under the Ministry of Agriculture were important to the rationalization process because, as he puts it, "[a]grarian science was to underpin rationalisation in the form of upscaling, professionalisation, mechanisation and the increasing use of chemicals."

Per Lundin has a slightly different take on the role of Swedish agrarian expertise in the agricultural reforms of the first postwar decades. He argues that it was not science but mechanization that drove the first decades of rationalization. With its production and income targets, the agricultural policy of 1947 had created a situation of institutionalized overproduction, in which there was little need for agricultural science to contribute by increasing yields. This was a structural constraint that also shaped the resource allocation to agrarian research. While the higher education and

⁸³ Per Lundin, "Bredd eller djup: Striden om agronomutbildningen" (unpublished manuscript, September 2015).

⁸⁴ For a general overview of the development of academic agrarian education in Sweden up to the mid-1980s, see Hjelm, *Lärdom på Ultuna*, 74–91; 124–32.

⁸⁵ On postwar agricultural policy in Sweden, see e.g. Iréne A. Flygare and Maths Isacson, "The Tension between Modernity and Reality, 1945–2010," in *The Agrarian History of Sweden: 4000 BC to AD 2000*, ed. Janken Myrdal and Mats Morell (Lund: Nordic Academic Press, 2011); Hans Jörgensen, "Neutrality and National Preparedness: State-Led Agricultural Rationalization in Cold War Sweden," in *Science for Welfare and Warfare: Technology and State Initiative in Cold War Sweden*, ed. Per Lundin, Niklas Stenlås, and Johan Gribbe (Sagamore Beach: Science History Publications/USA, 2010); Reine Rydén, *Marknaden, miljön och politiken: Småbrukarnas och ekoböndernas förutsättningar och strategier, 1967–2003* (Uppsala: Department of History, Uppsala University, 2005), 54–61.

⁸⁶ Mårald, "Knowledge," 98.

research system in Sweden expanded massively in the first postwar decades, the agrarian institutions were provided with a comparatively small share of the resources. The state funding allocated to the Agricultural College increased sixfold between 1938 and 1958, while the technical colleges saw their resources increase by a factor of seventeen.⁸⁷

This lag in the allocation of resources created tensions within the three colleges and seems to have driven a change in their orientation. Lundin shows how research in fundamental biology became considerably more important from the mid-1960s and argues that the Agricultural College's management took advantage of the growing interest in biology at this time by formulating the college's research work in terms that had greater political traction. This opened up for a considerable strengthening of basic research both at the Agricultural College and at the College of Forestry, something that, according to Lundin, marks the start of their transformation from education institutes to the research university SLU is today.⁸⁸ Mårald likewise identifies a drift towards biology and, for his part, suggests that growing public concern over the negative environmental effects of modern, chemical-based agriculture was a driving force.⁸⁹

Both Mårald and Lundin thus identify important shifts in the orientation of the Agricultural College in the 1960s. These shifts coincide temporally with the college's, and shortly thereafter also the College of Forestry's, first development aid work, and Mårald briefly mentions that the Agricultural College "[launched] projects in Africa" in the early 1960s. 90 But there is no earlier research that discusses the reason for, and the significance of, these projects. It remains an open question what role, if any, foreign aid engagements played in the more general processes of change. Was the foreign aid engagement partly a means to domestic objectives? Were developing country agriculture and forestry approached as potential new fields of scientific study? Earlier research also says little about continuities or discontinuities between Swedish agrarian expertise applied at home and abroad. How did the Swedish service science ideal fare when Swedish agrarian experts began to work in developing countries? The present dissertation will attempt to answer these questions.

⁸⁷ Per Lundin, "Jordbruksreformerna och de areella näringarnas högskolor" (unpublished manuscript, September 2015), 3.

⁸⁸ Per Lundin, "Reformeringen av högre utbildning och forskning inom de areella näringarna" (unpublished manuscript, February 2015), 31–37.

⁸⁹ Mårald, "Knowledge," 101.

⁹⁰ Mårald, "Knowledge," 99.

A Welfare State Goes Abroad: The Swedish Nature of Swedish Aid

Historical analyses of Swedish development aid are comparatively rare. There is no synthetic work spanning the entire postwar period, comparable to, for example, the available histories of Danish and Norwegian development aid. 91 Syntheses of Swedish postwar history in general also pay little attention to development aid. 92 There is, however, several historical case studies of specific Swedish development projects, activities, policies, or periods, though none analyzes the role of agrarian aid. 93 Furthermore, historians taking a wider perspective have written on the background and links between Swedish aid policy and Sweden's geopolitical position and perspectives. In this context, Swedish development aid is often understood in the framework of the ideology and self-understanding that came to characterize Sweden as a result of its policy of neutrality during the Second World War and freedom from alliances afterwards. Due to this foreign policy it was difficult for Sweden to engage

⁹¹ There is, however, an ongoing examination of Swedish aid history by historians Mattias Tydén, Urban Lundberg and Annika Berg. Their study, tentatively titled "Improving the World? Swedish Development Assistance during Three Decades" will fill a major research gap when it is finished. For Danish and Norwegian aid history, see Christian Friis Bach et al., *Idealer og realiteter: Dansk udviklingspolitiks historie 1945–2005* (Copenhagen: Gyldendal, 2008); Jarle Simensen et al., *Norsk utviklingshjelps historie*, 3 vols. (Bergen: Fagbokforlaget, 2003). Note also the useful and detailed account of Swedish development aid up until the late 1970s in Olav Stokke, *Sveriges utvecklingsbistånd och biståndspolitik* (Uppsala: Scandinavian Institute of African Studies, 1978).
⁹² Development aid is always mentioned in such work in relation to postwar social development, but tends to be treated in a rather cursory manner. A good example is a recent prestigious, multivolume effort: Kjell Östberg and Jenny Andersson, *Sveriges historia: 1965–2012* (Stockholm: Norstedt, 2013), 180–81.

⁹³ Annika Berg, "A Suitable Country: The Relationship between Sweden's Interwar Population Policy and Family Planning in Postindependence India," Berichte zur Wissenschaftsgeschichte 33, no. 3 (2010); Sunniva Engh, "The Conscience of the World? Swedish and Norwegian Provision of Development Aid," Itinerario 33, no. 2 (2009); Sunniva Engh, "Det internasjonale folkhemmet? Styringsmentalitet i velferdsstat og bistand," in Den självstyrande medborgaren? Ny historia om rättvisa, demokrati och välfärd, ed. Christina Florin, Elisabeth Elgán, and Gro Hagemann (Stockholm: Institute for Futures Studies, 2007); Norbert Götz, "The One Per Cent Country: Sweden's Internalisation of the Aid Norm," in Saints and Sinners: Official Development Aid and its Dynamics in a Historical and Comparative Perspective, ed. Thorsten B. Olesen, Helge Ø. Pharo, and Kristian Paaskesen (Oslo: Akademika, 2013); Viveca Halldin Norberg, Swedes in Haile Selassie's Ethiopia, 1924–1952: A Study in Early Development Co-Operation (Uppsala: Scandinavian Institute of African Studies, 1977); Tomas Kjellqvist, Biståndspolitikens motsägelser om kunskap och tekniköverföring: Från konkret praktik till abstract policy (Karlskrona: Blekinge Institute of Technology, 2013); Per Åke Nilsson, Svenskt bistånd till den tredje världen: Dess uppkomst under 1950-talet. (Hammerdal: Hammerdal Förlag och Reportage, 2004); Öhman, Taming Exotic Beauties. An account of Swedish agriculture aid up until 1986 is, however, given in an anthology written by Swedish development aid administrators: Christer Holtsberg, "The Development of Rural Development: Swedish Strategies for the Countryside," in Swedish Development Aid in Perspective: Policies, Problems and Results Since 1952, ed. Pierre Frühling (Stockholm: Almgvist & Wiksell International, 1986).

internationally in the increasingly polarized geopolitical situation of the early Cold War. Engagements in the developing countries were one way around this. Historian Bo Stråth also discusses how such engagements could be a way to deal with the impossibility of constructing a postwar Swedish identity around the notion of resistance to the Third Reich, as was done in other Western European nations. Through international commitments, Stråth suggests, the "bad conscience of 1945 was transformed into a world conscience."

Development aid was an integral part of these international commitments. That aid was linked to identity construction is clearly demonstrated in Sweden's first national policy for development aid. Government Bill 1962:100, which presented this policy, carefully constructed a particular Swedish kind of aid, whose goals, as former aid administrator Bertil Odén has pointed out, were closely oriented to the ideas on which the welfare state project was based.95 Swedish development aid was to help build national economies characterized by high rates of growth, but also by internal solidarity and by policies combating social inequality. Studies of links between this official aid rhetoric and actual motives for the provision of aid have been carried out chiefly by political scientists interested in idealist versus realist conceptions of aid, with some authors emphasizing the altruistic nature of Swedish aid as the export of public welfare, and others pointing out the close relation between development assistance and business interests. 96 To me, these are not necessarily conflicting. It is entirely plausible that a complex web of motives, both altruistic and selfserving, undergirded the Swedish aid efforts.⁹⁷

At any rate, the link between the welfare state and development aid did not stop at the level of rhetoric. Several historical studies, notably by historian of ideas Annika Berg and historian Sunniva Engh, have made it clear that there were close links not just in policy and oratory but also in practice between the welfare project in Sweden and its development aid activities abroad. ⁹⁸ In Sweden as elsewhere, the construction of the modern state was a project closely tied to an ideology of scientific rationality. This meant that groups of experts, positioning themselves as non-political bearers of this rationalistic

⁹⁴ Bo Stråth, "Neutrality as Self-Awareness," in *The Swedish Success Story?*, ed. Kurt Almqvist and Kay Glans (Stockholm: Axel and Margaret Ax:son Johnson Foundation, 2004), 154.

⁹⁵ Odén, Biståndets idéhistoria, 172.

⁹⁶ For the contrasting points of view, see e.g. Susan L. Holmberg, "Welfare Abroad: Swedish Development Assistance," in *The Committed Neutral: Sweden's Foreign Policy*, ed. Bengt Sundelius (Boulder: Westview Press, 1989); Stephen W. Hook, *National Interest and Foreign Aid* (Boulder: Rienner, 1995).

⁹⁷ Similarly, May-Britt Öhman's view is that altruistic ideals and commercial interests were closely entangled: Öhman, *Taming Exotic Beauties*, 90.

⁹⁸ See Berg, "Suitable Country"; Engh, "Conscience"; Engh, "Det internasjonale folkhemmet?."

ideal, could wield considerable influence over the development of Swedish society. 99 Some of them then took their engagement abroad as part of Swedish development aid, with particularly strong connections having been demonstrated within family planning and population control. 100 As already suggested, this dissertation will relate to this tradition of exploring continuities and discontinuities between domestic work and development aid. It will also take into account international influences. We know that a number of links existed between the three agrarian colleges and international science in the first post-war decades, and that their most prominent connections were with universities in the United States. 101 I will further explore how that shaped their aid work and how their representatives related to international models.

Delimitations and Source Material

My study of Swedish agrarian expertise in development aid is, as already noted, limited to an examination of the expertise represented at SLU and its predecessor colleges. These were not the only expert organizations that played a role, but they got involved in foreign aid early and extensively. Since they also were (and are) central institutions for the agrarian sciences in Sweden, I argue that studying them is a good way to approach the problem of agrarian expertise in such aid.

There are also further delimitations with regard to the study's chronological and topical design. The first significant aid endeavor at any of the three colleges was a course in animal reproduction for veterinarians from India and Thailand, given by Professor Nils Lagerlöf at the Veterinary College in 1954

⁹⁹ Tore Frängsmyr, *Svensk idéhistoria: Bildning och vetenskap under tusen år, del II 1809–2000* (Stockholm: Natur och Kultur, 2000), 300; Francis Sejersted, *Socialdemokratins tidsålder: Sverige och Norge under 1900-talet* (Nora: Nya Doxa, 2005), 232. Per Lundin and Niklas Stenlås have described these experts as "reform technocrats," see Per Lundin and Niklas Stenlås, "Technology, State Initiative and National Myths in Cold War Sweden: An Introduction," in Lundin, Stenlås, and Gribbe, *Science for Welfare and Warfare*, 9–10; Per Lundin and Niklas Stenlås, "The Reform Technocrats: Strategists of the Swedish Welfare State, 1930–60," in Vandendriessche, Peeters, and Wils, *Scientists' Expertise as Performance*.

¹⁰⁰ Berg, "Suitable Country; Engh, "Conscience."

¹⁰¹ I have examined this by studying the number of reported study visits abroad and visits to the colleges by foreign scholars for the first three postwar decades. By this measure, universities in the United States were central points of reference in particular for veterinary science and agricultural science in Sweden. See Karl Bruno, "Från Ultuna till Urbana och Uganda: Sveriges lantbruksuniversitet i sitt internationella sammanhang, 1945–2000" (unpublished manuscript, November 2012), appendix A. For a more general survey of the Americanization of the Swedish academy after World War II, see Dag Blanck, "The Impact of the American Academy in Sweden," in *Networks of Americanization: Aspects of the American Influence in Sweden*, ed. Rolf Lundén and Erik Åsard (Uppsala: Uppsala University, 1992).

and 1955. My chronology starts with this course and its background. In order to be able to study long-term developments and cover a range of activities, I end the study as late as 2009, when SLU's administration of Swedish support to forestry education in post-revolutionary and then post-Mengistu Ethiopia ended. This was the last—to date—major field effort in which SLU served as a consultant to the Swedish aid authorities.

The significant length of this chronology means that it has been impossible to examine and analyze every actor and activity of relevance. I have elected to focus on those processes and courses of events that, in my opinion, have exercised the most significant influence on the general historical trajectory. Besides the veterinary courses and the support to forestry education in Ethiopia, this includes the Agricultural College's role in planning and executing the Chilalo Agricultural Development Unit (CADU) in Ethiopia in the 1960s and 1970s and the institutional collaboration between SLU and SIDA as it played out between 1966 and 1996. I have studied these more formative or significant events in detail while leaving other developments including such aid activities in which SLU worked with other partners than SIDA—outside the scope of the study. 102 The topics of each individual chapter, and what part of the chronology they cover, are presented in figure 1 below.

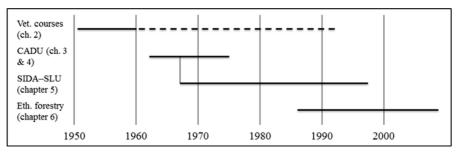


Figure 1. Schematic overview of the chronology of the dissertation. The dashed line indicates that the courses continued until 1993 even though my chapter is concerned primarily with the first decade. The vertical line between CADU and SIDA-SLU depicts the fact that the latter came about as a direct result of the former.

There are also two particular delimitations on an analytical level that I want to make explicit here. First, I make no claim to present exhaustive histories or

Sciences, 2002); Johan Toborn, "Etiopien: 'ett SLU-land'," in Ramberg, Sammanhang.

¹⁰² There have been a number of institutional and individual contacts with the developing countries at SLU that thus will not figure in the present work. Two of the more significant efforts were the Department of Crop Production's research collaboration with Nicaragua and the engagement of the Department of Animal Breeding and Genetics in Ethiopia. For introductions to these projects, see Lars Ohlander, "Nicaragua: Från bönforskning till doktorandprogram," in Sammanhang: SLU 25 år, ed. Gunilla Ramberg (Uppsala: Swedish University of Agricultural

evaluations of the development projects that figure in the dissertation. They are not my objects of study as such. Rather, my purpose is to understand some aspects of these projects in the context of Swedish agrarian science and technoscientific expertise, and, conversely, to understand the agrarian experts through examining the development projects they created. Consequently, I focus more on the planning phases, with their often explicit (if also often strategically adjusted to the context) presentations of expert opinions and understandings, than on the practice of development aid as it took place on the ground and in the field. Second, the empirical and analytical focus is on Swedish agrarian expertise. On occasion, I bring in expert perspectives from recipient countries and the voices of the people who participated in projects as developees, but I have not attempted to write an account which is symmetrical with respect to Sweden and the countries in which her experts have been engaged. This opens up the study to criticism for upholding Eurocentric and expert-centric biases as it unavoidably leads to a de-emphasizing of local agencies and to a lack of focus on the interaction between ideology and practice. 103 However, it reflects pragmatic considerations over the limits of my time and my access to sources rather than a historiographical stance. I do consider questions of how expert practices and ideologies were shaped by, for example, local resistance to, or appropriation of, development interventions to be both valid and very important. However, I have only been able to give partial and incomplete answers here. I further discuss some implications of this in the section on sources below.

I also want to make some points about my level of analysis. My interest in experts and expertise leads me to afford central importance to prominent individuals and the networks they built. Their stances can be explained partly in terms of individual projects, scientific ideologies and interests, and interpersonal networks. But it is also necessary to situate the actors in the institutional context that likewise contributed to shaping how they thought and acted. A source of inspiration for the analysis with regard to the link between individual and institution has been the notion of *formative moments*, as it is used by political scientist Bo Rothstein. He employs the concept in a take on the structure-agency problem that acknowledges the dominating role of structure while privileging agency under certain conditions. During periods of crisis, antagonism, and institutional dysfunction, Rothstein argues, actors who normally are constrained by institutional structures can find

¹⁰³ See the historiographical discussion in van Beusekom, *Negotiating Development*, 187–92.

¹⁰⁴ Bo Rothstein, "Aktör - Strukturansatsen: Ett metodiskt dilemma," Statsvetenskaplig tidskrift 91, no. 1 (1988); Bo Rothstein, Den korporativa staten: Intresseorganisationer och statsförvaltning i svensk politik (Stockholm: Norstedts juridik, 1992), 17–18.

means to change the fundamental conditions of the political system of which they are part. Formative moments thus become central turning points on which the historical development of organizations and systems hinges, and these turning points are actor-driven.

I am more generally interested in an actor perspective on history and thus prone to focus on individual agency also beyond clearly recognizable formative moments, but I nonetheless identify a formative moment as a crucial turning point in the story of Swedish agrarian expertise in development aid. In light of this, I employ different levels of analysis as a historiographical tool that highlights the changing nature of Swedish development aid and individual actors' room to shape this nature. The earlier chapters focus comparatively more on actor-linked microanalysis, whereas the later ones look more at the organizational level. This is intended to reflect one of my findings, namely, that as time passed, Swedish agrarian aid became more institutionalized and gradually less open to personal interventions. However, these are not definite demarcations, and even though the opportunity for individual actors to change the fundamental conditions of the aid system decreased, there was still ample room for individual initiatives to shape expert involvement. Thus, all chapters, to some extent, employ explanations in terms of both individual and (inter-)organizational factors.

Source Material

The dissertation draws on a range of archival and printed sources, complemented by a series of interviews with involved actors. As each of the empirical chapters is based on its own body of source material, more detailed presentations of the selected material will be provided in the separate chapters. This section contains an introduction to the sources used and some general source-critical remarks.

My central source material is unpublished archival material linked to decision-making on aid-related matters and to the administration of aid projects. The actual decision-making can be followed in material such as meeting minutes and other formal documents accounting for particular decisions. For the present analysis, it has, however, been much more useful to draw on the often large amounts of material created during the preparation of decisions and the administration of ongoing projects: memoranda, reports, professional correspondence, etc. Analyzing such material has made it possible to reconstruct many of the planning and decision-making processes. I use material from the archives of the three colleges and SLU as well as from the

SIDA/Sida, NIB, and the Central Committee for Swedish Development Aid (a predecessor of NIB) archives. 105

To some extent I also draw on published sources, such as press material, the Swedish Government Official Report Series, published accounts of development aid, published reports from SLU, etc. A special subset of printed sources is the numerous accounts of SLU's development aid history that have been published in festschrifts or by the university itself in magazines and books. These accounts can sometimes provide useful information, but are normally of limited utility as narrative sources. They typically present simplified accounts and in many instances misattribute initiative and agency.

In addition to the written source material, I also draw on interviews with people who in different ways have been involved in the events I analyze. In total, I have conducted twenty-two interviews using a semi-structured method, with a set of prepared questions framing an otherwise informal conversation. The interviews have taken place throughout the research process, without a systematic order or schedule. In most cases, I have contacted informants and arranged interviews as a consequence of having noticed the respective persons when studying other source material. Sometimes a suggestion or introduction by an earlier informant or a third party also opened up for an interview. The primary purpose of the interviews has been to gather impressions from participating actors that, in turn, have helped me to understand more of the context of the problems I examine. On several occasions, I have also used interviews to fill gaps in the written source material, and in these latter instances, I cite the relevant interview as a direct source in a footnote.

Source Criticism: Importance and Visibility

To go from a historical source material to a historical narrative requires a critical analysis of the former. The basic purpose of all source criticism is to determine whether a certain source can be used to answer a particular question:

¹⁰⁵ Access to material on development aid in the SIDA/Sida archives can be restricted if deemed sensitive with regard to the foreign relations of Sweden. This has not been a problem for the present study.

biståndsarbete," in *Bot för boskaps sot: Svensk veterinärmedicin 200 år*, ed. Nils Olof Lindgren (Skara: Jubileumskommittén för svensk veterinärmedicin 200 år, 1975); Lennart Hjelm, "SLU:s u-landsengagemang," *SLU-ringen* 6, no. 4 (1983); Nils-Ivar Isaksson, "Utbildning och utvecklingssamarbete för u-länderna," in *Vårt lantbruksuniversitet: En bok till Lennart Hjelm*, ed. Ingemar Månsson et al. (Uppsala: Swedish University of Agricultural Sciences, 1982); Lennart Prage, "På de internationella scenerna: SLU i ett 25-årsperspektiv," in Ramberg, *Sammanhang*; Lennart Prage, "Då och nu: Historiska paralleller i det internationella arbetet," in *SLU: Tre decennier mitt i samhällsutvecklingen*, ed. Gunilla Ramberg (Uppsala: Swedish University of Agricultural Sciences, 2008).

one employs source criticism to avoid jumping to ungrounded conclusions. Any historical argument needs to rest on a foundation that can stand up to source-critical scrutiny. But this purpose can be achieved in different ways. An older, and traditionally normative, form of source criticism in Swedish historiography involves asking questions about the tendency, closeness, and dependency of a source. These criteria are used to evaluate narrative sources. By evaluating the tendency of the author, the closeness in time and space of the narration to the event, and its possible dependency on other sources, conclusions can be drawn about the narrative's reliability and the extent to which it can be used by the historian.¹⁰⁷

As there has been a shift in the kinds of questions historians tend to ask, evaluations of the veracity of narrative sources have become comparatively less central to historical research during the second half of the twentieth century, and so the need for new forms of source criticism has arisen. In the early 1970s, Swedish historian Göran B. Nilsson presented an argument for what he calls functional source criticism, in which relevance and representativeness are the most important criteria. Relevance entails asking questions about whether the information provided by a source is relevant to the question, and representativeness involves questions about whether a source is typical of or representative for the studied event or period. In a more recent article, historian Maria Ågren agrees that representativeness, which she relabels importance, is significant but argues that the most central criterion ought to be visibility, that is, the question of what is visible in which sources, and why. 108 Nilsson's and Ågren's criteria have guided my appraisal of the sources, though in a few cases I have needed to evaluate narrative sources and have then made use of the classical criteria as well.

The use of oral sources comes with its own pitfalls that have to be carefully considered, the most obvious problem being the source's validity: it is often difficult to judge the extent to which the informant recalls the past correctly and the extent of his or her bias. Moreover, it is almost impossible to know whether the informant might seek to actively misguide the interviewer for his or her own reasons. This makes careful source criticism and comparison with other sources and source-types as crucial to oral sources as to any other

¹⁰⁷ For an introduction to this kind of source criticism in Swedish historiography, see Rolf Torstendahl, *Introduktion till historieforskningen: Historia som vetenskap* (Stockholm: Natur och Kultur, 1966), 89–103.

¹⁰⁸ Göran B. Nilsson, "Om det fortfarande behovet av källkritik: Jämte några reflexioner över midsommaren 1941," *Historisk tidskrift* 1973, no. 2 (1973); Maria Ågren, "Synlighet, vikt, trovärdighet – och självkritik: Några synpunkter på källkritikens roll i dagens historieforskning," *Historisk tidskrift* 125, no. 2 (2005).

source.¹⁰⁹ In the present case, most of the interviews were only used to help me acquire a better contextual understanding and are not cited in the text. But where I do cite an interview as a source, I discuss potential source-critical issues as deemed necessary.

There is also a more insidious risk associated with interviews, namely, that the researcher begins to internalize standpoints or interpretations suggested by the informants, perhaps in unwitting deference to their personal experience and knowledge of the topic. To an extent, to become influenced in such a way is a reason to perform interviews, as it often helps with the interpretation of other sources, but it can also introduce potentially problematic biases into subsequent analyses. Since this is likely to be a subconscious process, and as there is a narrow boundary between desired and undesired influences, it is hard to fully safeguard against. I have, however, tried to pay attention to how I as a researcher have related to what the informants suggest.

A few of the informants have also given me access to unpublished autobiographical material. Such memoirs differ from oral sources mainly in that the researcher has no control over the content. Otherwise, it is a material with, in principle, the same limitations concerning subjectivity, the nature of memory, the interest of the author in presenting him- or herself in a certain way, and so on. The fact that such material is not created by way of a dialog, nor under the time constraint of the interview situation, can work both ways for these issues. I draw on this sort of material mainly for biographical information but also use it to support factual arguments in a few cases. I then discuss it as appropriate.

Finally, I will discuss four concrete issues of visibility and importance in relation to the sources I have used. First, apart from the case of Nils Lagerlöf, I cite very little informal or private correspondence between the involved actors as I have not found significant volumes of correspondence in the archives I chose to focus on. This is a notable source-related limitation of the study. As historian Niklas Stenlås discusses, correspondence was the main way in which the professional elite of the time related to their contacts, and since correspondents often had a social as well as a professional relationship, the

¹⁰⁹ A very useful discussion of the use of oral sources together with written material (along with a presentation of the purposes, uses and methods of oral history that I fundamentally share) can be found in Lillian Hoddeson, "The Conflict of Memories and Documents: Dilemmas and Pragmatics of Oral History," in *The Historiography of Contemporary Science, Technology, and Medicine: Writing Recent Science*, ed. Ronald E. Doel and Thomas Söderqvist (Abingdon: Routledge, 2006). Note that in the present study I have used oral sources much less systematically than the method Hoddeson advocates.

¹¹⁰ Most likely, more letters could be found were one to systematically search for them. This would however require an empirical effort that I deemed incompatible with the present study.

professional and the social were normally not separated in the letters.¹¹¹ For this study, it is eminently clear from interviews and other sources that personal relationships and networks were very important, so analyzing a larger body of correspondence between the central actors would have provided interesting insights into the background of the developments detailed. The few instances in which I have found such letters further confirm this.

Second, I have limited my empirical work to Swedish archives and to interviews with Swedish actors. The study thus includes written source material from abroad only to the extent that it has been preserved in Swedish archives. Studying the same topics using or including material from abroad could be done, and would certainly add to the findings I present here. But in light of my research questions and interests, as well as the constraints on my time, I deemed it more productive to increase the amount of material studied in Swedish archives rather than spending a perhaps considerable time on a likely difficult and perhaps uncertain project of gathering material abroad. However, since I partly write about foreign settings, this privileging of Swedish experts and authorities over foreign partners, counterparts, and intended beneficiaries is somewhat problematic. It forecloses the possibility of bringing in multiple and complementary perspectives on the topic under study, and this is a constraint on the analysis that needs to be kept in mind. As I noted above, a particular risk with regards to the criterion of visibility is that the agency of foreign actors, especially people far from the official decision-making processes, is hidden by the dominance of the Swedish source material. As historian of science Suzanne Moon points out in regards to the study of colonial and postcolonial technology, "focusing on the easily obtainable ... archives to the exclusion of all others, makes it that much more difficult to recapture the lives of ordinary people as active lives, engaged with defining the sociotechnical life ... and not simply passive recipients of state largesse or oppression."112 Even though the purpose of my study is different. Moon's argument retains a degree of relevance. My choice of sources comes with a top-down bias, which makes it considerably more difficult to answer relevant questions about if and to what extent Swedish agrarian experts were influenced by foreign encounters and by possible instances of resistance or attempted subversion they might have faced in the field. In the

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¹¹¹ Stenlås discusses business rather than academic actors, and his study is set in the 1940s, but the characteristics of correspondence that he describes are clearly recognizable in my own sources, particularly in the material from the 1950s and 1960s. From the 1970 and onwards the correspondence culture seems to have changed. Niklas Stenlås, *Den inre kretsen: Den ekonomiska elitens inflytande över svensk partipolitik och opinionsbildning, 1940–1949* (Lund: Arkiv, 1998), 260–61.

¹¹² Suzanne Moon, "Place, Voice, Interdisciplinarity: Understanding Technology in the Colony and the Postcolony," *History and Technology* 26, no. 3 (2010): 196.

empirical chapters, I will discuss instances where I feel that this creates particularly significant gaps in the analysis.

Third, as will be apparent, almost all the actors who feature in the dissertation are male. This does not mean that there were no female agrarian experts in development aid, but it reflects both the periods studied and a particular visibility issue that pertains to the source material and foci used. To begin with, most students and almost all the staff at the three agrarian colleges were male until the mid-1970s. Consequently, up until at least the late 1980s, the majority of agrarian experts in Sweden were men. 113 As for my study, the later part of the chronology is then devoted to two separate developments: the institutional collaboration between SLU and SIDA, which was largely carried by an older, mostly male generation of experts, and SLU's support to forestry education in Ethiopia, also strongly male-dominated on account of it drawing on forestry expertise (which remains gendered male even today). Thus, the dominance of male experts in the dissertation cannot be taken as an indication of a lack of female expertise beyond the limits of my study. It does, however, make it seem likely that the expert-promoted ideologies I study here were shaped by the gendered nature of the experts' backgrounds. While I do not analyse this aspect as such, I will mention a few apparent indications.

Fourth, I draw on sources from six decades, of which the latest decades are very close to the present. This calls for some specific attention to how the nature of the source material changes with time and to issues of visibility and importance that arise. Generally speaking, the more recent source material, particularly from the last decade of the study, is sparser and less varied. This might seem counterintuitive but in fact reflects how, as historians Ronald E. Doel and Thomas Söderqvist put it, "[t]he once-stable world of typewritten and handwritten letters preserved in university archives, together with bound periodicals lining library shelves, is yielding to the realm of email, e-journals, weblogs, and other web-based reports." The rise of digital office equipment

¹¹³ Both the Veterinary College and the Agricultural College reached a fifty-fifty gender ratio among matriculating students in the 1970s. Even so, it took at least another two decades before similar gender ratios were achieved within the professions as a whole. For some veterinary statistics, see Karin Östensson, "Från manligt till kvinnligt," in *Veterinär – yrke i förvandling: Från manligt till kvinnligt; från ensamvarg till lagarbetare*, ed. Lars-Erik Appelgren, Ingemar Jämte, and Karin Östensson (Stockholm: Swedish Veterinary Association, 2010), 85–89. Forestry education has yet to reach equal gender ratios among students, and female students are a particular minority in the forest engineer study program. See Gun Lidestav, Elias Andersson, Solveig Berg Lejon, and Kristina Johansson, "Jämställt arbetsliv i skogssektorn: Underlag för åtgärder" (Department of Forest Resource Management, Swedish University of Agricultural Sciences, 2011), 9.

¹¹⁴ Ronald E. Doel and Thomas Söderqvist, "Introduction: What We Know, What We Do Not—and Why it Matters," in Doel and Söderqvist, *The Historiography of Contemporary Science*, 4.

and the decline of the secretarial profession have led to transformations in bureaucratic culture and as an effect of that to changes in the material left behind for historians to work with. I have tried to work around this constraint by writing from the sources available, to some extent complemented by interviews, while remaining aware of the limitations in terms of visibility and importance that arise from, for example, having access only to a small part of a total body of correspondence.

Terminology

This dissertation deals primarily with Swedish actors and organizations and is mostly based on Swedish-language primary sources. When quoting or paraphrasing such Swedish material, I have translated it into English myself. I have attempted to do this as accurately as possible, but have prioritized Englishlanguage readability over preserving the style or quirks of the original. Some particular translation issues can be mentioned already at this stage. The source material uses several different terms that I have translated as "development aid" or very occasionally as "development assistance." Development aid is a direct translation of one of these terms, utvecklingsbistånd. In the 1950s and 1960s in particular, the term tekniskt bistånd was also used. Its literal meaning is "technical aid," and the term had its origins in the UN concept of technical assistance. It referred to the provision of knowledge and expertise for development and was distinct from finansiellt bistånd, "financial aid," which referred to the provision of development credits (in practice, there was often a degree of overlap between technical and financial aid). Another common word is *u-hjälp*, an ambiguous term that can mean either "aid to developing countries" in general or "development aid" in particular. More recently, the word aid has mostly been dropped in favor of the word cooperation, so that what used to be called development aid is nowadays known as utvecklingssamarbete, "development cooperation." All these concepts have interesting histories in their own right, and the changes in their use reflect shifting conceptions of aid and aid recipients as well as the shifting self-understanding of donors. But these shifts are not the focus of my analysis, and so I have aimed for consistency and use the term development aid or, occasionally, development assistance throughout. For the latter parts of the chronology, I sometimes use the term cooperation as well.

Another terminological quagmire is the complex of terms used to refer to the recipients of aid or the development cooperation partners. The terms used in the source material vary with time. In the 1950s, common terms for developing countries were *underutvecklade*, "underdeveloped," or *efterblivna*, "backward," countries. Later the somewhat more neutral *u-länder* (sing. *u-*

land) became the dominant term; it simply means "developing countries." I use "developing country" throughout, but sometimes employ literal translations when quoting or paraphrasing. The very common Swedish constructions based on the word *u-land* are also translated in this way, so that, for example, *u-landsforskning*, which could mean either research in developing countries or research of relevance to developing countries, is translated as "developing-country research." To describe the collective of developing countries, often referred to as *u-länderna* in the source material, I primarily use the plural form ("developing countries") or "the developing world," but also occasionally use "Third World." The last-mentioned is strictly speaking not a correct translation, but I use it now and then to avoid cumbersome sentences with the word development repeated.

Finally something on names: chapters 4 and 6 are set in Ethiopia, where personal names consist of a given name followed by a patronymic. It is proper to use either the full name or just the given name when referring to a person (without the latter implying any personal familiarity), and I employ both options. Ethiopian names and words are generally rendered in the form encountered in the source material and might not reflect present-day linguistic conventions of transliteration.

Organizations featured in the dissertation are referred to with their official English name if one exists, and otherwise with a translation of the (in most instances Swedish) name. Short forms are sometimes used if there can be no misunderstanding. In certain cases, an organization's acronym is conventionally used as the de facto name of the organization, and I have followed this usage as deemed appropriate, with the most prominent examples being SIDA and SLU. Using the form SLU in an English text is inconsistent with the source material, where SUAS is more common, but I stick to the present-day convention to minimize the risk of confusion. A list of organizations, giving the English name used, the Swedish name, and the acronym, is provided in appendix B.

CHAPTER TWO

Practical Training for Modern Practitioners

Nils Lagerlöf, India, and Early Swedish Development Aid at the Veterinary College, 1950–1960

Those who, on June 17 of this year ... entered the Veterinary College's assembly hall were happy to wait by the door for a few minutes to enjoy the scene, as delightful as it was unusual for the premises. You could see dark-skinned gentlemen and sari-wearing beauties from India in happy conversation with beautiful Nordic blondes and tall and somewhat solemn Swedish men in dark suits. Cocktails of varying strengths and colors were served to the groups of guests, the long tables were laden with southern fruits and sandwiches in the most delicious colors. There were sun and happy colors over the tableau. There was also sun over Hagaparken's gorgeous greenery and over the blue waters of Brunnsviken, which formed a truly Swedish background to the international party. What was it, then, this meeting between East and West?¹¹⁵

THIS SUMMERY FEAST, alluringly if stereotypically described here in the 1955 issue of a Swedish veterinary newsletter, was in fact a farewell party. The Veterinary College was bidding goodbye to a group of Indian and Thai veterinarians who had spent a year in Stockholm enrolled on a special course in animal reproduction. Held on the initiative of the college's professor of obstetrics-gynecology Nils Lagerlöf, and funded through a tri-partite agreement between the United Nations, the government of India, and the Central Committee for Swedish Development Aid to Less Developed Areas, the "meeting between East and West" was the first significant effort in which Swedish agrarian expertise was placed in the service of Swedish development aid. 116

The course, whose background, execution, and consequences are examined in this chapter, took place in the context of fledgling development aid programs in the West that attempted to provide technoscientific knowledge to the developing countries. Lagerlöf had conceived of it during a mission to India as

¹¹⁵ E[rnst]. P[ålsson]., "'Indiskt' party på Veterinärhögskolan," *Medlemsblad för Sveriges Inseminationsveterinärers Förening* 5, no. 2 (1955): 3.

¹¹⁶ Some of the findings presented in this chapter have earlier been published in Swedish in Karl Bruno, "Nils Lagerlöf och det tidiga svenska biståndet," *Personhistorisk tidskrift* 110, no. 1–2 (2014).

a United Nations' Food and Agriculture Organization expert in animal reproduction. He reacted against what he saw as naïve optimism over the prospects of modernizing Indian cattle breeding through the introduction of artificial insemination (AI), which he considered a technology ill-adapted to prevailing veterinary conditions in the country. A successful introduction of AI would, Lagerlöf argued, require the reform of India's veterinary education and the development of a type of veterinary expertise that did not vet exist in the country, and the course was intended to help bring this about. Though his standpoints on expertise and education initially clashed with views held within FAO, Lagerlöf shared with its staff a fundamental belief in the benefits of Westernizing modernization. To criticize the premises of development aid would have been foreign to him, and he never questioned that the science and the profession he represented had much to contribute to developing countries. But he did question certain prevailing ideas within and beyond FAO of how food production could be stimulated through the use of animal reproduction technologies. His attitude in this respect was linked to his views on the role of the veterinarian in animal reproduction, and to his promotion of the veterinarian as a legitimate modern professional with a certain expertise that could meet the needs of an increasingly technologized animal production.

Several accounts of Lagerlöf's career, including his development aid activities, have been written in outlines, obituaries, and festschrifts produced by his colleagues and successors. Historian Nils Edling has compiled a short article based on parts of this material. Lagerlöf's colleague and former student Ingemar Settergren has also written a detailed account of the animal reproduction courses. 117 This chapter complements these texts with a historical analysis based on the extensive material left behind by Lagerlöf. I primarily answer two questions that contribute to my first and second research problems:

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¹¹⁷ Examples of such work are Allan Bane, "Nils Lagerlöf 70 år," Svensk veterinärtidning 17, no. 15 (1965); Allan Bane, "Professor Nils Lagerlöf in memoriam," Svensk veterinärtidning 22, no. 23 (1970); Allan Bane, "Nils P Lagerlöf," in Svenskt biografiskt lexikon (Stockholm: 1977–79); Stig Einarsson, "Nils Lagerlöf – grundaren av specialiteten husdjursandrologi," Svensk veterinärtidning 62, no. 4 (2010); Otto Garm, "Professor Nils Lagerlöf," in Festschrift to Professor Nils Lagerlöf on the Occasion of his Seventieth Birthday, the 25th August 1965, ed. Erik Blom (Copenhagen: Carl Fr. Mortensen, 1965); Ernst Pålsson, "Med Nils Lagerlöf i Indien," in Lindgren, Bot för boskaps sot; Leon Z. Saunders, "In Ever Widening Circles: Osler's Influence on Veterinary Medicine in Sweden," Canadian Veterinary Journal 34, no. 7 (1993). Edling's article is published as Nils Edling, "Nils Lagerlöf," in De areella näringarnas välgörare: Kungl. Skogs- och Lantbruksakademien och dess donatorer (Stockholm: Royal Swedish Academy of Agriculture and Forestry, 2010). Settergren's account can be found in Ingemar Settergren, "Internationella kurser i husdjursreproduktion i Sverige, del 1," Svensk veterinärtidning 45, no. 6 (1993); Ingemar Settergren, "Internationella kurser i husdjursreproduktion i Sverige, del 2," Svensk veterinärtidning 45, no. 7 (1993); Ingemar Settergren, "Internationella kurser i husdjursreproduktion i Sverige, del 3," Svensk veterinärtidning 45, no. 8–9 (1993).

How and why did Lagerlöf frame his expertise in the 1950s development context? Which strategies did he advocate for the development of animal reproduction in the Third World?

I mainly use source material from two archives: that of the Central Committee for Swedish Development Aid to Less Developed Areas, part of the archives of the Swedish Institute at the Swedish National Archives, and that of the Department of Obstetrics-Gynecology deposited in the central SLU archives. From the departmental archives, I use Lagerlöf's own documents—correspondence, manuscripts, memoranda, and published reports—and other material related to the department's international activities. The material about Lagerlöf's courses in the Central Committee archives also largely consists of documents either authored by Lagerlöf or addressed to him. All sources used are thus rather closely related to Lagerlöf himself, and so the subsequent account becomes very much about him. This raises the issue of whether other relevant actors and events are invisible, but I would instead argue that the sources' focus on Lagerlöf reflects the conditions under which the courses came about. They were very much his personal project.

"I Look Forward to Men Like You for Help"

Nils Lagerlöf's first contact with India took place in 1951, when he received a letter from Indian veterinarian G. B. Singh. Essentially a request for advice, Singh's letter discussed a number of problems he had encountered in his work on animal breeding and ended with an appeal to the Western expertise Lagerlöf embodied: "I look forward to men like you for help." But this was less straightforward than Singh perhaps imagined at first. Lagerlöf immediately began to problematize the application of veterinary science and technology to the developing world. While he certainly believed in the potential benefits of such applications, he was not convinced of the power of science and technology to level out differences between widely disparate contexts.

What was the nature of Lagerlöf's own expertise? He was born in Sunnemo in the province of Värmland in 1895 as the son of a clergyman, and attended the Veterinary College in Stockholm where he became a licensed veterinarian in 1919. He went on to devote his career to research and teaching at the college, becoming associate professor in 1922 and full professor in 1934. His chair was initially in obstetrics and ruminant medicine, but in 1948 it was

¹¹⁸ G. B. Singh to Nils Lagerlöf, 16 September 1951, 2, Department of Obstetrics-Gynecology archives, series Ö1, vol. 7, Swedish University of Agricultural Sciences archives (hereafter cited as OG).

¹¹⁹ Unless otherwise indicated, the rest of this section is based on the accounts cited above.

transformed into a chair in obstetrics and gynecology. In 1934, Lagerlöf also defended his PhD dissertation, though not at the Veterinary College, which was only granted the right to award doctorates in 1935. He instead defended his work on the relationship between sperm morphology and testicular histopathology in bulls at Karolinska Institutet, the medical university in Stockholm.

Lagerlöf was an active researcher who devoted most of his scientific work while associate professor to the study of various diseases in Swedish cattle. He only decided to focus wholly on animal reproduction during his PhD research in the early 1930s, partly inspired by a visit to the United States and perhaps influenced by his need for a dissertation topic that would be acceptable to the physicians at Karolinska. At the time, veterinary reproductive medicine was a relatively new research field. Only in the early twentieth century had veterinary researchers begun to show a systematic interest in the fertility and sterility in domestic animals, linked to the growing economic importance of dairy cattle. Most of those who worked on cattle focused on fertility problems in cows, but Lagerlöf's own work on the role of the bull followed in the footsteps of his predecessor as professor in Stockholm, Harry Stålfors, and he was also inspired by W. L. Williams' and W. W. Williams' (father and son) work at Cornell University. His dissertation work was, however, considered pioneering, and it propelled him to international fame.

After becoming professor in 1934, Lagerlöf proceeded with a program of improving the research and education he was responsible for. This was closely associated with new developments in the field of reproductive medicine, as reflected by the department's name change in 1948, when obstetrics and ruminant medicine became obstetrics and gynecology. The shift highlights the increasing importance attached both to the veterinarian in animal reproduction and to animal reproduction in veterinary education: gynecology meant a focus on sexual physiology and pathology. It should, however, not be understood as implying singular attention to the female animal. Lagerlöf's own dissertation work had been on the bull, and he established a semen laboratory that was one

¹²⁰ The hypothesis that Lagerlöf might have adapted his research topic to the interests of the faculty at Karolinska is veterinarian Stig Einarsson's. Lagerlöf had earlier spent time on a more descriptive kind of work on the abdominal organs of ruminants, and Einarsson presents evidence indicating that he worried this would not impress the physicians. See Einarsson, "Nils Lagerlöf," 39–40.

¹²¹ Abigail Woods, "The Farm as Clinic: Veterinary Expertise and the Transformation of Dairy Farming, 1930–1950," *Studies in History and Philosophy of Biological and Biomedical Sciences* 38, no. 2 (2007): 469.

 $^{^{122}}$ This veterinary specialty is sometimes known as theriogenology, a term not used in the present text.

of the first of its kind in the world. Based on work in this laboratory, a number of fertility problems in the Swedish cattle stock were effectively overcome. Such applied research was in line with Lagerlöf's general interests, which tended toward the ideal of service science. His student and eventual successor as professor, Allan Bane, notes how for him the "distance between scientific results and practical action [was] short," and his scientific priority was solving practical animal breeding problems. ¹²³ Given that this was his area of expertise, he also came to play a prominent role in the introduction of AI in Sweden, which he helped coordinate from his department at the Veterinary College. ¹²⁴ Alongside his domestic profile, Lagerlöf was considered an international scientific authority, having, among other things, been named the first chairman of the permanent international scientific committee for reproductive physiology and pathology on its establishment in 1948. ¹²⁵



Figure 2. In 1945, Nils Lagerlöf's department moved into a new, purpose-built building on the campus of the Veterinary College. The building, seen here under construction, is also a fitting symbol of Lagerlöf's institution-building ambitions. Photographer unknown. From the Swedish Veterinary Museum's photography collections.

¹²³ Bane, "Nils P Lagerlöf."

¹²⁴ See Stig Einarsson, "Allan Bane – Den första AI-läraren i Sverige," *Svensk veterinärtidning* 63, no. 4 (2011).

¹²⁵ Allan Bane, "Den första internationella kongressen rörande husdjurens fortplantning, sterilitetssjukdomar och art. insemination," *Meddelanden från Sveriges Yngre Veterinärers Förening* 3, no. 16 (1948).

The Curse of Technology Transfer

Three years later, in 1951, Lagerlöf published an article on veterinary education in obstetrics and gynecology in the *Journal of the American Veterinary Medical Association*. It was upon reading this piece that Singh, a London-educated Sikh veterinarian and at the time the director of Animal Husbandry and Veterinary Services in the Indian state of Orissa, wrote to him for advice. Singh felt that his present work on fertility problems in cattle had revealed his own training to be insufficient. The two exchanged a series of letters in which Singh asked numerous questions and Lagerlöf, stating his "great interest," tried to answer, though he admitted that he felt he could contribute only little without personal knowledge of the local conditions in Orissa. Something that especially caught Lagerlöf's interest in the first letter from India was a reflection Singh had made about the recent introduction of a new approach to animal breeding in his home state. Artificial insemination, Singh stated, was making him acutely aware of "our limitation in this field." 126

Artificial insemination is a breeding method in which precollected semen is introduced into the female animal in order to achieve pregnancy without mating. It affords the possibility of a considerably more controlled and efficient breeding program as it enables a single ejaculation to be used for the impregnation of many females and eliminates the need of physically relocating the male. In the early 1950s, this method and its associated techniques were still relatively new. Organized insemination associations for cattle had existed in Sweden since 1943, but the activities were still very much expanding in 1951.¹²⁷ As noted above, artificial insemination was also something of a special interest of Lagerlöf's, who had been intimately involved in the development of an AI organization in Sweden. 128 He thus had clear ideas about the complexity of AI work and expert knowledge of oftenrecurring problems. In many settings, the spread of diseases like brucellosis, tuberculosis and metritis among inseminated cows was the most serious issue. 129 Singh had indicated that both metritis and brucellosis—the first an inflammation of the cow's uterine wall and the second a bacterial infection causing spontaneous abortions—plagued the livestock in his state. Since he

¹²⁶ Lagerlöf to Singh, 23 November 1951, OG, series Ö1, vol. 7; Singh to Lagerlöf, 16 September 1951, 2.

¹²⁷ The early history of AI in Sweden is detailed in Ivar Dyrendahl, "Artificiell insemination," in Lindgren, *Bot för boskaps sot*.

¹²⁸ He had also participated in the government inquiry that investigated the matter. See SOU 1948:36, *Betänkande med förslag angående artificiell inseminationsverksamhet bland nötkreatur*.

¹²⁹ Through a vaccination program, tuberculosis and brucellosis had been brought under control in Sweden, but as late as the 1940s these infections were serious problems there as well. See Dyrendahl, "Artificiell insemination," 221–22.

inquired about effective hormonal therapies for these illnesses rather than about causal factors, prophylactic methods, and hygienic standards, Lagerlöf drew the conclusion that India's veterinary medicine was ill-equipped to handle artificial insemination.¹³⁰

This conclusion was grounded in Lagerlöf's understanding of the AI system in Sweden and more generally in his understanding of sterility problems in dairy cattle as being complex and multifaceted issues with both hereditary and environmental causes. When addressing the XIVth International Veterinary Congress in London in 1949, Lagerlöf had highlighted the importance of continuous sexual health control of a country's cattle stock for investigating the causes of sterility. ¹³¹ Swedish veterinarians involved in AI seem to generally have held that the Swedish system of systematic sexual health and sterility controls along with pregnancy examinations had laid the foundation for a relatively successful introduction of artificial insemination in the country. Responding to a critical appraisal of Swedish AI, Lagerlöf's student Allan Bane had argued a few years earlier that if not performed in tandem with such qualified preventive medicine, AI would be a much less effective process. ¹³² To Lagerlöf, Singh's letter testified to this.

The correspondence between Singh and Lagerlöf would lead to a friendship between the two colleagues, but for Lagerlöf, it was also the beginning of a process that would turn his professional focus to fertility problems in developing countries. Just a week after the first letter from Singh, he was contacted by a Greek veterinarian who, like Singh, asked his advice. The letter left him with the impression that the Greek authorities were likewise planning to "introduce [AI] without knowing anything about it," and from this, he began to deduce a pattern. He was simultaneously corresponding with a Danish colleague, Hans Christian Bendixen, who held a professorship at the Danish Veterinary and Agricultural University but at the time was working as a veterinary officer for the Animal Production Branch of FAO in Rome. In a

¹³⁰ See Lagerlöf to Singh, 23 November 1951, OG, series Ö1, vol. 7; Lagerlöf to Hans Christian Bendixen, 21 September 1951, OG, series Ö1, vol. 8.

¹³¹ Nils Lagerlöf, "The Veterinarian and the Breeding and Rearing of Animals," in *Report of the XIVth International Veterinary Congress* (London: H.M. Stationery Office, 1949), 109–10.

¹³² Bane debated with Artur Hansson, an agronomist specialized in animal breeding who would later become professor at the Agricultural College, and who will play a role in chapter 3 of this dissertation. Since Bane and Lagerlöf worked closely together on AI, they undoubtedly shared the views Bane expressed in his retort: Artur Hansson, "Erfarenheter från amerikansk seminavel," *Lantmannen* 32, no. 8 (1948); Allan Bane, "Den artificiella inseminationen i Sverige," *Lantmannen* 32, no. 9 (1948).

¹³³ The letters from and to the Greek veterinarian have not been preserved among Lagerlöf's papers, but the exchange is referred to in Lagerlöf to Bendixen, 24 September 1951, OG, series Ö1, vol. 8.

letter to him, Lagerlöf explained what he had begun to piece together, with a highly significant paragraph discussing the conditions of artificial insemination technology transfer:

I am now starting to understand that Messrs, "agriculture men," within or without F.A.O. I do not know, but after the war, they have rushed to "bless" backward countries like India and Greece with artificial insemination. If they do this without a functional veterinary apparatus that can take responsibility for the hygiene in the a.i. work, it is a probable risk that this a.i. will cause widespread sterility. It is good that F.A.O. now has sensible veterinarians who can correct this where it is needed. 134

This was an early expression of thoughts that would come to inform Lagerlöf's work in and for developing countries during the last twenty years of his life. In one sense, he presented an expert opinion about artificial insemination: it is meaningless, even counterproductive, to start AI programs in areas where the requisite veterinary competence is not at hand to ensure that hygienic standards are upheld and that breeding problems are correctly diagnosed and treated. AI, Lagerlöf suggested, is only one part of a larger system of reproductive medicine upon which its efficiency is dependent. If the technology is taken out of context, it will not increase breeding efficiency but rather contribute to the spread of infections and sterility. In a wider sense, Lagerlöf's understanding of the problem also implied a criticism of prevailing notions of technology transfer and modernization. Attempts to "bless" poorer countries would tend to become curses rather than blessings if they ignored the recipient context. This was a radical stance in the early 1950s, when belief in modernization through technology was widespread and contextual factors were habitually downplayed.

Modernization's Framework

Lagerlöf corresponded with Singh and Bendixen at a time when a discourse on underdevelopment as a global problem was emerging within the polarized framework of the Cold War. Situated within this discourse, early development aid focused on modernization and economic growth, with the latter being understood as more or less synonymous with development. New institutions with global ambitions and aspirations, like the UN or the World Bank, also developed and expanded at this time. The dominant ideological framework, formalized as a theoretical paradigm from the late 1950s, was a fresh trend in American social science known as modernization theory. It built on distinctly allochronic foundations: it located underdeveloped areas in the past and took

¹³⁴ Lagerlöf to Bendixen, 24 September 1951.

Western history as a model for development. A basic assumption was that underdeveloped areas could embark on the development path from tradition to modernity if the requisite needs were satisfied and Western ideals of rational science and technological progress were appropriated.¹³⁵

As a consequence, early development thinking focused on capital investment and knowledge transfers. Experiences from the Marshall Plan had led to the conclusion that growth came by way of investment, with the chief problem for developing countries being that they lacked sufficient resources to invest in their own economies. The role of development aid thus became to support growth by providing the resources necessary for investment, together with the knowledge needed for the diffusion of modern science and technology. With this made available, Western industrialization would, as it were, repeat itself in the rest of the world. This understanding rested on a conception of science and technology as inputs that could straightforwardly stimulate development and economic growth. There was widespread belief in a technological fix for developing-world problems, and little attention was paid to potentially complicating factors or to the wider idea of sociocultural development. 136 Anthropologist Arturo Escobar, associated with the critical post-development approach, puts it clearly: "Development was conceived not as a cultural process . . . but instead as a system of more or less universally applicable technical interventions intended to deliver some 'badly needed' goods to a 'target' population."137

FAO was one of the new institutions with global ambitions.¹³⁸ Formed almost immediately following World War II as the first of the UN specialist agencies, its activities had since then gradually expanded to include a rather large-scale consultancy program, in which FAO-affiliated experts worked as technical advisors in various developing countries as part of the UN's Expanded Programme of Technical Assistance (EPTA). Having been approved by the General Assembly in November 1949, the program, based on voluntary contributions from UN member states, financed three kinds of aid: the training of managerial personnel, the granting of scholarships to citizens of developing countries, and the sending of technical experts to the Third World.¹³⁹ FAO's

 $^{^{135}}$ For a detailed account of modernization theory and the modernization theorists, see Gilman, *Mandarins*.

¹³⁶ Bruce E. Seely, "Historical Patterns in the Scholarship of Technology Transfer," *Comparative Technology Transfer and Society* 1, no. 1 (2003): 10–14.

¹³⁷ Escobar, Encountering Development, 44.

¹³⁸ On FAO during its first decade, see Amy L. S. Staples, *The Birth of Development: How the World Bank, Food and Agriculture Organization, and World Health Organization Changed the World, 1945–1965* (Kent: Kent State University Press, 2006), chapter 6.

¹³⁹ Rist, History of Development, 88–89.

early expert assignments tended mostly to be top-down and narrowly defined to focus on limited technical problems. Historian Amy Staples suggests that while the narrowness of these missions often made them inefficient, broader efforts to build local capabilities were "effectively ignored" on account of the dependence on EPTA funds. 140

In 1951, Lagerlöf was still uncertain whether the AI programs he worried about belonged within or outside FAO. But his welcoming of FAO hiring "sensible veterinarians" to deal with breeding problems suggests that he knew that veterinary expertise and veterinary problems were becoming more important within the organization in the early 1950s. Australian veterinarian K. V. L. Kesteven had been appointed chief of its Animal Production Branch in 1950 and became a driving force in developing a center of animal health expertise at FAO. 141 At about the same time, a collaboration between FAO and the World Health Organization (WHO) that focused on the importance of veterinary skills and knowledge to the protection of (human) public health afforded a central role to veterinary expertise within a different branch of the organization. 142 And Lagerlöf, clearly on the outside when he corresponded with Bendixen in Rome, would soon find himself on the inside of FAO's project of providing veterinary expertise to the developing world.

An Unusual Modernizer

The views Lagerlöf had developed on artificial insemination as a technology that required a well-adapted context to function as intended made him a somewhat unusual modernizer at the time, both in the field of animal reproduction and in international development assistance in general. The former is illustrated well by his initial clashes with FAO over what sort of assistance India needed. In the correspondence cited above, Bendixen and Lagerlöf had broached the matter of FAO providing animal reproduction field experts. At the same time, the central government of India had made a request to FAO for experts who could help organize their new AI program, and had indicated the widely known Lagerlöf as their preferred candidate. FAO was not inclined to employ Lagerlöf for this task, and there are no indications in the sources that Lagerlöf had planned to apply for a UN position on his own initiative. He was however approached with an offer after FAO's first

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¹⁴⁰ Staples, Birth of Development, 100.

 ¹⁴¹ John Francis, "Dr. K. V. L. Kesteven Awarded the Degree of Doctor of Veterinary Science, Honoris Causa by the University of Queensland," *Australian Veterinary Journal* 45, no. 8 (1969).
 ¹⁴² Abigail Woods and Michael Bresalier, "One Health, Many Histories," *Veterinary Record* 174, no. 26 (2014): 653.

candidate declined.¹⁴³ Their proposal was, however, worded in a way that was typical of the narrow expert assignments of the time and thus contrary to Lagerlöf's views on artificial insemination. They requested three experts, and Lagerlöf's role as the group leader would be to spend one year as an "artificial insemination expert to advise and assist the Government on the technical aspects, organization and operation of artificial insemination centres." ¹⁴⁴

As his colleague Ernst Pålsson points out, Lagerlöf was overqualified for this task. It focused on the operational minutiae of AI stations, and thus only required someone with organizational skills and solid experience of AI, rather than an international authority on reproductive medicine. He much worse, from Lagerlöf's point of view, was the proposal's narrow focus on artificial insemination without a complementary effort to develop reproductive medicine. He made it clear to FAO that he could not accept the position as it stood because, in his opinion, India would not benefit from an artificial insemination program unless other necessary actions were taken as well. Lagerlöf argued that while developing countries might "hope that all difficulties would be overcome" with the introduction of AI, experience told him that the more likely result would be "a definite increase in breeding troubles." Lagerlöf was, however, in principle positive about going to India, if only "it can be arranged so that I can be of the intended usefulness." ¹⁴⁶

Bendixen, who supported Lagerlöf's views, was eventually able to convince his superiors at FAO, and the instructions were amended in accordance with Lagerlöf's objections. 147 While a part of the mission still focused on artificial insemination, the main emphasis was now on supporting the central government in developing the education of veterinarians in the field of animal gynecology. 148 The timetable was also reworked. Instead of spending an entire

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¹⁴³ Pålsson, "Med Nils Lagerlöf i Indien," 263. This was not an unusual way for FAO to find experts for its technical assistance programs at the time. The organization commonly drew on the "socio-cognitive networks" of its employees and often made informal approaches to potential recruits. See Jennifer Gold, "The Reconfiguration of Scientific Career Networks in the Late Colonial Period: The Case of the Food and Agriculture Organization and the British Forestry Service," in Bennett and Hodge, *Science and Empire*, 304.

¹⁴⁴ Bendixen to Lagerlöf, 10 January 1952, OG, series Ö1, vol. 7.

¹⁴⁵ Pålsson, "Med Nils Lagerlöf i Indien," 263.

¹⁴⁶ Lagerlöf to Bendixen, 5 February 1952, Swedish Institute/The Central Committee for Swedish Development Aid to Less Developed Areas archives, series F1, vol. 155, Swedish National Archives (hereafter cited as CK); Lagerlöf to Bendixen, 18 February 1952, OG, series Ö1, vol. 8.

¹⁴⁷ Bendixen to Lagerlöf, 12 February 1952, OG, series Ö1, vol. 8.

¹⁴⁸ The final formulation of the task, which now began "To advise and assist the Government in the development of the education of veterinarians in the field of animal gynaecology," can for example be read in the final report later produced for the central government: Nils Lagerlöf, Ernst Pålsson, and Bengt Lundgren, "Report to the Government of India on Artificial Insemination and Sexual Health Control on Cattle," (Rome: Food and Agriculture Organization, 1955), 1.

year in India, Lagerlöf would be there for two separate periods of two months each, and in between the two other experts would do fieldwork more directly linked to AI. Lagerlöf also convinced FAO that this three-person team could only be effective if he could hand-pick his colleagues. He chose Bengt Lundgren and Ernst Pålsson, two Swedish veterinarians who both directed insemination stations: Lundgren in Kalmar and Pålsson in Ystad.¹⁴⁹

Nothing in the material analyzed here points to the reasons Lagerlöf might have had for accepting the FAO mission. It is reasonable to assume that he had some degree of personal interest in development, because despite both being overqualified for and averse to the technical focus of the first FAO proposal, he decided to engage in a negotiation process instead of simply declining the offer or suggesting someone better suited for it. Why did he want to go to India, a trip that in the early 1950s was strenuous and not perceived as risk free?¹⁵⁰ In his professional correspondence from the time, Lagerlöf does not discuss his motivations beyond rather loose comments about wanting to be of use. 151 What likely played a part was that he already had some experience of aid work at home. During the 1940s, he had been heavily engaged in helping veterinarians among the refugees from the Baltic States who came to Sweden in 1944 to find work. 152 He had also been exposed to severe poverty, not to say misery, on a trip he had made in the American zone of occupation in Germany in 1948. His account of this trip demonstrates his interest in population sustenance and its links to productive cattle. 153 His interest was likely also further piqued at the XIVth International Veterinary Congress, which had had global food production as its theme and had featured an opening lecture by Lord Boyd Orr, the first director-general of FAO. 154

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¹⁴⁹ Lagerlöf to Bendixen, 22 March 1952, OG, series Ö1, vol. 8. Pålsson later wrote an account of the trip for a festschrift celebrating 200 years of Swedish veterinary medicine: Pålsson, "Med Nils Lagerlöf i Indien."

¹⁵⁰ Two other Swedish academics, Signe and Axel Höjer (see below), who were the same age as Lagerlöf also went to India in the early 1950s. Their eldest son supposedly later admitted that he and his siblings doubted if they would ever see their parents again after they had left. See Annika Berg, *Den gränslösa hälsan: Signe och Axel Höjer, folkhälsan och expertisen* (Uppsala: Uppsala University, 2009), 368.

¹⁵¹ Lagerlöf to Bendixen, 5 February 1952; 18 February 1952, CK, series F1, vol. 155.

¹⁵² Stig Einarsson, "Baltiska veterinärers flykt till Sverige. Del 1: Ankomst och utbildning i artificiell insemination," *Svensk veterinärtidning* 63, no. 11 (2011).

¹⁵³ Nils Lagerlöf, "Några intryck från en månads vistelse i amerikanska zonen i Tyskland våren 1948," *Meddelanden från Sveriges Yngre Veterinärers Förening* 3, no. 20 (1948).

¹⁵⁴ In a later account of Swedish veterinary development aid, Lagerlöf devoted significant space to Boyd Orr's speech at the congress, in a manner suggesting that he viewed it as a kind of starting point: Nils Lagerlöf, "Svensk veterinärmedicinsk hjälp till u-länder," in *Veterinärmedicinska föreningen 100 år 1968: En jubileumsbok* (Uppsala: Veterinary Student Association, 1968), 45–46.

From a professional point of view, an international engagement was also a new outlet for Lagerlöf's capabilities. His career in Sweden lay, in a sense, behind him in 1952. He had held his professorial chair for eighteen years, was a widely respected researcher domestically and internationally, and had a group of protégés and potential successors in place. 155 There was little left for him to prove in Sweden, or indeed even to do beyond holding his lectures and running his department. It is thus likely that he was driven by a mixture of a desire to provide aid and simultaneously offer some resistance to what he saw as overly naïve international reformers, and by a feeling that work abroad could reinvigorate his career. He would not have been alone in holding the latter view. He was in fact part of a broader movement: a number of prominent Scandinavian intellectuals complemented their domestic careers with an engagement in international organizations at the time. Some notable examples are Norwegian physician Karl Evang, and Swedish economist Gunnar Myrdal and physician Axel Höjer; the last-mentioned worked, like Lagerlöf, in India in the early 1950s. 156

Unlike Myrdal and Höjer, Lagerlöf was apparently uninterested in fusing his international activities with an ideological engagement or a political analysis. The material analyzed here contains no references to decolonization and its consequences, though Lagerlöf cannot have been unaware of the traumatic recent past of the country to which he was going. Nor did he seemingly pay much attention to matters of social change in India or elsewhere; nothing in the sources indicates a particular interest in political issues or in social reform more generally (with the exception of his interest in the cow slaughter ban being introduced in India; see my discussion below). A further comparison suggests, however, that Lagerlöf's understanding of modernization as a technical problem was both radical and critical, and that in this respect too, he was an unusual modernizer. At the time, Axel Höjer described the World Health Organization's international consultants as "enzymes" spreading "blessing forces in the large inert mass" of people in underdeveloped countries, and this attitude was common among international

¹⁵⁵ The most important of them was Allan Bane, who also had been a central figure in the development of Swedish AI and who would later take over Lagerlöf's chair. Bane was so engaged in the AI work that he finished his studies and became a licensed veterinarian only in 1947. By then he had already spent seven years as an AI expert. His work has been described by Einarsson, "Allan Bane – Den första AI-läraren i Sverige." See also Jan Rendel, *Från byatjur till genteknik:* En agrar- och vetenskapshistorisk studie av utvecklingen av svensk husdjursavel och husdjursgenetik under 1900-talet (Stockholm: Royal Swedish Academy of Agriculture and Forestry, 2003), 127–29.

¹⁵⁶ The work and careers of Axel Höjer and his wife Signe have been analyzed in Berg, *Den gränslösa hälsan*. For their international activities, see pages 359–484.

experts of the period.¹⁵⁷ When Lagerlöf wrote to Bendixen about FAO's international expert program, he too had used the word bless, but only within ironic quotation marks intended to reverse its meaning. Of course Lagerlöf, like Höjer, advocated education and knowledge as the way ahead for poorer areas of the world, but at least in the early 1950s he had a considerably more problematizing view of how this could be brought about and in particular of the role international expertise ought to play. As Lagerlöf saw it, experts certainly could bring blessings to the developing countries, but unless they were careful and paid proper attention to the context in which they were working, they might find these blessings turned into curses.

Swedish Veterinarians in India

Lagerlöf, Lundgren, and Pålsson left Sweden for India in February 1953.¹⁵⁸ They arrived in a country less than six years independent of colonial rule and still reeling from the bloody and traumatic Partition that followed the end of the *Raj*.¹⁵⁹ But it had a government under Jawaharlal Nehru that was committed to modernization and development, the initial strategy for which had been outlined in India's first Five-Year Plan from 1952. The plan split its goals between industrialization and rural modernization, devoting slightly more than a third of its expenditures to rural development.¹⁶⁰ One method employed to achieve the latter was known as the Key Village Scheme, which intended to improve animal breeding through the use of pedigree bulls as well as AI.¹⁶¹ It was in the context of this scheme that Lagerlöf's and Singh's correspondence had taken place, and it was also the reason for the request for help from FAO which had brought the Swedes to India.

¹⁵⁷ Höjer is quoted in Berg, Den gränslösa hälsan, 372.

¹⁵⁸ Lagerlöf wrote about the Indian journey in the journal of the Swedish Veterinary Association: Nils Lagerlöf, "På F.A.O.-uppdrag i Indien (del 1)," *Medlemsblad för Sveriges Veterinärförbund* 5, no. 8; 11 (1953); Nils Lagerlöf, "På F.A.O.-uppdrag i Indien (del 2)," *Medlemsblad för Sveriges Veterinärförbund* 6, no. 1; 7 (1954).

¹⁵⁹ The British *Raj* (the Hindi word for rule) is the term normally applied to the direct and indirect colonial rule of the British state in India between 1858 and 1947 (before 1858 the colony had been administered through the British East India Company). British rule ended with the Partition of India in August 1947, which established the two new independent states of Pakistan (then also including East Pakistan, i.e., present-day Bangladesh) and India. The Partition resulted, particularly in the contested border regions, in genocidal violence and massive population displacements.

¹⁶⁰ B. R. Tomlinson, *The Economy of Modern India: From 1860 to the Twenty-First Century*, 2nd ed. (Cambridge: Cambridge University Press, 2013), 140–43.

¹⁶¹ G. R. Madan, *India's Developing Villages* (Bombay: Allied Publishers, 1990), 224.

The Imperative of Practical Training

After their arrival, Lagerlöf and his colleagues had a few days of meetings with government officials in Delhi before they started on a two-month tour of the country. The primary objective was to visit the veterinary education institutions and insemination stations. One of the stops was Madras Veterinary College, which Lagerlöf considered "probably the best in the country, which however does not mean that it is good. . . . With respect to my own field, there was no practical training whatsoever."162 In Calcutta, Lagerlöf noted that the veterinary college remained at the "old equine stage" even though all horserelated practice had disappeared with the British military and in Nagpur that the veterinary college only offered a two-year course. Training for the Swedish veterinary degree nominally took five years, and Lagerlöf commented that a short course such as the one in Nagpur "can hardly lead to any particular result." ¹⁶³ These college visits gave Lagerlöf some initial insight into Indian veterinary medicine and what he perceived as its principal problems. Prime among them, and central to the ideas he would go on to develop, was the lack of practical training for veterinary students.

The visits to the insemination stations demonstrated to the Swedes the consequences of the Indian veterinary education model. In a later retrospective talk, Lagerlöf remembered how the veterinarians at the stations had developed

the system that they would sit in the laboratory and examine semen with every possible and impossible complicated method, without ever looking at the bulls, which very often were uninterested in mounting. The veterinary directors had given orders as to how many cows should be inseminated. Everyone had to obey and we were dismayed to find that many made-up figures regarding the insemination operations were sent to the central government.¹⁶⁴

From such experiences the Swedish experts drew the conclusion that to improve Indian cattle breeding in line with the government's intentions, the insemination program had to be complemented with a system of comprehensive sexual health control grounded in veterinary expertise. This led them to argue that it would be absolutely necessary to reform the veterinary education. Of particular importance, in their view, was to appoint professors and organize new departments in the field of obstetrics and

¹⁶³ Lagerlöf, "På F.A.O.-uppdrag i Indien 1," 153–54. Note that in the early 1950s, the real mean study time for a Swedish veterinary degree was around seven years. See SOU 1964:12, *Veterinärmedicinsk forskning och undervisning, del II*, 199–201.

¹⁶² Lagerlöf, "På F.A.O.-uppdrag i Indien 1," 150, my emphasis.

¹⁶⁴ Nils Lagerlöf, "Erfarenheter av veterinärmedicinska insatser i u-länder: Gästföreläsning vid Norges Veterinärhögskola den 4.9.1970," OG, series Ö1, vol. 8.

gynecology, departments where "as much practical training as possible" could be provided. 165 The most pressing problem, in Lagerlöf's eyes, was precisely the lack of practical, clinical training. Without such training, Indian veterinary candidates would not learn the techniques necessary to assist animal reproduction, nor would they be made aware of the on-farm hygienic measures needed to prevent the spread of disease. As historian of medicine Karin Johannisson discusses, the distinction between laboratory and clinical medicine is a central point of tension in all medical science, and the quote above plainly illustrates the problems Lagerlöf saw in a one-sided focus on the isolated, theoretically oriented laboratory environment over the clinic's demands for practical skills and intuition. 166 To him, veterinary reproductive medicine had significant clinical dimensions. If those who were supposed to practice it lacked the requisite clinical experience, understanding, and abilities, then the foundation was laid for situations like the one he had encountered at the Indian insemination stations, where, according to his understanding, the veterinarians did little useful work, instead splitting their time between pointless exercises in microscopy and fabricating statistics for their superiors.

In other words, even in the cases where the Indian veterinarians had good theoretical knowledge of reproductive physiology and pathology, Lagerlöf felt that meaningful veterinary work was close to impossible because they lacked the training, experience, and inclination to physically interact with animals. Throughout South Asia, there was a degree of contempt for manual and potentially dirty labor, and high social status and education effectively liberated one from having to perform such work. The veterinarians, belonging to an educated social elite, thus often left physical contact with animals to stockmen and other animal handlers. In Lagerlöf's eyes, this reluctance to work hands-on with animals was an attitude incompatible both with good veterinary education and with legitimate veterinary practice. While he thought that there could and should be a differentiation of responsibilities in AI, he was convinced that veterinarians ought to perform the most qualified tasks. A few years earlier, he had outlined those in the context of Swedish insemination stations, and

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¹⁶⁵ Lagerlöf, Pålsson, and Lundgren, "Report to the Government of India," 15.

¹⁶⁶ Karin Johannisson, "Kliniken: Medicinens praktik," in *Medicinen blir till vetenskap: Karolinska Institutet under två århundraden*, ed. Karin Johannisson, Ingemar Nilsson, and Roger Qvarsell (Solna: Karolinska Institutet University Press, 2010).

¹⁶⁷ This was rooted in the Indian caste system, with its core conceptual opposition between purity and pollution. It is an enormously complex issue which cannot be treated here; for an overview, see e.g. Susan Bayly, *Caste, Society and Politics in India from the Eighteenth Century to the Modern Age* (Cambridge: Cambridge University Press, 1999).

while he included semen collection and appraisal as veterinary tasks, he also argued that veterinarians had to take responsibility for the health and welfare of the bulls. Although not explicitly stated, this undoubtedly included physical examinations and treatments as needed.¹⁶⁸

Traveling through India had thus confirmed and reinforced Lagerlöf's conviction that artificial insemination was meaningless if not supported by an effective veterinary organization. The three Swedes stated this unambiguously in their final report to the central government:

When artificial insemination is introduced into a country, it will often happen that infertility problems become more pronounced and apparent. . . .

If the leaders of this work do not have good scientific background and practical experience, or if the veterinarians do not have good knowledge of fertility and sterility problems, it will very often happen that after some years following the introduction of A.I. into a country, there will be many new problems concerning reproduction.¹⁶⁹

Restated, their conclusion was that in the case of India the practical competence of the country's veterinary corps was low enough to imply that any modernization strategy based on a simple transfer of AI equipment was likely to end in failure. Lagerlöf and his colleagues were convinced that a precondition for successful AI was its combination with sexual health controls and efforts to combat sterility, and that this, in turn, demanded an improved training of veterinarians in obstetrics and gynecology. Consequently, they came up with their recommendation to create new professorial chairs and add more practical training.

Exporting the Swedish Model

In their final report to the Indian central government, the three Swedish veterinarians not only argued that new departments of obstetrics-gynecology had to be created but also cautioned the government to use the appropriate models when reforming the veterinary colleges. They recommended "that the veterinary colleges in India should not take Great Britain or the U.S.A. as models for improving their research and training," but that they should look to "countries such as Germany, the Netherlands and the Scandinavian countries." Behind this recommendation lay Lagerlöf's growing interest in promoting a particular vision of veterinary obstetrics-gynecology in India that

¹⁶⁸ Nils Lagerlöf, "Hur skall veterinärerna kunna bidraga till bästa möjliga resultat inom a. i. arbetet?," *Meddelanden från Sveriges Yngre Veterinärers Förening* 5, no. 1 (1950).

¹⁶⁹ Lagerlöf, Pålsson, and Lundgren, "Report to the Government of India," 4.

¹⁷⁰ Lagerlöf, Pålsson, and Lundgren, "Report to the Government of India," 26.

reflected his experiences with the model for teaching and research he had developed and championed at his own department.

The interest was rooted in the importance Lagerlöf afforded to clinical exercises. An inherent problem with the proposal to create new obstetricsgynecology chairs was that since the existing corps of teachers themselves as a rule had little clinical experience, there was a severe lack of competent candidates for the proposed professorships. Being trained outside India, as, for example, Singh had been, did not necessarily help in this respect. In the United Kingdom, where most Indian veterinarians who had been abroad had received their education, the new advances in reproductive medicine had entered veterinary curricula in the interwar period, but students were only taught the theory. 171 Though this had changed during and after the war, there had not yet been much of an impact on India, where most veterinarians in teaching or decision-making positions had been trained before the war (Singh, for example, had graduated from the Royal Veterinary College in London in 1936). It was this analysis of the problem and its solution that inspired Lagerlöf's idea of a course. Just before he left India in April 1953, he wrote to Per Wijkman, the Swedish ambassador to Delhi, and suggested that a "small troop" of Indian veterinarians could be trained in Sweden in order to later take up work as teachers in the Indian veterinary colleges. 172 This would, according to Lagerlöf, to a "very appreciable degree" contribute to more rational Indian cattle breeding and thus to economic development.

In his letter to Wijkman, Lagerlöf also referred to a new committee in Sweden working with technical assistance to underdeveloped countries. This was the Central Committee for Swedish Development Aid to Less Developed Areas, which channeled early Swedish bilateral aid to the Third World. Sweden had provided multilateral aid through the United Nations since the late 1940s, handled by Swedish government agencies as counterparts of the UN organizations. But from 1952, there was also a small Swedish program for bilateral—state to state—aid controlled by this Central Committee. It was not a government agency but rather a vehicle for cooperation between the main popular movements of Sweden (labor unions, political parties, cooperatives, mission societies, etc.), even if it was also provided with government funding. It was closely associated with the parastatal Swedish Institute, which already had a small aid department. This department, led by Sixten Heppling, became the secretariat and executive organ for the committee and handled all daily operations. Lagerlöf's awareness of the newly formed Central Committee is

¹⁷¹ Woods, "Farm as Clinic," 472.

¹⁷² Lagerlöf to Per Wijkman, 25 April 1953, CK, series F1, vol. 155.

¹⁷³ Nilsson, Svenskt bistånd, 6–9.

a further indication of his interest in international issues, and the letter to Wijkman, with its references to rationality and economic development, also shows that Lagerlöf neither opposed these development goals, nor questioned the value of Western science and technology in helping to achieve them. When wanting to train Indian veterinarians in Sweden, his intention was to find better means to the end of economic growth.

The idea of bringing foreign students to the Veterinary College in Stockholm was not new in itself. Lagerlöf had mentored international visitors before, and when G. B. Singh indicated his interest in studying in Stockholm he had immediately been invited. ¹⁷⁴ But the new proposal was original in that Lagerlöf now wanted to bring a group of people to Stockholm for an organized course. A simple explanation for this shift in his thinking is that he had come to believe that India had a need which could not be met through individual studies. He suggested that at least four or five of India's veterinary colleges needed teachers with further training. ¹⁷⁵ It is also possible that Lagerlöf considered the knowledge level of the Indian veterinarians so low that they would not benefit from independent work in Stockholm. He later suggested that organized courses were preferable for this reason: "It is 10 times better to have a first-rate course with many participants than to have a number of scholarship recipients who just obstruct our work and nobody has time to take care of." ¹⁷⁶

But the strongest motivating factor was arguably linked to the emphasis the Swedish team placed on establishing obstetrics-gynecology as its own discipline with its own professors at the veterinary colleges in India. That organizational model dominated in Scandinavia and continental Europe, but had historically not existed in the United Kingdom, which had been the model for the Indian veterinary colleges.¹⁷⁷ Of significance here is also that the United States provided development aid to India to expand its veterinary education in the 1950s, an expansion that was to take place according to the older organizational model. This supposedly "enraged" Lagerlöf, who, according to Ernst Pålsson, considered the United States—where veterinary colleges also mostly lacked obstetrics-gynecology departments—to be an "underdeveloped country, when it came to veterinary education in obstetrics, gynecology and

¹⁷⁴ Singh to Lagerlöf, 16 September 1951; Lagerlöf to Singh, 25 September 1951. He also discussed the matter with Bendixen: Lagerlöf to Bendixen, 24 January 1952, OG, series Ö1, vol. 7.

¹⁷⁵ Nils Lagerlöf, "P.M. Re. Possible Specialised Instruction in Obstetrics, Gynaecology and A.I. in Sweden of some Indian Veterinarians," 1, CK, series F1, vol. 155.

¹⁷⁶ Lagerlöf to Sixten Heppling, 17 December 1955, CK, series F1, vol. 155.

¹⁷⁷ For an overview of some aspects of veterinary medicine in colonial India, including education, see Saurabh Mishra, "Beasts, Murrains, and the British *Raj*: Reassessing Colonial Medicine in India from the Veterinary Perspective, 1860–1900," *Bulletin of the History of Medicine* 85, no. 4 (2015).

AI."¹⁷⁸ Pålsson's recollection is congruent with Lagerlöf's own account of the time he spent at Cornell University in the early 1930s. Though generally very impressed with American veterinary medicine, he considered the education of American veterinarians to be inferior to the one offered at his own college in Sweden.¹⁷⁹ Also, he unquestionably regarded an organizational model with obstetrics-gynecology as its own discipline, and consequently obstetrics and gynecology as significant parts of veterinary education, to be imperative for the resolution of breeding problems both in the developed and developing worlds. It was, Lagerlöf had suggested in his address to the XIVth International Veterinary Congress, only by devoting their full attention to reproduction that veterinary academics could master the complexities of sterility and other breeding problems:

[I]ndependent professor's chairs of obstetrics and gynaecology (breeding diseases) should be instituted at the veterinary colleges, where this has not been done already. The scientific demands now placed on a professor of this subject are so great that it is not possible for him to be good at surgery and medicine as well. ¹⁸⁰

It was also crucial that the professors of obstetrics-gynecology did not lock themselves up in ivory towers. As should be clear, Lagerlöf strongly believed that veterinary obstetrics-gynecology had to be a discipline with a significant practical-clinical orientation. ¹⁸¹ It also had to have good ties to farming. He continued his address by stating that

[f]or the teaching there should be one stationary and one ambulatory clinic, as it is hardly possible to get sufficient contact with the sterility problems under practical conditions without an ambulatory clinic. In teaching, practical demonstrations with phantoms and with animals set up in slaughter houses should be held to a great extent. ¹⁸²

Another reason for wishing to train an entire group of Indian veterinarians in Sweden can thus have been a desire to export the clinically oriented training

¹⁷⁸ Pålsson, "Med Nils Lagerlöf i Indien," 271. See also the account of the situation in the US in the Swedes' report to the Indian government: Lagerlöf, Pålsson, and Lundgren, "Report to the Government of India," 25.

¹⁷⁹ Nils Lagerlöf, "Några intryck från en studieresa i Nordamerika: Föredrag hållet inför Stockholm-Upplands veterinärsällskap den 6 december 1930," *Svensk veterinärtidskrift* 36, no. 2; 3 (1931).

¹⁸⁰ Lagerlöf, "Breeding and Rearing," 116.

¹⁸¹ He might have believed this stronger than most; it is possible that the field was more clinically oriented in Sweden than in any other country. Canadian veterinarian Leon Z. Saunders argues that while Lagerlöf held his chair at the Veterinary College, Swedish veterinarians were world leading in clinical examinations of reproductive organs in domestic animals. Saunders, "In ever widening circles," 433.

¹⁸² Lagerlöf, "Breeding and Rearing," 116.

model that had been firmly established at the Veterinary College in Stockholm since the days of Lagerlöf's predecessor as professor of obstetrics and ruminant medicine, Harry Stålfors. 183

Beyond the strong emphasis on practical training, the main difference Lagerlöf seems to have perceived between his own and others' approaches to animal reproduction is that his was more systemic. To Lagerlöf, it was counterproductive to break out bits and pieces, such as AI technologies, and attempt to develop them on their own. While acknowledging that modern cattle breeding hinged on the introduction of artificial insemination, he argued that it had to be combined with a whole system of sexual health controls and sterility research if it was to be successful. This, in turn, had to rest on well-developed veterinary expertise that could support the system both theoretically and practically. When Lagerlöf criticized other veterinary traditions, it was primarily this lack of a systemic understanding he attacked. In earlier correspondence with his Danish colleague Bendixen, he had polemicized about "Americans and Englishmen," suggesting that they had a limited understanding of reproduction issues and an attitude that he summarized as: "if only artificial insemination is introduced, everything will be fine."184 He clearly wanted to prevent this attitude from gaining a further foothold in India.

It is of some interest that Lagerlöf apparently saw the United States as offering little of value to his aid project. He was at least partially critical of American influences at a time when the United States was otherwise a very strong influence on the Veterinary College. Part of this was probably posturing intended to promote his own project over rival American proposals, but it is still clear that Lagerlöf believed the American model for veterinary education to be inferior to the one he represented and that he considered development in his field in the US to have been "slow." Since the American presence in India and elsewhere was so prevalent at the time, he had to point this out as part of his argument for the Swedish model. As a Swedish actor playing a role in a global context, Lagerlöf in a sense was an early, and apolitical, example of

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¹⁸³ On the history of the department, see "Avdelningen f\u00f6r reproduktion i ett historiskt perspektiv," http://www.slu.se/sv/institutioner/kliniska-vetenskaper/om-institutionen/reprod/historik-avd-reproduktion, last modified 21 October 2013.

¹⁸⁴ Lagerlöf to Bendixen, 24 January 1952. It is possible that Lagerlöf adopted overly drastic language here in order to secure influence for his views within FAO. An examination of the extent to which his statement matches up with actual attitudes among veterinarians and policymakers in the United States and Britain is beyond the scope of this study. For a historical study of the development of AI in Britain, see Sarah Wilmot, "From 'Public Service' to Artificial Insemination: Animal Breeding Science and Reproductive Research in Early Twentieth-Century Britain," Studies in History and Philosophy of Biological and Biomedical Sciences 38, no. 2 (2007).

¹⁸⁵ Lagerlöf, Pålsson, and Lundgren, "Report to the Government of India," 25.

an alternative outlook that resisted the global influence of the United States. He wanted to resist by exporting a Swedish model, and an effective way of doing this was to demonstrate that model first-hand to a larger group of Indian veterinarians.

Modernization and Sacred Cows

During the journey, Lagerlöf had also developed an interest in the culture of India and not least—probably for both professional and personal reasons—in the role of cattle in Hindu religious culture.¹⁸⁶ Long sections are devoted to this topic both in the final report to the central government and in the travel report he published in the journal of the Swedish Veterinary Association. He read up on the subject in order to understand its background, later corresponded with India in order to get a special study of it sent to Stockholm, and always brought it up when lecturing on his aid work.¹⁸⁷

Like the majority of Western observers at the time, Lagerlöf considered the religiously motivated prohibition of cattle slaughter being introduced in most of India a grave economical and ethical misstep. He recounted sights of cows with missing limbs or with horrible sores that nonetheless not even the veterinary colleges felt able to put down. But he was able to look beyond the suffering cattle to view the slaughter ban in a historical, political and cultural context in which there was no reason to believe that it would easily disappear through short-term modernization efforts. When reporting on his second trip to India, he stated that

[s]ince India became independent and after the separation of Pakistan, the religious demand for a prohibition of cattle slaughter has in fact become stronger and in most states such a prohibition ought to soon be in place. . . . Even if the responsible authorities and most intellectuals are fully aware of the very serious situation for the sustenance of the population, which is created with such a prohibition, they are also aware that in the present situation it is impossible to combat the religious view. It is however very likely that conditions will change in 10–15 years. ¹⁸⁹

¹⁸⁶ There has been considerable historical discussion of the connection between the status of the cow in Hindu religious culture and the cattle situation in the Indian state. For an introduction, see e.g. Frederick J. Simoons and Deryck O. Lodrick, "Background to Understanding the Cattle Situation of India: The Sacred Cow Concept in Hindu Religion and Folk Culture," *Zeitschrift für Ethnologie* 106, no. 1/2 (1981).

¹⁸⁷ Mukandi Lal to Lagerlöf, 7 June 1954, OG, series Ö1, vol. 8; Lagerlöf to Lal, 17 June 1954, OG, series Ö1, vol. 8; Pålsson, "Med Nils Lagerlöf i Indien," 269.

¹⁸⁸ Lagerlöf, "På F.A.O.-uppdrag i Indien 1," 154.

¹⁸⁹ Lagerlöf, "På F.A.O.-uppdrag i Indien 2," 3.

While expecting change in the medium-term future, Lagerlöf thus still acknowledged that because of the complex political-religious conditions that prevailed in post-partition India, the Western valuation of the life of a cow would not constitute the foundational attitude of the law in the 1950s. From this he concluded that any work aimed at improving the cattle economy in India would need to take religious sentiment into consideration, rather than simply assume that it would soon be made irrelevant by an overpowering modernization. This does not mean he ignored the issue: both during this first trip and during later visits to India, he appears to have always attempted to formulate a critique of the slaughter prohibition when lecturing to audiences that would be receptive. 190 He also tried to offer pragmatic alternatives, arguing, for example, that a suitable way ahead could be to stimulate the breeding of buffaloes. The buffalo was not protected by religious notions, and so the buffalo stock was in considerably better shape than the cattle stock. Lagerlöf considered trials with dairy cooperatives based on buffalo milk "the most promising sign of a new trend within Indian animal husbandry that has occurred."191

His thinking on the sacred cows of India serves as another example of how Lagerlöf's attitude differed from a linear view of modernization and development. While favoring modernization as a goal, and obviously holding the prohibition on cattle slaughter to be steeped in tradition and strongly negative for the Indian economy, he simultaneously recognized the limits of seeing modernization as a simple and unidirectional process. In 1954 as well as in later writings, he always gave prominent weight to historical and cultural contexts when he discussed the ban on cattle slaughter.

Educating Prophets

After returning to Stockholm, Lagerlöf spent spring and early summer developing ideas about how the course he envisioned might be realized. In June, he mentioned in a letter to Pålsson (who was still in India) that he "had tried to interest the [Central Committee] to contribute financially if I could bring some Hindus suitable to be trained as prophets to Sweden for a year." The word "prophets" reveals more of what Lagerlöf had in mind with the course. Beyond giving the presumptive students the clinical training and experience they lacked, the course was also intended to export a very specific idea of veterinary gynecology. What was to be prophesied was a systemic view

¹⁹⁰ Nils Lagerlöf, "Svensk veterinärverksamhet i Indien och andra u-länder i Fjärran Östern," 11, OG, series Ö1, vol. 8; Pålsson, "Med Nils Lagerlöf i Indien," 269.

¹⁹¹ Lagerlöf, "Svensk veterinärverksamhet," 11.

¹⁹² Lagerlöf to Pålsson, 16 June 1953, OG, series Ö1, vol. 7.

of animal reproduction along with the necessity of establishing obstetrics-gynecology as its own academic field including significant clinical elements. It was to this end that Lagerlöf contacted the Central Committee and embarked on a project of establishing his expertise as relevant to the fledgling Swedish bilateral development aid.

Linking up with Swedish aid

In August 1953, the XVth International Veterinary Congress was held in Stockholm. This brought many veterinary dignitaries to the city, among them K. V. L. Kesteven and Sir Thomas Dalling (a British veterinarian well known for his work on foot-and-mouth disease) from FAO. Lagerlöf used the occasion to further his plans by arranging a meeting between himself, Dalling, and Sixten Heppling, the secretary and main driving force of the Central Committee. ¹⁹³ The meeting went well and afterward Lagerlöf felt sufficiently assured of support from both FAO and the Central Committee to continue working on a more specific plan for the course. This was based on a tripartite cooperation in which FAO would pay the teachers' salaries, the Swedish government through the Central Committee would pay for scholarships to the participants, and the government of India would take responsibility for necessary expenses in India during the course (for example, compensation to the participants' families). ¹⁹⁴

In a memorandum Lagerlöf wrote for Heppling to use to explain the project's purpose to the Central Committee, he further explicated the reasons why he considered a course such as this to be necessary. He reiterated the aforementioned arguments about AI, but now also emphasized that the choice of participants had to be based on aptitude for research. Even if the primary reason for the course was to produce teachers who could train other veterinarians in clinical obstetrics-gynecology—training that had "to start as soon as possible"—it was, furthermore, important that they were capable of independent research because "one cannot easily transfer research results obtained in Europe to conditions in India, which most often are completely different." ¹⁹⁵

Lagerlöf thus did not embrace an unproblematizing and diffusionist understanding of science and the movement of scientific knowledge. He was no epistemological relativist, but he did question the possibility of an easy

¹⁹³ Nils Lagerlöf, "PM angående XV internationella veterinärkongressen, kontakt mellan FAO och Svenska kommittén för teknisk hjälp åt underutvecklade länder samt diverse," OG, series Ö1, vol. 7

¹⁹⁴ Lagerlöf to Sir Thomas Dalling, 19 October 1953, CK, series F1, vol. 155.

¹⁹⁵ Nils Lagerlöf, "VPM med förslag till avancerad utbildning av en grupp indiska veterinärer vid Veterinärhögskolans i Stockholm avdelning för obstetrik-gynekologi under läsåret 1954–1955," p. 2, 7 November 1953, CK, series F1, vol. 155.

transfer of research results between different contexts. As noted, he understood sterility problems as depending on a complex of environmental and hereditary causes and had earlier explicitly stated that "the causes of sterility vary considerably in different countries, and . . . great consideration must be paid to factors such as breed, the manner in which the breeding is carried out, climate, soil, feeding and care of the animals." This implied that reproduction knowledge which was to stimulate development in India could not entirely be produced outside India, and thus "prophets" who could teach and create valid knowledge in different contexts were needed. In a wider sense, the argument was about a perceived necessity of institutionalizing a local research capacity with the ability to generate its own innovative solutions to spatially localized problems. Lagerlöf did not see the expertise he represented as a closed system of practices but as something that required a degree of contextual openness. He thus advocated what I earlier described as a localist approach to development.

At the time, the Central Committee was focusing on field projects in Ethiopia and Pakistan, but Heppling was keen to find a place for Lagerlöf's initiative as well. 197 In a memorandum later put to the committee, Heppling argued that the relatively small investment Lagerlöf's proposed course represented would be a suitable gesture of goodwill towards India "in the political situation which has now arisen on the Indian subcontinent."198 The relationship between India and Pakistan had been very tense following Partition and the subsequent First Kashmir War, and Heppling thus suggested that by providing aid to both India and Pakistan, Sweden could avoid giving the impression of having chosen sides in their conflict. Heppling also argued that unlike the more long-term projects in Ethiopia and Pakistan, a course in Stockholm would be a way for the newly created Central Committee to guickly obtain a positive result without this having to be too laborious. Educating a group of Indian academics in Stockholm required very little work compared with the administration of field projects halfway across the world, and achieving a demonstrable success was important to the committee, whose goals were not just to carry out aid projects but also stimulate the Swedish general public's interest in aid. Finally, Heppling referred to an earlier initiative by the foreign-based Swede Paul Mohn, which was based on the idea of inviting around a thousand Asian grantees to Sweden to study Swedish democracy. 199

¹⁹⁶ Lagerlöf, "Breeding and Rearing," 109.

¹⁹⁷ About the Central Committee's work at this time, see Nilsson, Svenskt bistånd, 12–17.

¹⁹⁸ Sixten Heppling, "P.M. angående utbildning av indiska veterinärer i Sverige," 31 March 1954, CK, series F1, vol. 155.

¹⁹⁹ See Sixten Heppling, "The Very First Years: Memories of an Insider," in Frühling, *Swedish Development Aid in Perspective*, 17–18, See also Nilsson, *Svenskt bistånd*, 9–12.

This somewhat bizarre plan had garnered strong support among the youth organizations that were part of the Central Committee. Heppling, staunchly opposed to Mohn's initative, argued that Lagerlöf's plan was moderately similar but much better: Lagerlöf also proposed a project that would bring Asian people to Sweden—if not on the massive scale envisioned by Mohn—but one that had great potential to actually become practically useful.²⁰⁰

A Service Science Course

The course Lagerlöf wanted to teach was based on a conception of veterinary reproductive medicine as requiring the union of theoretical knowledge and practical skills in order to be useful. FAO's veterinary expertise had by now accepted the outline of his plan, which both Kesteven and, particularly, Dalling supported. The FAO leadership was still unconvinced, however, and Lagerlöf found it necessary to write "stern and detailed letters" to its headquarters in Rome.²⁰¹ Sir Herbert Broadley, FAO's deputy director-general and the official responsible for the technical assistance program, still preferred a narrower project that would train technicians in the use of AI equipment. In early 1954, Lagerlöf wrote directly to Broadley and explained in detail why his proposed course aimed at improving the education at India's veterinary colleges. ²⁰² After this campaign, FAO came around to Lagerlöf's views and confirmed its commitment to the course. In contrast, the negotiations with the Central Committee were painless. Convinced by Heppling of the viability of Lagerlöf's plan, its representatives raised no ideological objections and presented no other difficulties, even though bringing foreign students to Sweden was not a prioritized activity at the time.²⁰³ It probably helped that there would be no recruitment issues as all the work was to be performed by personnel already at the Veterinary College, and that the cost, shared by FAO and the government of India, was relatively insignificant compared with the field projects in Pakistan and Ethiopia. In June, the third party, India's central government, also confirmed that it would contribute to the course.²⁰⁴ Moreover, during this final

²⁰⁰ Heppling, "P.M. angående utbildning av indiska veterinärer i Sverige," 4–5.

²⁰¹ Lagerlöf is quoted in Bane, "Nils Lagerlöf och hans insatser," 274.

²⁰² Lagerlöf to Herbert Broadley, 31 January 1954, OG, series Ö1, vol. 8.

²⁰³ Nilsson, Svenskt bistånd, 12.

²⁰⁴ Indian Ministry of External Affairs to the Swedish legation in New Delhi, 1 June 1954, CK, series F1, vol. 155. Note that I have not analyzed any source material that could throw light on the reasoning within FAO or the Indian government, and so cannot say why they decided to support Lagerlöf. In particular the latter might have had its own interesting reasons for this, but I can offer no insight into them.

planning phase, it became clear that there was money available for two extra participants, who were recruited from Thailand.²⁰⁵

This planning process turned Lagerlöf's idea of technology transfer as necessarily based on knowledge, professionalism, and practical skills into an actual course design, which Lagerlöf then had to get all involved parties to agree to. This involved negotiations that illustrate how Lagerlöf functioned as a go-between who mediated between different contexts: his own clear conception of the project design, the new Swedish aid administration, the UN bureaucracy that characterized FAO in Rome, and the government of newly independent India, with its modernizing desires. Lagerlöf proved able to formulate his project in terms acceptable in all these contexts. But he was not just a go-between in different national and political contexts: he also drew on his role as a scientist, acting in a mediating role between science and politics as well. An interesting example of this can be found in a set of handwritten notes on the back of a letter from H. M. Patel, an undersecretary of state at the Indian Ministry of Agriculture, which Lagerlöf apparently used as a memory aid during a discussion in Delhi. 206 In the notes, he reminds himself that what is interesting to the expert might not interest the policymaker, and that it is important to make clear that the plans under discussion could be carried out using existing resources. The notes also contain a cryptic reference to Carl Linnaeus, arguably the best known Swedish scientist of all time. A possible interpretation is that Lagerlöf wanted to emphasize that his project, though largely practice-oriented, would still be solidly grounded in Swedish science. Another, more alluring hypothesis is that he wanted to compare the Indian students to Linnean apostles, whom he would train in the latest reproductive medicine before sending them out in the world. This is congruent with his use of the word prophets as well as with his continuing involvement in the students' careers after their time in Stockholm (see below).

In September 1954 the course participants gathered in Stockholm and the teaching began. It involved some theoretical instruction, but most of the time was spent on clinical exercises at the Veterinary College, at the Stockholm slaughterhouse, and later also at insemination stations in other areas of the country, primarily in Kalmar and Ystad, where Lundgren and Pålsson worked.²⁰⁷ Tangible organs and bodies, living as well as dead, were in focus. One part of the course consisted of clinical case training, during which every

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²⁰⁵ Settergren, "Kurser i husdjursreproduktion 1," 273.

²⁰⁶ H. M. Patel to Lagerlöf, 15 January 1954, CK, series F1, vol. 155.

²⁰⁷ The course structure and contents is described in Bane, "Nils Lagerlöf och hans insatser," 275–76. An attendance list providing short descriptions of the work done day-to-day through most of the course can be found in OG, series F5 A, vol. 1.

student was given responsibility for examinations and record keeping of one particular case, while given feedback and critique by Lagerlöf and the other students. Another part consisted of what was known as phantom training. Using artificial uteri contained in wooden boxes, together with dead calves or calf fetuses (a technique developed by Lagerlöf's predecessor as professor, Harry Stålfors), the students practiced obstetrical techniques and handling obstetrical problems.

Much of the course content was geared toward familiarizing the students with the idea and practice of physical animal interaction, thus giving them the clinical experience that they had been lacking and, hopefully, a new attitude to clinical work. That Lagerlöf considered this latter aspect crucial is clear from his account of his second trip to India. He had then taught a shorter course there and noted how the most important part of the training was teaching the Indian veterinarians to "not be ashamed of working with their own hands." ²⁰⁸ During their time in Kalmar and Ystad, the students thus took part in the daily routines of Swedish AI work. In a typical account of the time in Kalmar, the student S. M. Ishaque describes how he "went out practically every day with the chief veterinarian and did artificial insemination and treatment and pregnancy diagnosis."209 In this way the students both got to see firsthand and participate in the combination of AI with diagnostic work and examinations of the cattle stock. The field visits also included work at the local slaughterhouses, which the students had already experienced in Stockholm. This could be particularly bloody and challenging. Allan Bane describes how the students

had to present themselves at the Enskede [in southern Stockholm] slaughterhouse early in the morning, get dressed in rubber boots, rubber coats and rubber gloves, and start the examination of animals before the slaughter, record their findings, and perform dissections of the reproductive organs after the slaughter.²¹⁰

Bane notes that many of the participants initially reacted with shock to this training environment and tasks, which is not strange considering their social standing and limited experience of such work.²¹¹ But as Lagerlöf saw it, all veterinarians needed the skills these exercises fostered. Beyond the transmission of skills, the sexual examinations, the obstetrical exercises, and the practical work at the insemination stations were also part of a broader

²⁰⁸ Lagerlöf, "På F.A.O.-uppdrag i Indien 2," 100.

²⁰⁹ S. M. Ishaque, "Notes from a Study Tour of Kalmar and Ystad," 2, OG, series F5 A, vol. 1.

²¹⁰ Bane, "Nils Lagerlöf och hans insatser," 275.

²¹¹ Bane, "Nils Lagerlöf och hans insatser," 275.

attempt to convey a new sense of the veterinary profession, which Lagerlöf considered highly important given that he ultimately saw the course as being about training teachers and prophets. He explicitly addressed this point in a paper on "Veterinarians' Duty to the Farmer and his Livestock." Its main argument was that veterinarians must not remain aloof from agricultural practice but instead take part in it and learn from it:

The young veterinarian should try to learn as much as possible from the farmers' observations and experiences. He should gain the farmer's confidence by trying to understand his sentiments and economic conditions, not by sitting in the Government offices or in the hospitals but by going out to the villages in order to obtain closer contacts with the farmers.

To achieve this, he will have to mix with the farmer without assuming himself

 \dots He must remember that he is meant for the farmers and not the farmers for him. 212

While on the farm, the veterinarian's role was not simply to supervise and instruct but to do hands-on work: "In order to achieve good livestock development, the veterinarian has to remember that he has to keep his eyes open for keen observations and to work with his own hands to gain more and more experience." This clearly reflects not just Lagerlöf's understanding of his own specialist field but also his more general understanding of what it meant to be a modern, effective veterinarian. Like his research interests, this professional self-image was founded on a service science ideal in which agricultural utility was imperative, and true veterinary expertise required not only academic studies but also direct interaction with farmers and wideranging experience of practical and sometimes utterly gory work.

Ultimately this was about more than putting knowledge and skills at the disposal of agriculture. It was also, as Lagerlöf openly argued, about raising the status of the veterinarian. His paper concluded not with a remark on food production or economic growth, but with a proclamation on the profession itself: "The veterinarian in this country [i.e. India] will surely prosper, if he does his duty first." This implies that this and the subsequent courses were parts of a wider project of creating legitimacy for the veterinarian as a modern and effective professional ready to take on supporting and administrating roles

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²¹² Though I found this paper among course materials from 1957 and later, it refers to India, which suggests it was originally written for use in the 1954–55 course (the 1957 course was geared primarily to Turkey, the Arab countries, and Pakistan). Nils Lagerlöf, "Veterinarians' Duty to the Farmer and his Livestock," in "II F.A.O. International Training Centre on Animal Reproduction, Stockholm 1957, part 4," 1–2, OG, series F5 A, vol. 3.

²¹³ Lagerlöf, "Veterinarians' Duty," 1.

²¹⁴ Lagerlöf, "Veterinarians' Duty," 2.

in relation to the rapidly industrializing and economically ever more important animal production. Abigail Woods discusses a similar development in her study of British dairy farming and veterinary expertise, and in a comment on her findings, historian of science Jean-Paul Gaudillière describes it as being about "translating the demand for more milk into a question of reproductive control." A new audience and social role for veterinarians were created in the postwar period through "the redefinition of rarely used bodily techniques like rectal examination" and the application of "a package of skills for diagnosing pregnancy and to handle the newly discovered mass of 'unfertility' problems."²¹⁵ Lagerlöf's remarks on the veterinarians' duties suggest that he and his teaching were very much a part of this project.

²¹⁵ Jean-Paul Gaudillière, "The Farm and the Clinic: An Inquiry into the Making of our Biotechnological Modernity," *Studies in History and Philosophy of Biological and Biomedical Sciences* 38, no. 2 (2007): 526.



Figure 3. Phantom training at the Veterinary College during the 1954/55 course. Photo Lars Drejare. From the Swedish Veterinary Museum's photography collections.

From Sweden to the World

All participants got over the initial shock and successfully completed the course, which concluded with a study tour of other veterinary colleges around Europe in the summer of 1955. By then, Lagerlöf had evidently begun to acquire a taste for international engagements, and he also found himself sought after by FAO for further assignments. In the winter of 1953/54, he had been back in India for the second part of his mission there. Thereafter, he spent some time working in Israel, and the year after, from late 1955, he was visiting professor at a university in Cairo. From Egypt, he then immediately went to Thailand on behalf of FAO. Although Lagerlöf was over sixty years old, his schedule was intensive: "I will stay [in Rome] until January 6, when I go to Bangkok on behalf of FAO. Will stay there until

around March 1. Then India has asked me to stop by for a short while on my way home, and FAO has also suggested a visit to North Rhodesia, but that I am trying to postpone until June."²¹⁶

"We Need a New Training Center in Stockholm"

If Lagerlöf had previously intended his course project as a one-off attempt to help India in relation to his FAO mission there, his time in Egypt made it clear to him that other countries were also in dire need of assistance, and this laid the foundation for his continued international involvement. He deemed the situation in Egypt to be at least as bad as it had been in India. In a letter to Heppling in Stockholm, he painted a very gloomy picture:

No instruction in my field had been provided here at the college and there is tremendous <u>ignorance</u> among the veterinarians. The peasants have very valuable buffaloes, on which they depend, but the vets cannot because of their poor education help them even with a complicated delivery. This college trains all veterinarians for the Arab countries, with the exception of Turkey.²¹⁷

Perhaps Lagerlöf overemphasized the magnitude of the ignorance, for the purpose of his letter was exploratory: could another course be arranged in Stockholm with support from the Central Committee? Or as Lagerlöf matterof-factly wrote: "Frankly, we need a new training center in Stockholm in obstetrics and gynecology at the Veterinary College."218 Not just the valuable buffaloes were at stake here: in Egypt, planning was also underway for a new AI organization. Lagerlöf predictably considered this ill-advised as long as no veterinary competence in reproductive medicine was available. His desire to arrange a second course emanated from this encounter with yet another country that "had gotten the idea . . . to hastily implement artificial insemination, and this is meaningless before the veterinarians have been taught the A to Z of sexual physiology and sexual pathology."219 Egypt too would benefit from the Swedish model, and a course in Stockholm based on clinical training in obstetrics-gynecology might help rid the country of "the old English influence with English veterinary education which up until the last world war, as long as England imported her animal eatables, was lousy when it came to the clinical subjects."220 The second course was intended to target veterinarians from the

²¹⁶ Lagerlöf to Tore Tallroth, 17 December 1955, CK, series F1, vol. 155.

²¹⁷ Lagerlöf to Heppling, undated (probably December 1955), underlining in original, CK, series F1, vol. 155.

²¹⁸ Lagerlöf to Heppling, undated.

²¹⁹ Lagerlöf to Tallroth, 17 December 1955.

²²⁰ Lagerlöf to Tallroth, 17 December 1955.

Arab countries and Turkey, and possibly also—with implicit reference to the Central Committee's flagship aid projects—from Pakistan and Ethiopia.²²¹

The above-cited letter to Heppling is of particular interest in that it gives one of the rare glimpses of a personal motivation for Lagerlöf's active interest in the developing world: "One commits to very hard work when trying to start something like this, but I am convinced that it is tremendously beneficial and valuable to these countries. I believe I would fail in my task unless I do something about this."222 These wordings again suggest a utilitarian motive, but stronger than before. It is no longer just about possibly doing some good but about work that quite obviously is of great value. Lagerlöf had clearly been affected by his experiences in developing countries. He also wrote about failing in his task if this work was to stop. That is the closest we get in the material analyzed here to his personal reasons for engaging with the developing world, and trying to understand what he meant becomes speculative. But a reasonable interpretation is that by this time he was not only ready to go if asked but also felt a personal responsibility for developing veterinary gynecology in poorer parts of the world. Perhaps he saw it as a transfer of responsibility from the local and national context—the Veterinary College and Sweden—where his "task" had been completed, to the international context, where there were enough difficult and complex problems to keep him busy for the rest of his working life? Engaging with these problems probably also seemed more interesting and satisfying to him than to end his career at the Veterinary College, with what that implied of paperwork and teaching responsibilities.

In the end, he proved able to convince the Central Committee again, and a second course was held in 1957, the same year Lagerlöf was appointed vice-chancellor of the Veterinary College. The reproduction courses were then well on their way to becoming institutionalized. Although Lagerlöf had indicated to Heppling that he did not expect to be involved in further courses, he eventually arranged another five and was preparing a sixth at the time of his sudden passing in 1970, aged seventy-five. 223 After retiring from the college in 1962, Lagerlöf also resumed his international travels, which had been put on hold by his obligations as vice-chancellor. Accompanied by young colleagues like Ingemar Settergren and Börje Danell, he worked in both Latin America and

²²¹ Lagerlöf to Heppling, undated. Heppling later replied that for political reasons, it was important to include students from sub-Saharan Africa and Asia as well. Heppling to Lagerlöf, 7 March 1956.

²²² Lagerlöf to Heppling, undated.

²²³ "Central Committee should expect that this is the last course I can be responsible for." Lagerlöf to Heppling, 12 March 1956, CK, series F1, vol. 155.

Pakistan during the late 1960s, both on FAO missions and on course-related follow up and recruitment trips.²²⁴

Impact and Scope of the Courses

The courses not only shaped Lagerlöf's later life, they also had a notable impact in the recipient countries. According to Nils Edling, all of India's veterinary colleges taught obstetrics-gynecology around 1960, and most had professorial chairs held by former course participants. ²²⁵ In itself, this fact does not allow for judgments about the impact of the courses on teaching practices. I thus cannot say to what extent the participants fully appropriated Lagerlöf's views, given that they returned to live and work in a very different social environment. But there are some indications that the courses made a difference as to how both reproductive matters and the veterinary profession were understood. A glance at the present-day web pages of Indian veterinary colleges, like the webpage of the Department of Animal Reproduction, Gynaecology and Obstetrics at the Nagpur Veterinary College, at least suggests as much. The department's name itself betrays something of Lagerlöf's influence, and the presentation of its history even more: it notes how the department's founding father, A. S. Kaikini (who had been a student of Lagerlöf's), "was a trendsetter" who "designed the road map of this Department."226 According to Stig Einarsson, who took over the chair in obstetrics-gynecology after Lagerlöf's protégé Allan Bane retired, it was also quite common that previous course participants would eventually secure not just teaching positions but also rise to prominence in the veterinary administrations of their home countries.²²⁷ These positions would have presented opportunities to promote Lagerlöf's views, if there was an interest in doing so.

When G. B. Singh first inquired about the possibility of studying in Stockholm, he stated that he was "not interested in any Degrees or Diplomas, but in the practical application of the work." This spirit also came to inform the reproduction courses, and no formal academic degrees were awarded to those taking them. Sweden did not have a one-year master's degree when they were initiated, and conferring one of the existing Swedish postgraduate degrees

²²⁴ Bane, "Nils Lagerlöf och hans insatser," 278–81. See also Lagerlöf, "Erfarenheter av veterinärmedicinska insatser i u-länder."

²²⁵ Edling, "Nils Lagerlöf," 514.

²²⁶ "Nagpur Veterinary College, Department of Animal Reproduction, Gynaecology and Obstetrics," last modified 2015, accessed November 3, 2015, http://www.nvcnagpur.net.in/dept.php?id=27.

²²⁷ Stig Einarsson, interview by author, 7 March 2013.

²²⁸ Singh to Lagerlöf, 16 September 1951, 1.

on participants of a comparatively brief and largely practical course was not possible. Instead, Lagerlöf obtained permission from the faculty of the Veterinary College to award participants the title of Fellow of the Royal Veterinary College of Sweden (FRVCS). This fellowship had no academic significance as such and was only given to international course participants, but to them, it could be useful to have something formal to show for their long absence when returning home. Ingemar Settergren also suggests that the title eventually gained "general recognition" in veterinary circles (cf. figure 5 below).²²⁹ The Indian Council of Agricultural Research later judged that FRVCS holders were "fully competent" to teach postgraduate courses, even if the title itself was not given equal status with academic degrees.²³⁰

In financial terms, the veterinary courses played a relatively minor role in the fledgling Swedish development aid. They are not discussed at all in Per Åke Nilsson's study of the Central Committee. But they are generally given positive evaluations in both the contemporary and retrospective material that do discuss them.²³¹ In 1961, Heppling described them as one of the committee's "most valuable efforts in the work of raising living standards in the underdeveloped countries," a judgment he also stood by in a later, retrospective text.²³² So even if the courses were only a small part of the early Swedish development aid, most stakeholders considered them significant and valuable contributions. This likely helped create a positive impression of agrarian expertise and might thus have facilitated the establishment of the more significant joint project between the aid authorities and the Agricultural College which was to follow.

As more definite structures for Swedish agrarian and rural development aid evolved, the courses continued in a more institutionalized form under the name SIPAR: Swedish International Programme on Animal Reproduction. SIPAR courses, funded by FAO and SIDA, were given biennially, with follow-up trips by the course management taking place in the course-free years.²³³ These trips, originally undertaken by Lagerlöf to provide support

²²⁹ Settergren, "Kurser i husdjursreproduktion 1," 275.

²³⁰ Indian Council of Agricultural Research, "Equivalence of M.R.C.V.S. (UK) and F.R.V.C.S. (Sweden) Diplomas to M.V.Sc. Degrees Awarded by the Indian Universities," 3 December 1970, OG, series Ö2, vol. 3.

²³¹ For some examples, see e.g. SOU 1962:12, Aspekter på utvecklingsbiståndet, 132; SOU 1963:34, U-länder och utbildning: Riktlinjer för svenskt tekniskt bistånd på utbildningens område, 56.

²³² Heppling to the Board of Directors of the Veterinary College, 15 June 1961, OG, series Ö1, vol. 8; Heppling, "The Very First Years," 22.

²³³ See Settergren, "Kurser i husdjursreproduktion 2"; Settergren, "Kurser i husdjursreproduktion 3."

and advice to former students, but also to check that they were sticking to what they had been taught, became important forms of aid in their own right. Beyond advertising and recruiting for the courses, such visits created more tangible connections between the Veterinary College (which from 1977 became the Faculty of Veterinary Medicine at SLU) and universities and veterinary administrations abroad. These connections meant that the Swedish model for training in veterinary obstetrics-gynecology could be exported in more ways than through training courses, for example through the spatial planning of veterinary college departments.

Figure 4 below shows a sketch of a space for phantom training and other activities that Lagerlöf's student (and then head of the Veterinary College's international office) Börje Danell sent to Kasetsart University in Thailand. The sketch was based on an original that Danell and Lagerlöf had prepared together for a veterinary college in Lahore. It came with a document authored by Lagerlöf in March 1970, in which he very explicitly spelled out both how a department for obstetrics-gynecology should be designed and what sort of activities should be conducted there.²³⁴ Other proposals for physical layouts. building on the same principles, were later sent to other places, for example to the School of Veterinary Medicine in Lusaka, Zambia.²³⁵ These sketches, which can be said to feature Lagerlöf's vision of an ideal department, highlight another interesting feature of this knowledge transfer project. Though sensitive to the need for local knowledge production, neither Lagerlöf nor his successors were seemingly interested in adapting the core contents of their field to different contexts. A department of obstetrics-gynecology was to look more or less the same in Zambia as in Thailand, Pakistan, or Sweden.

There is one salient difference between the sketches, however: the layout of the dressing rooms. The sketch Lagerlöf sent to Lahore does not have a dressing room for women, while the one Danell sent to Kasetsart has one, though much smaller than the one intended for men. This presumably reflects gendered understandings of the veterinary profession in the respective countries rather than the situation in Sweden, where the number of female veterinary students exceeded the number of male ones in the early 1970s—but in relation to the knowledge transfer project as a whole, it is an insignificant exception.²³⁶

²³⁴ Nils Lagerlöf, "Shortnote Concerning Construction of Buildings for the Establishment of a New Department of Animal Reproduction at Lahore College of Veterinary Science and Animal Husbandry," 2 March 1970, OG, series F5 F, vol. 2.

²³⁵ Ingemar Settergren, "Comments to a Sketch with Suggestions for Premises for the Section of Obsterics-Gynaecology [sic], School of Veterinary Medicine, Lusaka," OG, series F10 B, vol. 2.

²³⁶ On gender in the Swedish veterinary profession, see Östensson, "Från manligt till kvinnligt."

That the sketches are otherwise so similar suggests that Lagerlöf's localism remained embedded in centrist thinking. In a sense, his was a totalizing approach to the transmission of reproduction knowledge, in which courses, follow-up visits, and architectural suggestions formed a coherent whole. It required local research work, but the central constituent parts of the vision itself were closed to local modification. Stig Einarsson recalls how Lagerlöf could be not just a helping but also a judging expert who would sternly upbraid former students if he felt that they were not working hard enough or if they had deviated from his model and prescriptions.²³⁷

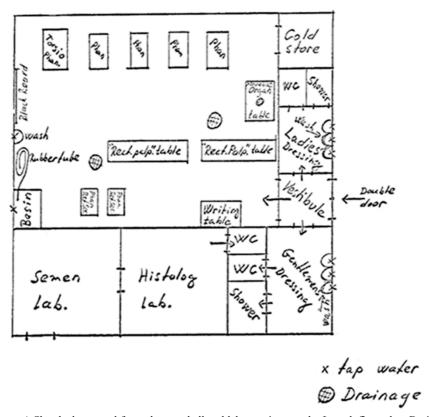


Figure 4. Sketched proposal for a phantom hall and laboratories, sent by Lagerlöf's student Börje Danell to Kasetsart University in Thailand in 1974. Sketches such as this were another way of communicating a Swedish model for training in animal reproduction: the sketch itself, and the accompanying description, implied a very specific idea of a department of obstetrics-gynecology, in terms of both physical layout and relevant activities.²³⁸

²³⁷ Einarsson, interview.

²³⁸ Börje Danell to S. Samutra, 11 December 1974, OG, series F10 B, vol. 2.

Effects on the Veterinary College

The courses were mostly Lagerlöf's personal project. He never attempted to integrate them with the Veterinary College's regular activities but rather tried actively to keep them apart. Writing to Heppling in 1956, he explained that he was "extremely eager not to have to steal [resources] from my own division so that I can be criticized for bringing foreigners and neglecting the teaching of my own [students]."239 This is in clear contrast to the Agricultural College, where a decade later development aid came to be closely tied to institutional change (as I will show in the next chapter). This reflects the different contexts in which the respective projects took place. Unlike the aid authorities of the mid-1960s, the Central Committee had neither the financial nor the executive resources to support a more far-reaching agrarian effort. Conversely, in the 1950s Lagerlöf had neither reason nor means to attempt to link his aid work to the Veterinary College's general objectives. In fact, only by keeping the two distinctly separate could he maintain legitimacy for an aid project built mostly on his own personal motives and ideas. But the courses still made their mark on the college. Lagerlöf's successor as vice-chancellor, Carl G. Schmiterlöw, was also interested in development aid and, among other things, brought a number of Cuban students to Sweden.²⁴⁰ Furthermore, the courses in reproduction were from 1962 complemented by similar courses in pathology. organized by the college together with the National Veterinary Insitute and run by Sven Rubarth, professor of pathological anatomy (later professor of pathology).²⁴¹ Like their reproduction counterparts, these combined biennial courses in Sweden with follow-up trips abroad. The Veterinary College also eventually established an international office, which would go on to become part of SLU's International Rural Development Center.

Courses organized according to the same model, although with curriculum updates, continued to be given until the early 1990s, when SIDA, by then finding them an old-fashioned, Swedish-centered and unproductive form of aid, became more reluctant to finance them. ²⁴² In response, the course leaders asked former participants to give their opinions of the course to the agency. It says something about the impact the courses had on the individual participants—if nothing else—that in 1991 a flood of letters from veterinarians across the world, all addressed to Director-General Carl Tham, arrived at SIDA

²³⁹ Maybe this was also an attempt at pressuring the Central Committee to commit more funding.

Lagerlöf to Heppling, 12 March 1965, 2. ²⁴⁰ Einarsson, interview.

²⁴¹ Lagerlöf, "Svensk veterinärmedicinsk hjälp," 51–52.

²⁴² See p. 246 below.

in Stockholm protesting the proposed cancellation.²⁴³ Despite the protests and later attempts to move the courses to a developing country, the longer courses in animal reproduction and pathology were both canceled in 1993. Some of their legacy lived on for a few more years through shorter courses in AI and in udder health. The department also introduced a Master of Science program in veterinary medicine for international students, which ran until 2007.²⁴⁴

²⁴³ The letters can be found in the SIDA archives: Swedish International Development Authority (SIDA), Central archives, series F1 AD, vol. 5221, National Archives of Sweden (hereafter cited as SIDA).

²⁴⁴ "Avdelningen för reproduktion i ett historiskt perspektiv."

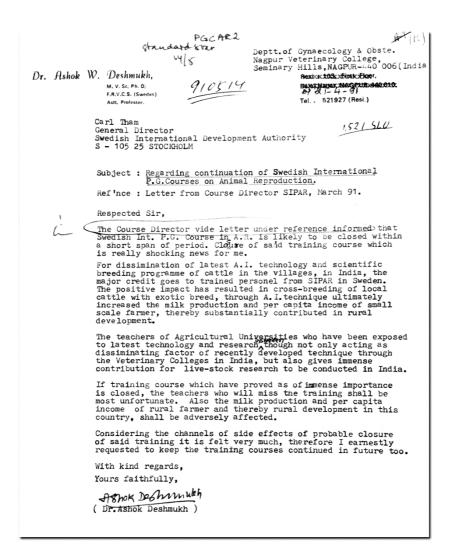


Figure 5. Letter from Indian veterinarian Ashok W. Deshmukh to SIDA's director-general, Carl Tham, protesting the proposed cancellation of the international courses in animal reproduction. Deshmukh had been a course participant himself; note his use of the FRVCS title in the letterhead. Many letters like his were sent to SIDA at the time.²⁴⁵

Practical Training for Modern Practitioners

The rise of development aid in the 1950s was linked to the early Cold War and the ongoing decolonization. From the ideological construction of "underdevelopment" as a global problem emerged an attitude that one could,

²⁴⁵ Ashok W. Deshmukh to Carl Tham, 21 April 1991, SIDA, series F1 AD, vol. 5221.

and ought to, help the increasingly independent so-called "underdeveloped countries," but this attitude was linked to a rather shallow understanding of the societies encountered and the effect of the efforts made. Supporting development was seen chiefly as a matter of supplying capital as well as knowledge and technology that could instigate the transformation from tradition to modernity. FAO's narrowly defined expert assignments, including efforts to introduce AI in cattle breeding in various countries, were typical examples of this modernization ideology in practice.

Yet as the example of Nils Lagerlöf shows, the ideology could be renegotiated on the ground. He did not subscribe to what he perceived to be the prevalent understandings within FAO of the driving forces and dynamics of animal production development. He could not support narrow attempts to transfer AI technology and methods and argued instead for a more systemic approach. Its core was the comprehensive development of local institutions based on a Swedish service science-oriented model for veterinary obstetrics and gynecology. In particular after his encounter with India, he became convinced that a veterinary educational reform that created more space for reproductive expertise was the only viable way ahead. Drawing on his international recognition as a scientist and expert, Lagerlöf proved able to convince FAO of this view. The organization helped fund his courses, and a decade later, at the second joint FAO/WHO international meeting on veterinary education, accepted a declaration that directly reflected Lagerlöf's views in its attribution of "outstanding importance" to the "physiopathology of Animal Reproduction."246

While Lagerlöf distanced himself from what he considered problematic attitudes to development, he engaged in renegotiation and not rejection, and it would be a mistake to understand his engagement as being of a fundamentally critical nature. His criticism of "Messrs. 'agriculture men'" was not grounded in distancing himself from ideas of development or modernization. Lagerlöf in fact strongly believed in the benefits of a Westernizing modernization, and was in this respect no different from the FAO leadership. But he did question certain prevailing ideas of how development worked. To him, promoting modern animal breeding could not hinge solely on technology transfer. It had to focus on the promotion of the veterinarian as a modern professional, whose combination of theoretical knowledge and practical skills could efficaciously serve the needs of an animal reproduction that—to be sure—increasingly worked along

²⁴⁶ The declaration is quoted in Pålsson, "Med Nils Lagerlöf i Indien," 262.

technological lines. Accordingly, his training courses served the dual purpose of providing both a necessary set of skills and a new professional identity.

Lagerlöf's knowledge export was based on a combination of different standpoints. He resisted what he saw as the universalizing tendencies in the project of transferring knowledge and technology to the developing countries, and instead promoted local capacity-building. He was also strongly oriented to agricultural production and explicitly argued that the development of veterinary expertise presupposed an interactive relationship with farmers and their knowledge. Finally, like those theories of modernization Nils Gilman labels technocosmopolitan, Lagerlöf rejected the idea that modernity could come about through a clean break with the past. He instead argued for the need to take tradition and local conditions into account. But his engagement, though oriented to local problems, remained steeped in ideas of the superiority of the science and modernity that he himself represented. It was universalizing on a higher level: though Lagerlöf consistently argued for local knowledge production and the development of local capabilities, he had no particular interest in changing the contents of the model he wanted to export in response to what he encountered abroad.

Lagerlöf thus combined a strong service science ideal with a form of centrist thinking that set strict limits on what he understood as relevant to take into account. This illustrates the difference between recognizing the need to adapt to local contexts, problems, and obstacles on the one hand, and being open to change in response to new cultures and knowledge systems on the other. It provides further support for the idea that the two should not be conflated or understood as necessarily being intimately associated, as, for example, James Scott tends to do in his discussion of high modernism. The amalgamation of production-oriented localism with centrist thinking will also return as an important feature of Swedish agrarian expertise abroad throughout this book. We will next encounter it as a defining characteristic of the expertise represented at the Agricultural College as it found a place for itself in Swedish development aid planning and began to create the strategy that would inform one the major Swedish aid efforts in the 1960s.



Figure 6. Nils Lagerlöf (sitting, left) with students and the vice-chancellor of the Veterinary College, professor of pharmacology Carl G. Schmiterlöw, at the closing ceremony for the 1967 FAO/SIDA postgraduate course in animal reproduction. Photo Allan Myrman. From the collections of the Nordic Museum.²⁴⁷

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²⁴⁷ Available online from "Digitalt museum," http://digitaltmuseum.se/.

CHAPTER THREE

The Formative Moment

The Agricultural College and the Formation of Swedish Agricultural Aid, 1960–1965

IN 1970, THE Agricultural College of Sweden held an "education day," bringing together would-be students with teachers and representatives of the agricultural sector. One of the matters raised on this occasion was whether it would be suitable for the college to start an "education branch" in Africa.²⁴⁸ That this topic was discussed highlights how matters regarding Africa and development aid had become relatively prominent on the college's agenda. The primary reason was its ongoing involvement in a rural development project in a region of Ethiopia's Arussi province. Since 1967, the newly created Swedish International Development Authority had financed most of this project, known as the Chilalo Agricultural Development Unit, or CADU. It was run, as we will see, with support from the Agricultural College, representatives of which had also performed most of the preparatory work.

The college's involvement stemmed from the fact that rural development abroad had become a significant concern for its leadership during the 1960s. By the mid-1960s, the Agricultural College had convinced the Swedish aid authorities to initiate a program of science-based agricultural development aid. This meant that Swedish aid practice came to link up with what is now known as the Green Revolution (my usage of this term in the context of CADU is anachronistic, though only slightly so: the term was coined in the late 1960s, and authors writing about CADU in the 1970s explicitly referred to it as a Green Revolution project).²⁴⁹ The notion itself is a general label for science-driven agricultural development based on genetically improved food crops and the implementation of modern cultivation techniques such as artificial fertilizers and irrigation.²⁵⁰ Through the Agricultural College's involvement,

²⁴⁸ "Rapport från Lantbrukshögskolans utbildningsdag 1970," 23, Agricultural College archives, Planning division, Secretary Section, series B III, vol. 9, Uppsala Country Archives (hereafter cited as AC-SS).

²⁴⁹ See, e.g., John M. Cohen, "Effects of Green Revolution Strategies on Tenants and Small-Scale Landowners in the Chilalo Region of Ethiopia," *The Journal of Developing Areas* 9, no. 3 (1975). ²⁵⁰ It is most often associated with the activities of the Rockefeller and Ford Foundations in South Asia in the 1960s, but the first postwar Green Revolution project dates back to 1946, when the

Sweden also engaged in this type of development activity, as the college's experts brought their localistic and productivity-oriented approach to bear on an agricultural society in Ethiopia. The present chapter primarily answers questions about this involvement, which relates to all three of my research problems: How and why did the college's experts maneuver to secure a place in Swedish development aid? How did they formulate their understandings of agricultural and rural development? How did they relate to the technologies and methods associated with the Green Revolution, and why? How and why did they begin to construct a relationship with the Swedish aid authorities? The following chapter then goes on to inquire how the strategies developed when the Swedish experts began to work on-site in Ethiopia.

I base the chapter primarily on documentation preserved in the archives of the Agricultural College and in those of the Swedish aid authorities, mostly the archives of the Swedish Agency for International Assistance, or NIB (1962–1965), and then SIDA from 1965 onward. Complementary material cited includes reports and archives of public commissions that investigated Swedish development aid, as well as newspaper and magazine articles. I also employ oral sources and written memoirs from some of the involved actors.

While these sources account well for the official decision-making processes by which the Agricultural College found its way into development aid, they pose some problems of visibility and importance. Something I expected to find but which is invisible in this material is indications of tensions at the college over the introduction of development aid. It is somewhat difficult to judge whether or not this reflects a true state of affairs. A central matter as regards importance has to do with the Agricultural College's various actors' motivations for engaging in development aid and for advocating the particular form of aid that they did. I make an extensive argument about this, which is empirically stronger in parts and somewhat more conjectural in others. The overall argument could have been strengthened by a complementary analysis of private or semiprivate correspondence between the actors, but as discussed in the introduction, such material has not been included.

A New Context for Agrarian Development Aid

The origins of the Agricultural College's institutional engagement with development aid can be traced to the end of the 1950s, a time when the public debate on Swedish aid policy intensified as part of a more general reorientation of Swedish foreign policy. The earlier focus on strict neutrality was replaced

Rockefeller Foundation engaged in an agricultural development program in Mexico. See also my earlier discussion on pp. 11–13 and Harwood, *Europe's Green Revolution*, chapter 6.

by a more active stance in international politics that became increasingly apparent through the 1960s.²⁵¹ This also opened up for an increased engagement in bilateral aid. A 1959 Central Committee inquiry had recommended that Sweden increase its bilateral aid commitments, something for which there was strong political support. This, however, problematized the Central Committee's position. It was at most a quasi-governmental organization, whereas many policymakers now saw an expanded aid program as an obvious matter for the state.²⁵² In May 1960 Ulla Lindström, the minister whose portfolio included aid issues, established a government inquiry with instructions to develop a new organizational structure for the administration of Swedish development aid. In March the following year the inquiry proposed the creation of a new government agency with a more comprehensive responsibility for the field, and on January 1, 1962 the new government agency, NIB, was created, superseding the Central Committee. With NIB, bilateral development aid fully became a state responsibility, handled by a central organ under the Ministry for Foreign Affairs.²⁵³ Yet NIB was not organized as a traditional government agency but was something of a sui generis organization, led by a secretary-general and with an advisory council attached. This council consisted of representatives of the popular movements that had formed the Central Committee as well as other interests, and it operated alongside the agency's executive unit, the secretariat.²⁵⁴

In the early 1960s, planning also started for an expanded aid program. The government wanted to develop some principal aid policy guidelines and to include as many different stakeholders as possible in this work: "the few who knew something of aid and the many who were interested," as SIDA official Lars Kalderén would later put it.²⁵⁵ In February 1961 a special government

²⁵¹ See, e.g., Christine Agius, *The Social Construction of Swedish Neutrality: Challenges to Swedish Identity and Sovereignty* (Manchester: Manchester University Press, 2006), 101–16, particularly 12–15; Ulf Bjereld, *Kritiker eller medlare? En studie av Sveriges utrikespolitiska roller 1945–90* (Stockholm: Nerenius & Santérus, 1992), 41–53.

²⁵² As before, the most extensive account of the Central Committee and of Swedish development aid before 1962 is Nilsson, *Svenskt bistånd*. About the period 1958–62 on pages 29–77. The period is also considered, and interpreted somewhat differently, in Öhman, *Taming Exotic Beauties*, 85–128.

²⁵³ This was not all of Sweden's bilateral aid: NIB's responsibilities primarily encompassed what was then described as technical assistance, which was demarcated from the financial aid administrated by the Ministry of Finance. Besides this, Sweden also provided multilateral aid through the United Nations.

²⁵⁴ For details of the organization, see Government Bill 1961:174, angående organisationen för handläggning av frågor om tekniskt bistånd till underutvecklade länder.

²⁵⁵ The quote is from Kalderén's introduction to a collection of texts by SIDA's director-general, Ernst Michanek: Ernst Michanek, *Vår insats för u-länderna: Tal, diskussioninlägg, reflexioner 1964–1970* (Stockholm: Prisma, 1970), 9.

board, known as the Swedish Government Advisory Board on International Aid Issues and chaired by Prime Minister Tage Erlander, was created to function as an arena for this work. It brought together numerous interests, including government ministers and members of parliament, as well as representatives of industry, cooperatives, the banking sector, academia, and various popular movements.²⁵⁶ It also included two special working groups for education aid and humanitarian aid. In total, it met ten times in 1961 and 1962. In March 1962, two months after the creation of NIB, the prime minister then presented the result in the form of a new aid policy bill (often referred to as the Swedish "aid bible") for the approval of parliament.²⁵⁷ By personally underwriting the bill, Erlander greatly increased the symbolic value of this moment for Swedish aid, a value further accentuated when the bill then passed unanimously. The prime minister and all of parliament supported the new Swedish development aid policy.

Government Bill 1962:100 outlined a comprehensive program that, in Per-Åke Nilsson's words, stood "as a dividing line between a pioneering stage of experimentation and experience-based firm activity with the purpose to realize the plans for development aid." Together with the new agency, it meant that Swedish development aid was now poised to become a substantially more significant endeavor. In the present context, the bill also serves as a symbolic dividing line between the more informal aid project driven by Nils Lagerlöf at the Veterinary College, and the much larger and more organized aid work that would be conducted by the Agricultural College from the 1960s.

Agricultural Science and Development

In the international development debate, modernization theory had found what would become its most influential formulation in W. W. Rostow's 1960 "non-communist manifesto," *The Stages of Economic Growth*.²⁵⁹ Rostow, who served as an advisor to President Eisenhower and would go on to advise Kennedy, had developed a theory based on a mechanistic understanding of societal development in five distinct stages, from tradition to mass consumption. This stage theory has later become something of a symbol of a linear, Westernized, and politicized understanding of development, and it was

²⁵⁶ SOU 1962:12, 5–6.

²⁵⁷ Government Bill 1962:100, *angående svenskt utvecklingsbistånd*. An interesting background to the bill can be found in a collection of memoranda that derived from work performed for government advisory board. The collection was, under the editorship of Olof Palme, published as SOU 1962:12.

²⁵⁸ Nilsson, Svenskt bistånd, 73.

²⁵⁹ Walt Whitman Rostow, *The Stages of Economic Growth: A Non-Communist Manifesto* (Cambridge: Cambridge University Press, 1960).

fittingly published during the first year of what the United Nations had pronounced the "Development Decade."

Rostow's development model assumed that agriculture would be commercialized, and peasant farming would lose its importance, during the socalled "take-off" stage.260 In the early to mid-1960s, economists and development scholars began to pay more direct attention to this problem of agricultural development in the Third World.²⁶¹ They acknowledged that international patterns of trade were disadvantageous to exports from developing countries, while their severe poverty kept domestic markets for industrial productions small and insignificant. Seeing that the vast majority of developing-country populations lived as rural farmers, these scholars argued that agricultural development would increase the prosperity of rural areas, thus creating an augmented domestic demand for industrial products.²⁶² Consequently, agricultural development was increasingly seen as a first step towards successful industrialization. Agrarian historian Janken Myrdal has also suggested that the spotlight was turned on peasants and agriculture partly through the process of decolonization and the rise of liberation movements. This led to "peasants and rural societies [being] identified as essential elements of the social structure."263

In Sweden, ideas about a new and more central role for agriculture in development aid began to be clearly articulated in the early 1960s. I opened this book with the example of how the secretary-general of NIB, Arne Björnberg, addressed a congress of agricultural students in 1962. His speech not only suggested that industrial development had hitherto been overemphasized in postwar development aid, it also contextualized the need for increased agricultural productivity clearly in terms of feeding the world's population. This was a second, and crucial, dimension of agricultural development aid. The question of how to mitigate the perceived tension between a rapidly growing global population and the excessive demands this would put on the world's resources—what historian Björn-Ola Linnér has

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²⁶⁰ Rostow, Stages of Economic Growth, 8; see also Rist, History of Development, 97.

²⁶¹ An early paper drawing attention to the role of agriculture in development is Bruce F. Johnston and John W. Mellor, "The Role of Agriculture in Economic Development," *The American Economic Review* 51, no. 4 (1961).

²⁶² John M. Cohen, *Integrated Rural Development: The Ethiopian Experience and Debate* (Uppsala: Scandinavian Institute of African Studies, 1987), 21–22.

²⁶³ The quote is from a publication in which Myrdal seeks to explain the increased interest in rural history in Western academia in the 1950s, but increased global attention to peasants as a sociopolitical category likely also affected development theory. Janken Myrdal, "Peasants and Rural Societies in History (Agricultural History)," in *International Encyclopedia of the Social & Behavioral Sciences*, ed. James D. Wright (Oxford: Elsevier, 2015), 671.

²⁶⁴ Björnberg, "Opening Address," 2.

termed the population-resource dilemma—had in fact been discussed since the end of World War II, but was at its height in the early 1960s, when a "voluminous outpouring" of literature was published on the topic.²⁶⁵ The importance afforded to this problem was a second key factor in the promotion of efforts to develop Third World agriculture at the time.

There was general consensus in development circles and among agrarian experts that such development had to be effected through the application of modern agrarian science and technology in developing countries. In 1963, the UN "Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas" was held in Geneva. Agriculture was the subject that attracted the most contributions, in total over five hundred papers, while speakers from every section of the conference "acknowledged the development of agriculture as the key to an expanding economy." Science-driven agriculture aid was thus becoming firmly established both as an important aspect of economic development and as a weapon that could be brought to bear on the population-resource dilemma. Sweden sent a number of delegates to Geneva, several of whom came from the Agricultural College and so were well aware of the international discussions.

Development Aid at the Agricultural College?

The initial impulse that eventually led to a link between the Agricultural College and Swedish development aid was not the Geneva conference, however, but a Swedish government report. In mid-1963, one of the working groups of Erlander's Advisory Board on International Aid Issues published a report that drew up guidelines for expanded Swedish aid to education in various fields. One of the chapters was devoted to agriculture. Its author, Claes-Erik Odhner from the Swedish Trade Union Confederation, was an agronomist who had a long-standing interest in development issues.²⁶⁷

²⁶⁵ Björn-Ola Linnér, *The World Household: Georg Borgström and the Postwar Population-Resource Crisis* (Linköping: Linköping University, 1998), 191. See more generally pages 191–226 for a discussion of the 1960s population-resource debate focused on the works of Swedish-American food scientist and debater Georg Borgström.

²⁶⁶ Science and Technology for Development: Report on the United Nations Conference on the Application of Science and Technology for the Benefit of the Less Developed Areas, vol. III: Agriculture (New York: United Nations, 1963), 3.

²⁶⁷ Odhner would later become the confederation's representative in NIB and then SIDA's Board of Directors. His interest in international aid issues can be traced at least to the mid-1950s, exemplified for example by a series of articles discussing the matter in LO's official journal *Fackföreningsrörelsen* published during 1956 (in numbers 43, 44, and 45). That he wrote the chapter is confirmed by the minutes of the working group's meetings, e.g. 7 February 1963. Swedish Government Advisory Board on International Aid Issues archives (YK 1875), vol. 1, National Archives of Sweden.

Odhner began with some general remarks on the role of agriculture in development, taking up the new international trends also seen in Björnberg's speech:

In recent years, one ought to have increasingly realized that industrialization is not the sole determinant of economic and social development in the developing countries in the way one earlier had imagined. Agriculture has and will continue to have a large, and in many countries dominant, importance as a base for economic development.²⁶⁸

He then proposed as the most useful a Swedish aid effort to train agricultural students at what he called the "higher mid-level," which meant something that approximately corresponded to a Swedish degree in agricultural management (this was awarded after a shorter and more practically oriented course than the agronomy course offered at the Agricultural College). After finishing the higher mid-level course, the students should be able to work as agricultural instructors, managers of larger properties, or civil servants in the agricultural administration of their home countries. But he also argued that a problem with any form of Swedish agricultural aid was that Swedish-trained agronomists lacked the requisite expertise in tropical and sub-tropical agriculture. Thus, as a prerequisite for any aid project, the report further proposed that NIB should finance supplemental education for "around ten" agronomists at a suitable foreign university where these subjects could be studied. Finally, Odhner considered the higher-level education offered at the Agricultural College and proposed its expansion: first, in order to be able to train more Swedish agronomists, and second, to make it possible to consider starting an Englishlanguage course, leading to a full agronomy degree for a "not insignificant number of students from developing countries."269

Up to that time, the Agricultural College's international interests had been limited. Its focus lay firmly on its role in Sweden, where it supported the rationalization of the agrarian sector. It had also recently, and very controversially, swallowed up the previously partly independent agricultural experiment organization.²⁷⁰ But a crucial shift took place within the college in the summer of 1963, when the professor of agricultural economics Lennart Hjelm was named vice-chancellor. Hjelm had previously worked at the National Research Institute for Farm Construction in Lund and the Agricultural Economics Research Institute in Stockholm, but since 1955, he had held a chair at Ultuna, and when Vice-Chancellor Gunnar Torstensson retired, Hjelm

²⁶⁸ SOU 1963:34, 100.

²⁶⁹ SOU 1963:34, 100-05.

²⁷⁰ Hjelm, Lärdom på Ultuna, 103-10.

was elected to succeed him. In Hjelm, the college found a leader with good political connections, significant institution-building ambitions, and also—partly thanks to these ambitions—a pronounced interest in development aid.²⁷¹



Figure 7. Lennart Hjelm (1915–2009), professor of agricultural economics and vice-chancellor of the Agricultural College (1963–1977) and SLU (1977–1982). Photographer unknown. From the collections of the Royal Swedish Academy of Agriculture and Forestry.

Hjelm's appointment as vice-chancellor coincided with the publication of the report containing Odhner's ideas about aid to agricultural education. When asked to comment, the Agricultural College replied positively and expressed support for the working group's basic understanding of aid.272 agricultural educational proposals to train Swedish agronomists abroad and to speed up the college's expansion were warmly recommended. The proposal to consider an Englishlanguage course for students developing countries was, on the other hand, viewed with notable hesitation.²⁷³ The college argued that there were scant resources for such a course and that there would likely be problems when the students were to return to their home countries. Any such activity at the Agricultural College should be of a more limited character. It "should be planned in conjunction with larger efforts and should

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²⁷¹ The importance of Lennart Hjelm for the development of the Agricultural College and later SLU was immense. As of yet, no biography of him has been written, but an outline of his career can be found in an unpublished memoir: Lennart Hjelm, "En smålännings strävsamma liv: Utbildning, verksamheter, upplevelser, utmärkelser," SLU Central Administration Archives, list II, series Ö7, vol. 1, Swedish University of Agricultural Sciences archives.

²⁷² Meeting minutes, Board of Directors of the Agricultural College, 26 September 1963, § 259, attachment 3, Agricultural College archives, Secretary Division, series A I a, vol. 60, Uppsala Country Archives (hereafter cited as AC-SD).

²⁷³ A similar point had been made at a conference organized by the Swedish Higher Education Authority in January 1963, where the then vice-chancellor Gunnar Torstensson represented the Agricultural College and argued that it seemed "unsuitable" to bring students to Sweden to obtain a primary degree in agriculture. See "Referat från konferens ang. universitetens och högskolornas medverkan i u-landshjälpen, arrangerad av universitetskanslern den 14 januari 1963," 5–6, Swedish Government Advisory Board on International Aid Issues (YK 1875), vol. 1, National Archives of Sweden.

be completed in a suitable way in the aid-receiving country."274

These initial contacts between the Agricultural College and Swedish development aid took place in the context of the formation of a new aid policy and a new government agency for development aid and of the gradually increasing emphasis on agricultural development in the international aid debate. Together these two factors created the necessary external conditions for the development of an aid role for the Agricultural College. The former, which can be more generally understood as the construction of a new role for Sweden as an actor on the international scene, created institutional and ideological structures to which the college could be attached, or rather attach itself, while the latter meant that an international and national context came into being in which the college's expertise was in demand. However, as we will see in the next section, the college resisted the way in which NIB wanted to utilize its expertise, and proposed its own alternative instead.

Experimentation or Education?

In October 1963, NIB approached the Agricultural College with an inquiry about precisely that suggestion made by Odhner that had been less well received, namely, if the college would be willing to organize courses at Ultuna for students from developing countries. This triggered activity among a group of professors eager to see the college play a role in development aid, but whose vision of that role diverged from NIB's. The activities at the college ultimately came to be aimed at a reformulation of the problem in question, from being about education to being about agricultural science.

When NIB's request arrived, the college's faculty appointed a special committee to analyze it and produce a response. The committee consisted of professors Börje Åberg (professor of plant physiology), Ewert Åberg (professor of crop production), and Artur Hansson (professor of animal breeding and one of the Ultuna delegates at the Geneva congress), as well as acting associate professor of agricultural economics Bengt Nekby (who functioned as secretary), and Vice-Chancellor Hjelm, who acted as chairman.²⁷⁵ The inclusion of Hjelm and Nekby indicates a new and more assertive attitude to the question of development aid at the college. Hjelm was the college's academic leader and most prominent representative, and Nekby was the main source of experience of developing countries and of development

²⁷⁴ Meeting minutes, Board of Directors of the Agricultural College, 26 September 1963, § 259, attachment 3, p. 3.

²⁷⁵ Meeting minutes, Faculty of the Agricultural College, 15 October 1963, § 24, AC-SD, series A II a, vol. 31.

practice available at Ultuna. He had been a student of Hjelm's and had graduated from the college in 1957 with a specialization in agricultural economics. Hjelm had then arranged for him, with the help of a Kellogg Foundation scholarship, to study with the well-known agricultural economist Earl O'Heady at Iowa State College. O'Heady directed the Center for Agricultural and Economic Adjustment, a newly created research unit focused on the study of agricultural economics and policy in the United States as well as abroad. This was part of a larger trend of an increased interest in international issues among American universities, many of which played

important roles in American development aid.277 Even though his own work in Iowa was on the structural development of American agriculture, Nekby must have been aware of at least some work on agricultural development abroad as this was a topic of increasing importance among American agricultural economists, including those at O'Heady's research center.²⁷⁸ In Iowa, he wrote a PhD dissertation which he later, with the support of Hjelm, could convert to a Swedish licentiate degree. He then returned to take up a position at Ultuna but did not stay long in Sweden. Encouraged by Hjelm, he was recruited by the Ford Foundation to work as an economic advisor to one of the regional governments of newly independent Nigeria.²⁷⁹ His tasks concerned agricultural development planning in relation to Nigeria's long-term economic plans.



Figure 8. Bengt Nekby (b. 1930), agricultural economist and former student of Lennart Hjelm. Nekby was a driving force when the Agricultural College first became involved in Swedish development aid. He then went on to an international career at the World Bank. Photographer unknown. From the collections of the Royal Swedish Academy of Agriculture and Forestry.

²⁷⁶ Hjelm, "En smålännings strävsamma liv," 5–6.

²⁷⁷ Seely, "Historical Patterns," 14.

²⁷⁸ The center published a number of books on food production and international development through the 1960s. An important early example, published only a year after Nekby returned to Sweden, is Iowa State University Center for Agricultural and Economic Adjustment, *Food: One Tool in International Economic Development* (Ames: Iowa State University Press, 1962). Nekby himself recalls that it was very notable at conferences and meetings that development issues interested many researchers. Bengt Nekby, interview by author, 15 April 2013.

²⁷⁹ Unless otherwise specified, the biographical details on Nekby are taken from the personal memoirs of him and his wife, to which they graciously gave me access: Bengt Nekby, "Margareta och Bengt" (unpublished memoir, April 2001).

That Hjelm, who at this time was not yet vice-chancellor but head of the Department of Economics, encouraged Nekby to go to Nigeria rather than to stay at Ultuna suggests an interest in developing countries and in development matters. Why he was interested is less apparent: nothing in his biography hints at his being previously concerned with the field. He had, however, traveled in the United States in 1960 and might have been inspired by the increasing interest in international development at the American land-grant universities. Furthermore, by 1961 it would have been clear to a politically perceptive individual—as Hjelm undoubtedly was—that development aid would become a major political issue and a significant public expense in Sweden over the coming years. He might thus have considered it beneficial to obtain some personal expertise in this area for his department. More personal motives might have figured as well: Hjelm had grown up as one of seven children on a farm at a time when rural poverty was still widespread in Sweden, and perhaps this background contributed to his interest in foreign development.

Nekby spent two years in Nigeria working alongside other development professionals, many of whom were former colonial officials. When Hjelm then became vice-chancellor in 1963, Nekby returned to the Department of Economics, and while working there he was appointed to the committee tasked with producing a suitable reply to NIB on behalf of the college's faculty.

Land or Labor Productivity for Development?

This committee seemingly did not spend much time on developing the Ultuna-based agronomy course NIB had requested, for when a reply was finished in April 1964, its primary suggestion was that the Agricultural College should participate in a development project in the Third World instead. The proposed project was to consist of scientific interventions that could increase yields from smallholder agriculture.²⁸¹ Two crucial points of strategy that the committee made were related to this smallholder focus: first, the report argued for promoting land rather than labor productivity, and second, it strongly advocated a strategy based on localized, adaptive research. I will discuss the first point here and the second in the next section.

Before discussing its own proposal, the committee had to address NIB's original request for an agronomy course. It was swiftly dismissed, with the committee arguing that the possibilities of receiving students from developing countries at Ultuna were "strictly limited" due to a lack of resources. Even if

²⁸¹ "Forskning och undervisning på jordbrukets område: Ett förslag till ett svenskt biståndsprojekt i anslutning till lantbrukshögskolan," attachment § 15a to meeting minutes, Faculty of the Agricultural College, 15 April 1964, AC-SD, series A II a, vol. 31.

²⁸⁰ Hjelm, "En smålännings strävsamma liv," 6.

resources were provided, it was, they argued, extremely doubtful whether this type of course was suitable. The teaching at the college was not adapted to foreign conditions, foreign students' prior knowledge was often (they claimed) significantly lower than what was expected of Swedish students, and both language and social problems were foreseen.²⁸² In retrospect, it is hard to judge the extent to which these were genuine concerns.²⁸³ As will become clear, the college had other interests that figured into the proposal they had presented. Its representatives had reason to be more interested in creating a large-scale, farmer-oriented field project than in training a comparatively small and elite group of students in Sweden. They might thus have overemphasized the expected problems.

Though rejecting the proposal to train foreign students in Sweden, the committee highlighted that the college's involvement in development aid was important, motivated in terms of both the population-resource dilemma and agriculture's role in general economic development. Based on a discussion of the importance of agriculture to development, with reference to an address by Gunnar Myrdal to the World Food Congress the year before, the committee concluded that it "ought to be of great interest to investigate the ways in which, and to what extent, the agricultural college appropriately could contribute to the work for developing countries."284 Both research and education activities were identified as such appropriate contributions, and the importance of an integrated project, with different efforts brought together in a common context, was emphasized. As the centerpiece of the project, the plan proposed that NIB should establish a research station in a developing country. This station was to be affiliated with the Agricultural College, and around it research and education were to be organized. The focal point of the research work would be the creation of higher-yielding plants and cattle. The plan also included extension as well as produce distribution and marketing efforts.²⁸⁵

A reasonable hypothesis is that the idea of the Agricultural College taking part in agricultural development abroad was a result of foreign influences.

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²⁸² "Forskning och undervisning på jordbrukets område," 9–10.

²⁸³ There were in fact precedents; in 1961 the Danish Veterinary and Agricultural University had begun training African students to become veterinarians, a program which had had at least a degree of success (of the 23 students starting their training in Denmark during this program, 16 graduated as veterinarians). Agrarian education in Sweden and Denmark were arguably similar enough for this to suggest that the difficulties—though certainly major—involved in adapting the Agricultural College's curricula to a group of students with a wholly new background might have been overcome. See Niels-Iver Heje, "Internationalt bistandssamarbejde," in *Veterinærskolen 225 år: Rids av de seneste års udvikling*, ed. Gudrun Lefmann (Frederiksberg: Faculty of Animal and Veterinary Science, Royal Danish Veterinary and Agricultural University, 1998), 104.

²⁸⁴ "Forskning och undervisning på jordbrukets område," 1.

²⁸⁵ "Forskning och undervisning på jordbrukets område," 2–7.

There were international models, as many European agricultural colleges had departments of tropical agriculture, originally linked to colonial ventures. With the colonial empires gone or disappearing, a natural postimperial task for them was to engage in development aid, continuing the old relationship in new ways. There were models in the United States as well, where recent legislation—Title XII of the 1961 Foreign Assistance Act—encouraged the land-grant institutions to engage in food production—related aid. According to agricultural economist John W. Mellor, a leading actor in Cornell University's international work and later chief economist of the American aid agency USAID, they were "the cornerstone of the effort" during the "period of ascendancy of U.S. foreign aid to agricultural development." And development through research and extension was an important part of the land-grant philosophy.

The American example is likely to have been more important to the Agricultural College. The early 1960s was a time of American cultural and scientific dominance in Sweden, and there were direct links between the college and US universities. Nekby had connections in Iowa, and the American influence on the Agricultural College as a whole was significant in terms of scientific contacts.²⁸⁸ Many of the organizational reforms that Lennart Hjelm instigated also gathered inspiration from the American land-grant university.²⁸⁹ However, the college's plan focused on small-farm development, which by no means was a self-evident strategy in the context of the mid-1960s aid debate, neither in the United States nor internationally. Immediately after the war, America had in fact promoted family farming and land reform abroad, and the Rockefeller Foundation had experimented with peasant-oriented scientific interventions in Mexico. But by the 1960s, the emphasis had shifted to a more classical modernizing strategy based on large-scale, mechanized farming with

²⁸⁶ Examples include the Dutch agricultural university in Wageningen and, from the 1970s, the agricultural faculty of the Catholic University of Leuven in Belgium. See Harro Maat, *Science Cultivating Practice: A History of Agricultural Science in the Netherlands and Its Colonies, 1863–1986* (Dordrecht: Kluwer Academic Publishers, 2001); Bert Woestenborghs, Roeland Hermans, and Yves Segers, *In het spoor van Demeter: Faculteit Bio-Ingenieurswetenschappen K. U. Leuven, 1878–2003* (Leuven: Leuven University Press, 2005), 133–34.

²⁸⁷ John W. Mellor, "Foreign Aid and Agriculture-Led Development," in *International Agricultural Development*, ed. Carl K. Eicher and John M. Staatz (Baltimore: Johns Hopkins University Press, 1998), 60.

²⁸⁸ The United States was far and away the most common destination for study visits by Agricultural College researchers in the period 1945–1970. See Bruno, "Från Ultuna till Urbana och Uganda," appendix A.

²⁸⁹ This is according to Hjelm's memoirs. In at least one case—the Centre for Agricultural Adjustment—activities were based directly on a US model. Hjelm, "En smålännings strävsamma liv," 6; 13.

capital-intensive inputs and equipment and the associated reduction in labor demand.²⁹⁰ In 1963, the president of the Rockefeller Foundation argued that "farming as a way of life will give way to agricultural production as a strictly business enterprise with significant increases in land holdings and comparable decreases in the number of individual land owners and the size of the farm labour force."²⁹¹ The Ford Foundation and USAID also shared this understanding.²⁹² This strategy also informed the only ongoing Swedish agricultural aid project: an endeavor in Algeria where a huge agricultural unit had been provided with a Swedish management team and American combine harvesters in order to restore, improve, and reorient its production.²⁹³

While the Agricultural College's professors agreed in principle that farming as a way of life would eventually disappear in the developing world, they did not expect or support a general shift from smallholding to large-scale commercial agriculture in the near future. They argued instead that in nearly all developing countries, the most pressing concern was the development of peasant farming. This led to the crucial conclusion that the project had to focus on increasing land productivity through scientific interventions and the provision of new inputs, rather than increasing labor productivity through mechanization. In other words, the core of the project had to be technical innovations and methods to help farmers use them, rather than capital-intensive machinery that would drive unemployment. Rural incomes had to increase as a prerequisite for the development of a successful industrial sector that might at some point, but not now, need surplus labor from agriculture. The report explicitly noted that expanding production through the use of capital-intensive and labor-saving technology belonged to a "rather late" stage that presently could be ignored.²⁹⁴ For the time being, yields needed to increase without any significant decreases in labor demand; thus, an intensive rather than extensive strategy for the development of farming should be promoted.²⁹⁵

²⁹⁰ On U.S. policies on land reform abroad, see Janken Myrdal, *The Dovring Saga: A Story of Academic Immigration* (Stockholm: The Royal Swedish Academy of Letters, History and Antiquities, 2010), 142; on the Rockefeller Foundation in Mexico, see Jonathan Harwood, "Peasant Friendly Plant Breeding and the Early Years of the Green Revolution in Mexico," *Agricultural History* 83, no. 3 (2009); on the development strategies of the 1960s, see Harwood, *Europe's Green Revolution*, 4.

²⁹¹ Cited in Harwood, Europe's Green Revolution, 119.

²⁹² Harwood, Europe's Green Revolution, 119.

²⁹³ The press rather preferred the formulation that the Swedes were in Algeria to "save the harvest." See e.g. Hans Granqvist, "Aftonbladet hos svenskarna på NIB:s skandalfarm: De får jobba som 'galningar'," *Aftonbladet*, 3 October 1963, 9. See also my account below.

²⁹⁴ "Forskning och undervisning på jordbrukets område," 3.

²⁹⁵ Note that the terms intensive and extensive are used only in relation to each other here; a highly mechanized and chemicalized agriculture is certainly intensive in comparison with, for

It is instructive to compare this stance with Lennart Hjelm's simultaneous work on the future of agriculture in Sweden. In 1960, a major government inquiry was appointed to propose new agricultural policy guidelines. As a member of one of the inquiry's expert groups, Hjelm had conducted a study of the future direction of Swedish agricultural rationalization, published in 1963. He reached the conclusion that Sweden had chosen a different path than most other Western countries. The prevailing production targets meant that land productivity was not a prioritized dimension, and so Swedish policy had been to free up labor by promoting mechanization and extensive agriculture instead of stimulating yield increases.²⁹⁶ This extensive strategy had created certain problems related to underutilization of technology and sometimes labor, which could easily lead to "disharmonious" production conditions.²⁹⁷ These results, though applying to a wholly different context and set of problems, were in an important respect mirrored in the college's stance vis-à-vis agricultural development in the Third World: both highlighted the importance of maintaining what Hielm described as "economically appropriate proportions between labor, land, and capital."298 While striving for the economically appropriate might sound like a self-evident conclusion of an economist's analysis, it had interesting implications. In the context of both Swedish agriculture and Swedish-led interventions abroad, it, in practice, implied less focus on mechanization and more on agricultural science than had earlier been the case. In both instances, Hjelm thus reached conclusions that afforded agricultural expertise a more direct role.

A Localist Ideology of Agricultural Development

As the college's proposal presented agricultural development aid as a science-based endeavor, it also contained a clear outline of the college's view of the role of agricultural research in development aid. A central paragraph discussed the significance of localized experimental activity:

The economic and technical development naturally demand continual agricultural research efforts. Despite the obvious importance of research, this point is most often the weakest in the development programs. This is perhaps due to an underestimation of the latter stages of applied research. The large variations in

example, pastoral nomadism. But if discussing whether modern agriculture should be optimized toward land or labor productivity, the latter represents the more extensive approach. See also the discussion of the terms in Carin Martiin, *The World of Agricultural Economics: An Introduction* (Abingdon: Routledge, 2013), 268–69.

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²⁹⁶ Hjelm's work in the context of the 1960 agricultural inquiry has been analyzed in Per Lundin, "Jordbruksreformerna," 17–21.

²⁹⁷ SOU 1963:66, Det svenska lantbrukets effektiviseringsvägar, 192.

²⁹⁸ SOU 1963:66, 193.

agriculture in terms of natural, economic and cultural conditions demand extensive regional experimentation. Research results can thus only in special cases be directly transferred from one environment to another. A failure to complete the research to the stage at which the results are practically applicable ought to play a larger part in the resistance to technological innovations than the often-cited cultural factors. With clearly tested research results, the work of the extension services is naturally also made significantly easier. ²⁹⁹

The college's professors evidently took the central role of scientific research for granted, assuming it would contribute to progress and productivity. They also demarcated scientific knowledge from the knowledge of the local population. The latter was granted no epistemic authority at all, being instead reduced to "cultural factors" that were only considered as resistance to agricultural science's innovations. The notion that science could and would bring about societal improvement—and do so through a quite simple, linear process—was not problematized in their proposal, beyond the rather perfunctory remark that a "more or less extensive land reform" would be needed in many countries to encourage farmers to make changes. These are starting points imbued with a high-modernist ideology, and they reflected widely held views of science in development at the time.

But while taking a reductionist view of rural societies in the developing world, Hjelm and his colleagues did not characterize these societies using stereotypes of inherent conservatism and backwardness. They suggested that there would be little resistance to "practically applicable" research results, which rather implied that smallholding farmers in developing countries would be ready and willing to make rational changes to improve their situation if given the proper tools by researchers acting as service scientists. Here the Agricultural College's experts actively distanced themselves from those who argued that peasant agriculture was so mired in tradition as to be a lost cause, ripe for replacement by agricultural entrepreneurs.

This stance was in line with ideas that American agricultural economist (and later Nobel Laureate) Theodore Schultz put forward at the time. Schultz was not explicitly cited, but his work appears to have been a major source of inspiration for the plan as a whole. In his book *Transforming Traditional Agriculture*, published the same year as the Agricultural College sent its proposal to NIB, he made the case that earlier development thinkers had misunderstood the situation of farmers in so-called traditional societies. American modernization theorists in particular tended to link what they

²⁹⁹ "Forskning och undervisning på jordbrukets område," 3.

^{300 &}quot;Forskning och undervisning på jordbrukets område," 3.

³⁰¹ Schultz' work would be referred to in later documents (see below).

described as tradition with passivity, stagnation, and resistance to change. Walt Rostow, their main ideological force at the time, had introduced the dubious notion of "pre-Newtonian" to describe traditional societies that he judged incapable to rationally and productively manipulate nature. But Schultz argued that if traditional agriculture had stagnated, it was not because of fatalism or irrational reverence for past practices. He suggested that the cause was rather the opposite: agrarian societies had, over centuries, employed rational methods to optimize their systems of production as far as their technologies allowed, but over time such optimization tended toward equilibria where further production increases were impossible. In economics terminology, the marginal productivity of investments in the existing factors of production approached zero for traditional agricultural societies. Schultz's conclusion was that such societies needed to be provided with modern technology to break the impasse.

Schultz's theses on "traditional" agriculture were distinctly ahistorical, were supported only by problematic evidence, and paid no attention at all to social or material inequality.³⁰⁴ But his challenge to psychological and cultural explanations for agricultural stagnation lent support and credibility to those who favored peasant-oriented development. The argument that peasants were in fact rational economic agents who would "turn sand into gold" if provided with proper incentives suggested that peasants could be main drivers in development processes.³⁰⁵ It also implied another conclusion drawn by the Agricultural College's committee, namely, that resistance to innovations tended to result from the failure to supply such incentives due to a dearth of research. More particularly, the committee concluded that resistance followed from the failure to sufficiently adapt technologies to local conditions. This was an idea that would come to have a formative impact on the future of the Agricultural College's development aid work.

In order to make sure that innovations became incentives, the committee argued—similar to Nils Lagerlöf's views on the need for veterinarians to interact with farmers—that it was not enough to communicate research results to the farmers: their problems should guide the research.³⁰⁶ And similar to Lagerlöf's point about local research, the committee discussed this in light of

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³⁰² Rostow, Stages of Economic Growth, 4; see also Adas, Dominance by Design, 242–46.

³⁰³ Theodore W. Schultz, *Transforming Traditional Agriculture* (Chicago: University of Chicago Press, 1983), 29–32.

³⁰⁴ See the discussions of Schultz's work in Polly Hill, *Development Economics on Trial: The Anthropological Case for a Prosecution* (Cambridge: Cambridge University Press, 1986), 23–26; Mitchell, *Rule of Experts*, 223–24.

³⁰⁵ Schultz, Transforming Traditional Agriculture, 5.

³⁰⁶ "Forskning och undervisning på jordbrukets område," 8.

an understanding of agricultural research results as something that rarely will retain its full applicability when moved from one context to another. In agricultural science, the committee claimed, it is impossible to perform a direct transfer of established knowledge and produce the desired results in the new location. They argued, in other words, for what Paul Richards has called ecological particularism over scientific universals, for local adaptations instead of transfers of allegedly universal knowledge.³⁰⁷ While they took for granted that the experimental methods employed by Swedish experts would work in developing-country conditions, the knowledge generated by applying these methods was, according to this line of reasoning, local and not universal. This is the direct reversal of the point Scott puts forward for the case of high-modernist agriculture: that it seeks to reshape local environments in favor of pre-packaged solutions, rather than adapting solutions to existing conditions.³⁰⁸

A more concrete example of localist thinking can be found in the committee's discussion of plant husbandry, where it outlined some principles for plant breeding and varietal use:

The cultivation material can consist of already-present varieties or of introduced varieties with better cultivation characteristics. Insofar as the already-present cultivation material is well adapted to the environment, it should primarily be used. It is eminently probable that this material's quantitative and qualitative return can be improved through breeding. Plant breeding, which at the outset can likely be carried out with relative simple methods, can be expected to yield good results.³⁰⁹

Such prioritizing of local varieties was not a commonly held view among international agricultural experts in the mid-1960s. Most of the varieties used as inputs in contemporary Green Revolution projects were instead developed by what Jonathan Harwood has described as a "cosmopolitan strategy," a universalistic plant breeding approach that aimed at creating varieties which would perform well under a wide range of conditions. In contrast to the cosmopolitan strategy, Harwood describes a local strategy, starting from existing local varieties and aiming at developing a variety that would perform well under specific, local conditions. The Agricultural College experts did not unequivocally side with either strategy: another point made further on in the proposal was that introducing new varieties complemented by pesticides, an approach more related to the cosmopolitan strategy, could also be a viable way ahead. The local approach was, however, the prioritized one, in line with

³⁰⁷ Richards, *Indigenous Agricultural Revolution*, 10.

³⁰⁸ Scott, Like a State, 301.

^{309 &}quot;Forskning och undervisning på jordbrukets område," 4.

³¹⁰ Harwood, Europe's Green Revolution, 45–46; 122–23.

the more general argument about the importance of localized and decentralized research.

The contrast between cosmopolitan and local plant breeding strategies reflects deeper tensions between the local and the universal in agricultural science. Though agricultural researchers ignore differences in cultivation conditions between different localities only at their peril, agricultural science has nonetheless been characterized by a range of universalizing attempts. from Harwood's cosmopolitanism to the idea that almost any environment can be reshaped to fit with preexisting agricultural approaches, to a belief in what has been described as "transfer through analogy"—the idea being that if the target area's climate and soil conditions are close enough to those of an area for which solutions have already been developed, these solutions can be used off the shelf.311 While, as noted in the introduction, localist approaches to the development of tropical agriculture were often advocated in the colonies during the interwar period, a lack of attention to local contexts in some postwar development projects had resulted in well-publicized failures. often based on a problematic combination of aggressive mechanization and chemical fertilizer inputs.³¹² But the Agricultural College representatives argued from the outset for a distinctly local approach based on the adaptation of technologies to local environments.

Presumably the argument was made with the rather recently failed projects in mind, but the approach they argued for was also rooted in the history of Swedish agricultural experimentation and extension activities. The committee used "a hundred years of Swedish experience in experiment organization and design" as an argument for why this type of effort was suitable for Swedish expertise. This was surely an attempt to relate the proposal to the established policy that Sweden ought to provide aid in areas to which its nationally available expertise was especially well-suited. But it also gives insight into how agricultural experimentation was understood at the Agricultural College. It referred to the experimental activities performed since the nineteenth century

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³¹¹ On the reshaping of environments, see e.g. Muir, *Broken Promise*, chapter 2; on transfer through analogy, see Doug Porter, Bryant Allen, and Gaye Thompson, *Development in Practice: Paved With Good Intentions* (London: Routledge, 1991), 85–86.

³¹² On the interwar period, see Hodge, *Triumph of the Expert*, 148–52; Tilley, *Living Laboratory*, chapter 3. Among the postwar projects, the most notorious was the British East Africa Groundnut Scheme from the late 1940s, where inadequate attention to local conditions had resulted in spectacular failures. Other examples include the Mechanical Cultivation Scheme in Sierra Leone and the Niger Agricultural Project in Nigeria; see Hodge, "Hybridity of Colonial Knowledge," 213–14. For examples of rural development projects contemporary with CADU which suffered from a lack of adaptive research, see Uma Lele, *The Design of Rural Development: Lessons from Africa* (Baltimore: Johns Hopkins University Press, 1975), 180.

^{313 &}quot;Forskning och undervisning på jordbrukets område," 4.

under the auspices of the Royal Swedish Academy of Agriculture, the regional agricultural societies, and, from 1907, the Central Institute for Agricultural Experimentation. The last-mentioned was a government agency that eventually developed into a national experiment organization for plant and animal research. This research system had always included a regional and localized component, with experiments sometimes even being carried out on private farms. It also included an extension dimension through which new knowledge was disseminated to farmers.³¹⁴ Since 1948, the main body of the national experiment organization had been co-located with the Agricultural College and shared its board of directors (in 1962, the two organizations were formally merged). The college was also developing special extension activities, by which it provided advice to extension agents in agricultural societies and the county-level boards of agriculture.³¹⁵

Those responsible for this experiment system emphasized the important role played by the local dimension both for knowledge production and dissemination. In 1955, Erik Åkerberg, a plant breeder and then-head of the National Institute for Agricultural Experimentation, outlined the importance of having both a fixed experimental setup, run by the national experiment organization, and local experimental activities under the aegis of the agricultural societies. These complemented each other, Åkerberg explained: the fixed experimental activities evaluated newly bred varieties in comparison with presently cultivated ones, whereas in a second step, local experiments were employed to investigate under which specific conditions or in which areas promising varieties could be recommended to farmers.³¹⁶ The service science tasks Åkerberg outlined for the local experimentation activities corresponded well to what the college's committee proposed to establish in a developing country. Erland Mårald also notes how another report published by the inquiry into the future agriculture policy had stated that experimental activities were "natural points of contact between research and farmers." The committee made a similar point and explicitly recommended the Swedish (and Norwegian) model of study farms for the proposed project. These farms were

³¹⁴ Mats Morell, *Jordbruket i industrisamhället, 1875–1945* (Stockholm: Natur och Kultur/LT, 2001), 142–56; Mårald, *Jordens kretslopp*, 139–45.

³¹⁵ Mårald, "Knowledge," 98.

³¹⁶ Erik Åkerberg, "Om fast och lokal försöksverksamhet," *Växt-närings-nytt* 11, no. 2 (1955). Though complementary on paper, there were in fact tensions between the central and local research institutions that at least on one occasion flared up into open conflict. See Gabriel Söderberg, "Limits of Market Technocracy: Swedish Fertilizer Research and the Crisis of Objectivity 1945–1960," in *Constructing Invisible Hands: Market Technocrats in Sweden* 1880–2000 (Uppsala: Uppsala University, 2013).

³¹⁷ Mårald, "Knowledge," 99.

cultivated by their owners under the supervision of a researcher who proposed experiments and improvements, and so simultaneously functioned as knowledge production sites and as model farms for knowledge dissemination both to the owner and within the local farming community.³¹⁸

The organization of the Swedish agricultural research system, with its local components and close ties between the college's higher education and research on the one hand, and the more practically focused experiment organization on the other, is thus likely to have shaped how the faculty of the Agricultural College understood agricultural development. Knowledge of the failed mechanization schemes in Africa in the 1940s might have contributed as well. Moreover, Nekby's tenure in Nigeria, with its links to British colonial knowledge networks that at least at times had manifested a strong interest in the local, probably also had an influence. The small-farm focus of the end result, and the importance it attached to exhaustive localized experimentation and extension in the developing world, makes the Agricultural College's proposal stand out among other contemporary Green Revolution projects. As Harwood compellingly argues, few of these projects based their interventions on historical experiences of smallholder-oriented agricultural development. With scant concern for ecological particulars, they instead implemented cosmopolitan programs and thus ended up having to relearn lessons already learned before the war. 319 But as we have seen here, in the Swedish case such experiences did carry over into postwar international development, even if the initial ideas would come to change in a number of respects. This will be considered further below and in the next chapter.

Development Aid as Institution-Building

When submitting its plan to NIB, the Agricultural College had—rather similar to how Nils Lagerlöf reacted to the FAO proposal for a mission to India—reformulated a development initiative so as to be more congruent with its own expertise. This congruence had a convenient side effect for the college: it meant the plan could also function as an argument for its own expansion. This becomes clearer if we look at the parts of the plan that considered education in connection with the proposed project: training of people in the recipient country and training of Swedish experts for development work.

The plan did not simply posit the college in a supervisory role in a developing country but also argued that the college itself needed to expand. This was not, however, to receive foreign students but to make it possible to accept more *Swedish* students. As noted, the Agricultural College's experts

319 Harwood, Europe's Green Revolution; Harwood, "Cumulative Learning Process."

³¹⁸ "Forskning och undervisning på jordbrukets område," 6–7.

differed from Lagerlöf in that they had no interest in training a relatively small group of elite students in Sweden. Rather, Hjelm and his colleagues proposed to employ Swedish expertise in field settings, working much closer to developing-country farmers. This enabled them to construe development aid as a new labor market for Swedish agronomists:

The major difficulty [concerning the training of agronomists for development aid] is naturally the limited resources of the agricultural college. The Swedish labor market can easily absorb the present production of agronomists. If a larger agricultural development aid effort should be desired, then this must imply an increased admission level and thus that increased material and personal resources must be placed at the college's disposal.³²⁰

This argument had been suggested already in the consultation response from the year before, but it was now developed into the statement that any significant Swedish effort in agricultural aid would require more agronomists. At this time, it was the government and not the college itself that determined its number of student places (the same applied to all other professional colleges in Sweden), and to lobby the government, development aid—being a political project unanimously supported by the parliament—was a potent vehicle. This is why the argument went beyond positing development aid as a new career path for the college's students to suggest that the Swedish provision of such aid *presupposed* an expansion of the college. It contrasted with Odhner's remarks on education aid from less than a year earlier, in which he had stated that even if there was no abundance of agronomists in Sweden, there ought to be "relatively good" recruitment opportunities for aid assignments and certainly better than, for example, for engineers and physicians.³²¹

While the comparison might suggest that the college's argument was deliberately misleading, a fairer take on it is that the labor situation was complex and could be interpreted in different ways. Choosing an interpretation that strongly emphasized the need for more personnel could be turned into a very useful argument to secure for the college a larger allocation of resources in a political context where there was strong support for an expansion of development aid. The focus on science-driven agricultural aid played directly into this. Such aid presupposed agronomists for its planning and execution, and the more agronomists needed, the more had to be trained at Ultuna, and the more resources had to be provided to the college. In this way, it is possible to discern an underlying *expansionist* motive behind the aid engagement. There is no reason to doubt that Hjelm and his colleagues had a genuine interest in

^{320 &}quot;Forskning och undervisning på jordbrukets område," 12.

³²¹ SOU 1963:34, 103.

development or that they believed in the strategy they advocated, but their interest was intertwined with the realization that the college stood to benefit from an increased Swedish agricultural aid effort and from a good relationship with the aid authorities.

The desire to increase the number of students was only one expression of a more general motive of self-interest and institutional safe-guarding. Hjelm's tenure as the college's vice-chancellor was associated with its expansion but also with its transformation into a decidedly different institution for teaching and research in the agricultural sciences in a wider sense, ending with the creation of SLU in 1977. A clear indication that Hjelm considered the development aid work an important part of this more general transformation can be found in a memorandum he presented to the faculty working committee a few years later. There he argued that there were three main reasons for the college's continued expansion over the next five years: (1) problems relating to the ongoing rationalization of Swedish agriculture; (2) pressing environmental issues; and (3) the matter of development aid and food production in developing countries.³²²

The prominent role Hjelm afforded to development aid in his planning for the future suggests that he viewed the engagement as part of a more general institution-building process, of which the increase in student intake was just one part.³²³ Further support for this thesis can be derived from the fact that his memorandum envisioned the development aid work as being closely linked to the college's core activities of education and research, rather than being separated from them, as Lagerlöf's courses at the Veterinary College had been. In 1964, the committee that handled NIB's proposal had also put forward this point. It had suggested that since the need for agricultural development aid was likely to increase, it would be "realistic to consider it a permanent activity at the Agricultural College," a wording that suggests a vision of a prominent and

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³²² Lennart Hjelm, "Målsättning för lantbrukshögskolans utbyggnad under nästkommande femårsperiod," attachment § 56 to meeting minutes, Working committee of the Faculty of the Agricultural College, 18 March 1966, AC-SS, series A VI a, vol. 1. Later planning at the Agricultural College also emphasized this, see e.g. *Långtidsplan för Lantbrukshögskolan* (Uppsala: Royal Agricultural College, 1973).

³²³ There was seemingly little opposition to this particular part of Hjelm's agenda. I have found no evidence of any conflicts over the aid engagement, though I cannot conclude with certainty that there were none. It is hard to believe that the entire faculty saw development aid as a relevant task for the college, but no open disagreement is noted in the faculty or board meeting minutes or in any other material reviewed. It is possible that, given the general expansion of the college at the time and the minor financial undertaking the development engagement implied, nothing motivated uninterested actors to move from a passive lack of interest to open hostility, with the risks that might have entailed.

permanent center for development-related agrarian expertise at Ultuna.³²⁴ Institution-building is a motive in line with what has been suggested by people who knew Lennart Hjelm at the time.³²⁵ The thesis is also further strengthened by the fact that the college pushed for its conception of development aid in other contexts as well. A few years later, in its consultation response to the major government inquiry on the new agricultural policy, the college used a comment on food supply issues in developing countries as an excuse to make a broader multiparagraph argument on agricultural development aid and the college's possible contribution.³²⁶ In the end, something like what Hjelm envisioned was established at Ultuna with the International Rural Development Center. IRDC became important to Swedish development aid, but it never really made development aid a major avenue of expansion for the college; this will be discussed in more detail in chapter 5.

Development Aid as a Legitimacy Project

The importance Hjelm and his colleagues afforded to institution-building and institution-protection becomes more understandable if we consider the wider context. We know that modern agriculture began to come under fire from the new environmental movements in the early 1960s. It was thus hardly a coincidence that Hjelm's expansion plan included environmental research on, among other things, "biocides," a word that had entered the Swedish language straight from Rachel Carson's *Silent Spring*.³²⁷ Acknowledging the problem and expanding into research on environmental aspects of agricultural production could help safeguard the college's future legitimacy as well as increase its social relevance at a time when the environment was a growing concern for Swedish policymakers and the Swedish public at large.³²⁸ Precisely the same case could be made for development aid, also a high-profile political and public issue in the mid-1960s.³²⁹

^{324 &}quot;Forskning och undervisning på jordbrukets område," 14.

³²⁵ Anders Forsse, interview by author, 14 May 2013; Nekby, interview.

³²⁶ SOU 1967:7, Den framtida jordbrukspolitiken: Remissyttranden över betänkande av 1960 års jordbruksutredning, 94–95.

³²⁷ See Harri Siiskonen, "Silent Spring and the Nordic Agricultural Magazines," *Scandinavian Economic History Review* 50, no. 1 (2002): 11–15. Note that the connotations of the word in Swedish were less negative than they had been in Carson's book.

³²⁸ For an account of the development of environmental perspectives at the Agricultural College, see Olle Pettersson, "Hur kom miljöforskningen till lantbrukshögskolan? En studie av dialogen mellan lantbrukshögskolan/SLU och omvärlden," *Kungl. Skogs- och Lantbruksakademiens tidskrift* 128, no. 3 (1989).

³²⁹ Though particular ecological issues were addressed later on in the planning process, the deeper implications of exporting (at least parts of) the agriculture criticized as environmentally problematic were generally not discussed by the Swedish experts.

Furthermore, the social changes that followed agricultural rationalization put all institutions bound up with the agrarian sector in a problematic position in a different way. Agriculture's reduced need for manpower was a necessary precondition for the expansion of the industrial sectors. This undermined the influence of the agrarian sciences and their institutions, as rural populations decreased and farmers became just one special interest group among many. There was a certain paradox in the development: the more efficient and extensive Swedish agriculture became, the less political leverage its institutions would have.³³⁰

Per Lundin's studies of agrarian higher education and research reforms in the 1950s and 1960s provide more insight into the particular situation of the Agricultural College. He argues that the college (and the College of Forestry) was limited in its possibilities to expand in the ways the rest of the higher education institutions could. As a professional college training a limited number of students for particular professions, it could not plug into the ongoing movement toward mass higher education; at the same time, it sorted under the Ministry of Agriculture, which was preoccupied with the agricultural reforms and did not prioritize higher education and research issues. By the mid-1960s, Lennart Hjelm seems to have believed that these were acute issues which had to be dealt with. Lundin shows that after becoming vice-chancellor, Hielm began to manifest a strategic agenda through his work on one of the Swedish Government Research Advisory Board's (Forskningsberedningen) committees. The core of his strategy was to present the field of biology as the cornerstone of the research at the Agricultural College as well as the College of Forestry. Formulating the research in terms of what at the time was a prioritized scientific field was, Lundin argues, "the agrarian colleges' first step toward claiming their own space in the Swedish (basic) scientific landscape."331

Lundin does not consider Hjelm's maneuvering with regard to development aid, but there is a striking contemporaneity between the struggle to increase the college's legitimacy in the eyes of science policymakers he analyzes and the attempt to expand through development aid that I have presented here. It is also striking how the proposal for an intensive rather than extensive strategy for agricultural development aid—with its consequent focus on agricultural science—is mirrored in Hjelm's findings on the future of Swedish agriculture, which likewise emphasized a focus on research instead of further

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³³⁰ For a general discussion of this problem, see Lawrence Busch, "The State of Agricultural Science and the Agricultural Science of the State," in *From Columbus to ConAgra: The Globalization of Agriculture and Food*, ed. Alessandro Bonanno et al. (Lawrence: University Press of Kansas, 1994), 77–78.

³³¹ Lundin, "Reformeringen," 33; 22–37.

mechanization. And the memorandum I cited above, in which Hjelm suggested that rationalization, environmental issues, and development aid would grow to become core issues for the college in the early 1970s, adds additional weight to the idea that the aid effort was part of a larger project. Against this, I argue that the engagement in development aid was one expression of a broader intent: the expansion and transformation of the college that Hjelm strived to effect. By arguing for the importance of agricultural research in fresh contexts, thus expanding the college's area of interest and turning to new stakeholders, besides the traditional ones within the Swedish agricultural sector, he attempted to expand the college; to maintain and strengthen its position in society and its social and political legitimacy.

If the college's engagement in development aid is understood as a foray into a new political field, the flip side was the possibility of colonizing new scientific fields. The 1964 plan suggested that activities at the experiment station could be linked to research at the college on "agricultural problems of developing countries."332 Two years later, in his five-year expansion plan, Hielm also noted the importance of research: both research on tropical agriculture and on synthetic foods were mentioned as examples there.³³³ As chapter 5 will show, it would prove very difficult to establish development-related research at the college, but there was an interest in the idea from the very outset, and it most likely functioned as an important motivating force. Moving into development aid could also cater to more idealistic motives. It would enable the interested college professors to play their part in the new developments in the Third World; to help realize the utopic dreams of the first development decade by constructing one piece of the cornucopia promised by the green revolutionaries. One of the involved professors, Ewert Åberg, became particularly interested in the question of how to feed the world and published several works on the topic. He also became involved in the Consultative Group for International Agricultural Research, a consortium of agricultural research centers that would later engage many other scientists at SLU.334

The Agricultural College had thus taken NIB's inquiry about agricultural education aid and reformulated it into a proposal for science-based agricultural development aid, based on a localist development strategy intended to stimulate smallholder agriculture. For Hjelm and his colleagues,

^{332 &}quot;Forskning och undervisning på jordbrukets område," 4; 7.

³³³ Hjelm, "Målsättning för lantbrukshögskolans utbyggnad."

³³⁴ Ewert Åberg, "Vad bör man göra för u-landsjordbruket?," *Kungl. Skogs- och Lantbruksakademiens tidskrift* 107 (1968); Ewert Åberg, *Världssvälten kan hejdas* (Stockholm: Prisma, 1970); Camilla Odhnoff and Bo Bengtsson, "Ewert Åberg in memoriam," *Svenska Dagbladet*, 23 December 1983.

this was a way to simultaneously communicate their unwillingness to provide basic training to students from developing countries and their desire to still play some kind of part in Swedish development aid. This desire was undergirded by the conviction that the college stood to gain from such an engagement. The college's professors recognized that their participation in development aid would enable them to use the Third World for their own institutional and scientific purposes. But I do not mean to imply that the college's professors cynically designed a plan for agricultural development abroad that in fact would only serve their own ends. There is no reason to doubt that they wanted to participate in development aid because they felt that they could be of much-needed assistance to poorer countries, nor to question that they believed that the strategy they advocated was the best way to provide such assistance. But they were sensitive to the fact that this strategy seemed one of the few avenues of expansion open to the Agricultural College. This, in turn, meant that development aid quickly became part of a project—driven primarily by Vice-Chancellor Hielm—to widen the scope of the college and to secure its present and future relevance by, ultimately, changing it from a sector-bound agronomical institute to a broader research university.

The NIB Crisis, the "Scandal Farm," and the Agricultural Aid

The Agricultural College's proposals for a new aid project were received by a NIB scarred by internal strife and external pressure. After its creation in 1962, the agency had seen an influx of staff with little experience of Swedish public administration, and this had created friction in its inner workings. Tensions also mounted between the head office in Stockholm and project staff in the field. The press gradually picked up on the problems, and in September 1963, the Gothenburg daily paper *Göteborgs Handels- och Sjöfartstidning* initiated a press campaign that questioned the agency's organization and its management of Swedish aid. It soon intensified to the point that the responsible minister, Ulla Lindström, later would describe it as "the stormiest attacks of [my] political life." The press attacks, in turn, triggered a political crisis, known as the "NIB crisis," and Arne Björnberg, the agency's secretary-general, was eventually forced to leave his position. The pressure of the project of the point of the project of the point of the point of the point of the project of the proje

³³⁵ Ulla Lindström, *Och regeringen satt kvar! Ur min politiska dagbok 1960–1967* (Stockholm: Bonnier, 1970), 169.

³³⁶ These developments have not been extensively treated by historical research. The most detailed analysis available of the crisis is a thesis written for the Uppsala political science seminar in the spring of 1966: Arne Sjöberg, "NIB-krisen" (unpublished thesis, Uppsala University, 1966). My copy was graciously provided by Sofia Lindgren. A very short description of the crisis is further given in Klas Markensten, "Biståndets organisation," in *Bistånd på mottagarens villkor*:

The NIB crisis and its aftermath brought about the end of the older Central Committee model, in which civil society organizations had formal influence over development aid. NIB would soon be replaced by SIDA, which was organized as a standard government agency according to the conventional principles of Swedish public administration. But the crisis also opened up new possibilities, among other things for agricultural aid. A contributory reason for this was that one of the more notorious projects during the crisis had been an agricultural endeavor in Algeria, a project the press had dubbed the "scandal farm."³³⁷

The "Scandal Farm" and Its Aftermath

In Algeria, NIB provided personnel support and machinery to a major agricultural unit created by the merger of six farms that had been abandoned by their French owners after or during the Algerian War of Independence. Its total size was more than two thousand four hundred hectares. General Swedish sympathy for the cause of the FLN and the newly formed NIB's desire to find suitable projects to support had led to a Swedish-Algerian agreement on the development of the farm. But the project suffered from poor planning. There was no agronomic expertise in place during the project launch, and none of the Swedes present spoke either French or Arabic. The scandal-hungry press also took some pleasure in pointing out how NIB had supplied inappropriate technology and how the combines obtained from the United States had broken down in transit. But what really made the news was the conflict between the field staff and the NIB management in Stockholm. The project director, former missionary Signar Öman, wrote a letter of complaint—not intended for public consumption—in which he adopted drastic biblical language when pointing out

Filosofi och teknik, ed. Lennart Wohlgemuth (Stockholm: Swedish International Development Authority, 1976), 175. Ulla Lindström's recollections of the course of events are published in her memoirs, in which she is very critical to the press and considers the criticism to have been unreasonably harsh and in parts directly wrong: Lindström, Och regeringen satt kvar!, 169–83; 209–11. Another personal view of the crisis can be found in Anders Forsse, "Ämbetsman i biståndet," in...och världen växte: Biståndet som vi minns det, ed. Peter Gumbel, Bo Kärre, and Anna Wieslander (Uppsala: Sida-seniorerna, 1999), 54–61. See also the account in Kjell Östberg, I takt med tiden: Olof Palme 1927–1969 (Stockholm: Leopard, 2008), 227–30.

³³⁷ Granqvist, "NIB:s skandalfarm."

³³⁸ Like the NIB crisis as a whole, this early example of agricultural aid has not been subject to any historical research, but see Hasse B. Gaenger, "Skandalfarmen som blev mönsterfarm," in Gumbel, Kärre, and Wieslander, ...och världen växte.

³³⁹ Torsten Ehrenmark, "NIB:s skördetröskor havererade i starten: DN på Afrikafarmen," *Dagens Nyheter*, 21 September 1963.

the shortcomings of the secretary-general: "Björnberg, Björnberg, why have you forsaken me?" When this ended up in the press, it further fueled the crisis.³⁴⁰

When Hjelm and his colleagues at the Agricultural College had finished their proposal in the spring of 1964, the acute phase of the NIB crisis was over and important personnel changes had been effected at the agency. Björnberg had been replaced as secretary-general by Ernst Michanek, a Social Democrat of high standing and with much administrative experience. Serving under Michanek, the two most prominent civil servants at NIB were Per-Erik Rönquist, who had been Björnberg's deputy, and Anders Forsse, a diplomat who had been peripherally involved with the Algerian project in his role as the first Swedish consul in independent Algeria before being asked to help out at the crisis-ridden NIB.³⁴¹ As Forsse remembers it, he and Rönquist worked out a plan in which organizational stability was to be achieved by limiting Swedish efforts to education, health care, and family planning, and to five different countries. Michanek had in principle accepted this as a sound plan, but in the fall of 1964, agriculture nevertheless found a prominent place on NIB's agenda.³⁴²

This was a result of Lennart Hjelm personally calling on Michanek in 1964 and arguing that Sweden ought to engage in agricultural aid by establishing an agricultural experiment station in a developing country, as the Agricultural College had earlier proposed.³⁴³ Michanek, who paid close attention to food-related matters and, unlike his subordinates, wanted a broader aid program, let himself be convinced by Hjelm, and, according to Forsse, from then on Hjelm came to have "very evident influence" on Michanek in agricultural matters.³⁴⁴

³⁴⁰ Ehrenmark, "NIB:s skördetröskor," 1.

³⁴¹ Rönquist, who became acting secretary-general when Björnberg left NIB, played a central role in the early (re-)organization of Swedish aid, but passed away unexpectedly in 1965.

³⁴² Forsse, interview. Forsse's memories of how he came to NIB and his work at NIB and SIDA in the 1960s are also published as Forsse, "Ämbetsman i biståndet." He would later become director-general of the agency (1979–1985).

³⁴³ I have not found any contemporary source that clarifies the precise details of these developments. The best sources available seem to be the recollections of Anders Forsse, published in 1989 and 1999. I build on a comparison between them and the interview I held with him in 2013: Forsse, interview; Forsse, "Ämbetsman i biståndet; Anders Forsse, "CADU: Birth Pangs, Precepts, Hurdles," *U-Lantbruk*, no. 2 (1989). In Forsse's earlier account, he suggests that Michanek already was interested in complementing Swedish activities in family planning and education with food production, while in the latter, as well as in the interview, he implies that it was only after talking to Hjelm that Michanek let himself be convinced, against the advice of himself and Rönquist.

³⁴⁴ Forsse, interview. Hjelm's good relationship to the aid authorities has further been emphasized by all my informants with insight into the circumstances at the Agricultural College or SIDA. One example, from some unpublished reflections over agricultural aid by Inge Gerremo who worked at SIDA from 1965, can be quoted: "Lennart played a conclusive role for the good contacts and

The experiences from Algeria likely helped make Michanek more receptive to the idea of a new, smallholder-oriented and more thoroughly expert-planned agricultural project.³⁴⁵ Moreover, the small-farm and local focus of the college's plan were possibly accentuated in response to the news from Algeria, where the farm had been operated based on a universalistic and commercializing strategy for development and technology transfer. Michanek was probably also impressed by the effort the college had put into the proposal. NIB received many project suggestions at this time, not all of them well-motivated, and Michanek, frustrated by this, would often refer to a principle employed by USAID: that the burden of proof of a project's viability rested on the proposer.³⁴⁶

Behind the particular considerations at NIB lay the broader and more complex problem of how to best approach the population-resource dilemma. As Björn-Ola Linnér notes, agricultural development was the technological optimists' answer, whereas the more pessimistically inclined pointed out that population control was needed as a long-term solution.³⁴⁷ Sweden already had a family planning aid program, which Forsse and Rönguist would have preferred to focus on. Before being forced to leave NIB, Björnberg was open to combining food production with family planning, as is evident from his 1962 address to the student congress that I quoted at the opening of this book. Michanek's interactions with Hielm eventually led him to adopt a similar stance, and after 1964 he publicly argued strongly for the need for food production efforts as well as for family planning.348 That increased food production would tend to come with its own set of social disruptions was not an issue at this stage. The debates on the Green Revolution would only begin in earnest at the end of the decade.³⁴⁹ Yet unavoidably, both the notion of a food crisis and the effects of science-driven agricultural change were part of the wider intellectual context of the early Swedish aid. Concerns in particular about the social effects of, and the social constraints on, scientific interventions

relations which came to develop between SIDA and SLU." Inge Gerremo, "Några reflexioner kring samarbetet mellan SIDA/Sida och SLU," 1 (unpublished manuscript, November 2009).

³⁴⁵ This is how Bengt Nekby, but not Anders Forsse, remembered it. A source-critical analysis suggests that Forsse is the better source, though no matter if there was a direct link between Algeria and the new initiative or not, the Algerian farm was unavoidably part of the context of the planning of the new project. We will see later how Hjelm and Nekby strongly distanced themselves from it. Nekby, interview; Forsse, interview.

³⁴⁶ Michanek, Vår insats, 31; 57.

³⁴⁷ Linnér, The World Household, chapter 8. Those who were optimists could be optimists in the extreme, see, e.g., James B. Billard, "More Food for Multiplying Millions: The Revolution in American Agriculture," National Geographic 137, no. 2 (1970).

³⁴⁸ Michanek, *Vår insats*, 36–37; 48.

³⁴⁹ Linnér, The World Household, 213.

into small-farm agriculture would soon find their place in the discussion about a possible agricultural project, as we will see in the next chapter.

Foundations of the Rural Development Pair

In their work on expertise, Joris Vandendriessche and his colleagues discuss what they call "expert encounters" with state and society. If the experts are convincing enough, they suggest, the result is a "(re)shaping [of] the social and political objects under expert scrutiny."350 Hjelm's convincing of Michanek was one such encounter, which changed Swedish development aid by bringing in agricultural expertise. Unlike the project to develop the Algerian farm, which was initiated based on general Swedish sympathy for Algeria and without having relevant expertise available, the new relationship between NIB and the Agricultural College ensured that future projects would be planned by experts and motivated if not explicitly in scientific terms then at least along the lines of technical rationality. And in the specific project the college had proposed, its own scientific expertise and methods had a preeminent place, centered as it was on the scientific development of agriculture and animal husbandry. This entailed its own particular logic of scientific rationality and connected it to the tradition of Swedish localized agricultural experimentation. It also linked up with the ongoing international attempts to employ modern science and technology to reshape agriculture in the developing world, though it addressed this problem from a distinctly localistic approach that was less common internationally.

In reformulating the method for agricultural aid, Hjelm and his colleagues had effectively created a problem designed to be solved by expertise only available within, or at least trained by, the Agricultural College and the incorporated national experiment organization. They defined agricultural development aid as primarily a matter of agricultural experimentation, and once that definition was accepted at NIB, no other organization in Sweden had a better claim than the college to being able to provide the relevant expertise. It is also of importance here that the agricultural modernization project in Sweden was fundamentally state-driven. Few private firms had agronomic competence, and none could credibly challenge the Agricultural College's claim to having the most relevant expertise. So when Hjelm had Michanek's ear, the college's professors found themselves able to largely decide the future shape of Swedish agricultural aid.

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³⁵⁰ Vandendriessche, Peeters, and Wils, "Performing Expertise," 9.

³⁵¹ This contrasts sharply with, for example, development aid in civil engineering domains, where private consulting firms often secured central roles in Swedish projects. Cf. for example the important role played by consulting company SWECO in May-Britt Öhman's account of Swedish hydropower aid to Tanzania: Öhman, *Taming Exotic Beauties*.

In light of this, I understand the NIB crisis and its aftermath to have constituted a formative moment for Swedish agrarian aid. Being a period of institutional dysfunction, the NIB crisis enabled strong actors to affect the fundamental characteristics and goals of the aid administration. In 1964, Lennart Hjelm took advantage of this to place agricultural development on NIB's agenda, but more importantly to make the Agricultural College central to such an aid effort. While other factors ensured that Swedish aid soon would have expanded beyond education and healthcare anyway, most likely also into agriculture, it now did so with the Agricultural College in a central role.³⁵² This created the foundations of what would become the rural development pair of SIDA and SLU, which would affect Swedish agrarian aid for decades to come. The college's central role also played some part in shaping future Swedish research cooperation with developing countries, as experiences from what would become the CADU project influenced the later creation of SAREC, the government agency responsible for research cooperation with developing countries. The creation of SAREC drew on experiences from CADU and other early projects with important research components, such as the Children's Nutrition Unit (CNU), also in Ethiopia, and Vice-Chancellor Hielm was personally a member of the commission proposing the agency's formation.³⁵³

³⁵² A second government bill on development aid (Government Bill 1968:100, angående långtidsplan för det statliga utvecklingsbiståndet m.m.) established that from the budget year 1974/75, the aid budget should correspond to one percent of Swedish gross domestic product. This lead to a significant expansion of both bilateral and multilateral aid. Odén, Biståndets idéhistoria, 84.

³⁵³ See SOU 1973:41, Forskning för utveckling, also Carl Widstrand, "Creating Knowledge: Swedish Support to Development Research," in Frühling, Swedish Development Aid in Perspective.

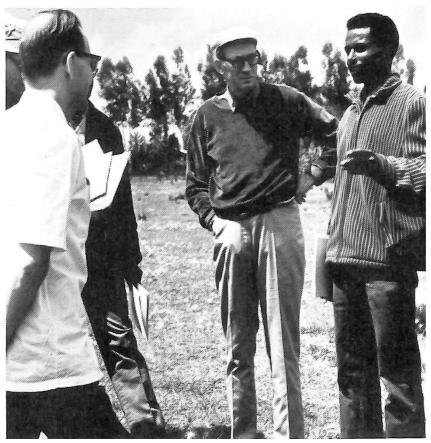


Figure 9. Lennart Hjelm (facing the camera) and Ernst Michanek in Ethiopia, probably during the planning stages of CADU. Hjelm and Michanek's good relationship was key to making SIDA and the Agricultural College development partners. Third person unknown. Photo Harald Linder.³⁵⁴

Enter Regional Development

Once NIB had abandoned the idea of enrolling the college in an education aid effort, it instead began preparations for a larger agricultural field project. In October 1964, an agricultural working group was appointed to take responsibility for this task.³⁵⁵ This group was dominated by members from the Agricultural College (see table 1 below), recruited directly from the committee that had designed the earlier project proposal. Hjelm and his colleagues had thus formally secured roles as key agriculture aid experts. In this respect, their actions fell into a larger pattern of expert maneuvering within the postwar

354 From Isaksson, "Utbildning och utvecklingssamarbete för u-länderna," 63.

 $^{^{355}}$ Meeting minutes, NIB Secretary-General, 20 October 1964, \S 20, NIB, series A II, vol. 1.

Swedish state. Per Lundin and Niklas Stenlås discuss how state initiatives at the time often originated with experts: "small [groups] of individuals" who were able to enroll themselves in the government apparatus. For major reform issues, experts often served on large government inquiries; in the present case, the arena was more modest, but the basic mechanism was the same: the elevation of experts to positions where they could make proposals that often led to them becoming government-backed "implementers of their own plans and visions." In the rest of this chapter as well as in the next one, we will see how this pattern played out in the field of agricultural development aid.

The new expert group was chaired by Hjelm and had Nekby as its working secretary. Besides Hjelm, Nekby and the other Agricultural College professors, one notable member of the group was Gösta Ericsson, then head of division at the National Board of Agriculture, who would later become the director of SIDA's agricultural division. Another was the aforementioned Erik Åkerberg, then the director of the Swedish Seed Association (which ran the internationally renowned plant breeding institute in Svalöv).

Table 1. The members of NIB's agricultural working group. Professors from the Agricultural College dominated the group and performed almost all of its work.

Member	Home institution		
Professor Lennart Hjelm (chair)	Agricultural College		
Associate professor Bengt Nekby (secr.)	Agricultural College		
Head of Division Gösta Ericsson	National Board of Agriculture		
Professor Artur Hansson	Agricultural College		
Budget Secretary Ulf Hänninger	Ministry of Agriculture		
Consultant Håkan Rydén	Swedish Union of Agricultural Banks		
Professor Börje Åberg	Agricultural College		
Professor Ewert Åberg	Agricultural College		
Professor Erik Åkerberg	Swedish Seed Association		

This working group—the "agricultural group," as it soon became known—came to function as an arena for the development of a new strategy for agricultural aid. Its creation also amounted to the genesis of an organizational coupling between the Agricultural College and the development authorities, for five of the group's nine members were representatives of the college, and, in practice, these five dominated its work completely. It gave the group a distinctly double allegiance: to NIB, on whose behalf it worked, and to the college, whose interests directly played into the planning of the new aid strategy.

³⁵⁶ Lundin and Stenlås, "The Reform Technocrats," 135.

According to the group's instructions, its most important task was the longterm planning of NIB's agriculture aid, including the formulation of concrete project proposals.³⁵⁷ Bengt Nekby also remembers that the work, at least unofficially, focused only on Africa and, consistent with the college's earlier proposal, on projects aimed at smallholders.³⁵⁸ The working group's second task was to consider the training of Swedish experts for agricultural work under foreign conditions and to support NIB in designing education programs. The group was also supposed to comment on proposals received by NIB. follow FAO's activities, and follow up on existing projects in which Sweden was engaged. Such projects were rather few: besides the farm in Algeria, the most significant was the Nordic Tanganyika Project, later known as the Kibaha Education Center, in Tanzania. This was a joint Nordic educational and health aid project launched in the early 1960s which also included an agricultural component.³⁵⁹ Aid historian Jarle Simensen calls the agricultural center at Kibaha "a fascinating piece of agricultural history" and notes how its strategies would shift "from two weeks [sic] demonstration courses for local farmers, to out-reach efforts in the region and back to an ordinary agronomist school."360 However, though the agricultural group was informed about Kibaha and later briefly visited it, it seems to have had little direct influence on their work.

In practice, the group mainly focused on two things: the planning of a large Swedish rural development project, and the problem of recruiting and training Swedish experts for developing-country assignments. While these were partly interlinked efforts, my analysis here will focus on the former.

The Idea of Integration

From the outset, the agricultural group was committed to the idea that the project should target small farmers and that it should integrate different aspects of agricultural production and marketing. The idea of an integrated approach, understood as the application of simultaneous efforts in different fields with the aim of modernizing an agricultural system, had been present since the college's first consultation response. But until now, this had primarily been a point of

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³⁵⁷ Per-Erik Rönquist, "Ang. planering av bistånd på jordbruksområdet. Arbetsdirektiv 17.10.1964," 3, NIB, series F VIII, vol. 1.

³⁵⁸ Nekby, interview.

³⁵⁹ For an overview of Kibaha's history, see Annika Billing and Catarina Carlsson, *Kibaha Education Centre: A Sustainable Sustainable Development Cooperation Project?* (Gothenburg: University of Gothenburg, 2009). It is of some interest in the present context that Billing and Carlsson note that though never intended to be an integrated efforts, the different parts of the Kibaha center nonetheless came to draw extensively on one another (p. 26).

³⁶⁰ Jarle Simensen, "The Norwegian-Tanzanian Aid Relationship: A Historical Perspective," in *Tanzania in Transition: From Nyerere to Mkapa*, ed. Kjell Havnevik and Aida C. Isinika (Dar es Salaam: Mkuki na Nyota Publishers, 2010), 59.

principle. With a real project to plan, the group wanted a more solid understanding of what an integrated approach to agricultural development could amount to, and for that, they looked to the Indian sub-continent and to Israel.

In January 1965, Nekby traveled to Pakistan and India to study two ongoing rural and agricultural development efforts: the Comilla project in East Pakistan (present-day Bangladesh) and the Intensive Agricultural District Program (IADP) in India.³⁶¹ The latter was a Ford Foundation initiative, described by Perkins as "the organizational framework for the green revolution [in India]."362 Its main thrust was the demonstration and distribution of artificial fertilizers and improved seed in large-scale rural districts. The Comilla project, the brainchild of Pakistani social scientist Akhter Hameed Khan, focused on regional development of a more limited area by way of research, education, demonstrations, public works, and the organization of farmer cooperatives for the distribution of credit and inputs.³⁶³ After a slow start, the project had begun to achieve significant results by the mid-1960s, and it made a strong impression on Nekby. When presenting his experiences to the agricultural group, he stated his opinion that the Comilla project would be of "extraordinary importance" to the continued planning. 364 Though the concrete suggestions in Nekby's later summary of the knowledge gained from the trip were worded carefully, it is clear that certain aspects had stood out. The project ought to have a regional focus, continually evaluate its experiences, contain an experiment station led by foreign experts, and be based on an innovation that could easily be demonstrated to be profitable, so as to facilitate the mobilization of the local population.³⁶⁵ This focus on production and profitgenerating innovations was the main novelty of this approach compared with the earlier notion of community development, which was a very influential strategy in the 1950s and likewise aimed at popular participation to improve rural life but tended to de-emphasize income generation.³⁶⁶ By contrast, to the Agricultural College's experts, it was crucial that farmers' incomes increased.

 $^{^{361}}$ Lennart Hjelm and Bengt Nekby, "Preliminär rapport från studieresa i Libanon, Pakistan, Indien, Israel, Tunisien och Algeriet samt från diskussioner med the Food and Agriculture Organization of the United Nations i Rom den 14/1-10/2 1965," NIB, series F VIII, vol. 1.

³⁶² Perkins, Geopolitics, 182.

³⁶³ About the Comilla project, see, e.g., Arthur F. Raper, *Rural Development in Action: The Comprehensive Experiment at Comilla, East Pakistan* (Ithaca: Cornell University Press, 1970).

³⁶⁴ Meeting minutes, NIB working group for agricultural issues, 22 February 1965, § 29, NIB, series F VIII, vol. 1.

³⁶⁵ Bengt Nekby, "Graden av integration: En värdering av några olika typer av jordbruksprojekt," pp. 29–30, 24 March 1965, NIB, series F VIII, vol. 1.

³⁶⁶ Lars-Erik Birgegård, "A Review of Experiences With Integrated Rural Development (IRD)," (Uppsala: International Rural Development Center, 1987), 4.

After leaving the sub-continent, Nekby met up with Hjelm in Israel, another source of inspiration in the field of regional development where an integrated approach was also emphasized.³⁶⁷ They then continued to North Africa, visiting Tunisia and NIB's farm in Algeria. Coming from the development programs in Asia, the Algerian project appeared to Nekby as an antithesis of successful development. He considered the project to consist of separate capital-intensive efforts in an environment where they served little apparent purpose, as is clear from the report he wrote together with Hjelm:

As far as NIB is concerned, the project seems to have been characterized by a lack of a well-thought-through plan and by an unnecessarily bureaucratic attitude. From the start, there has been no development plan based on the conditions in the area, the availability of resources, and the possibilities of later applying and taking over the constructions.³⁶⁸

At the time, there were discussions about having the Swedish National Board of Public Building design and construct a large barn so that the farm's milk production could increase. This construction project would, according to Nekby's memoirs, "command an astronomic price," and in the report to the agricultural group, the very idea of commercial milk production in an area with "strictly limited" sales possibilities was rejected, followed by a harsh dismissal of the suggested construction project itself: "It must be extremely unsuitable to at all construct a Swedish monument building that cannot be imitated for the next 25–50 years." Their forcefully distancing themselves from the Algerian project can be seen as a way for Hjelm and Nekby to strengthen their own position. The project they advocated was based on a wholly different strategy: a focus on smallholders instead of large-scale commercial farming, and an integrated system of efforts based on scientific research rather than the disintegration they felt they had witnessed in Algeria.

In early spring, Nekby briefed the NIB board of directors on an FAO agricultural credit project that the agricultural group had been asked to consider. On this occasion, Nekby also related to the board the group's ongoing planning of an integrated agricultural project. During the ensuing discussion, the board expressed that agriculture ought to be a prioritized area for Swedish aid.³⁷¹ Emboldened by this vote of confidence, in June the working group presented a comprehensive report containing recommendations

 $^{^{367}}$ See meeting minutes, NIB working group for agricultural issues, 22 February 1965, § 30, NIB, series F VIII, vol. 1.

³⁶⁸ Hjelm and Nekby, "Preliminär rapport från studieresa," 9.

³⁶⁹ Nekby, "Margareta och Bengt," 7:73.

³⁷⁰ Hjelm and Nekby, "Preliminär rapport från studieresa," 9.

³⁷¹ Presentation lists, Board of Directors of NIB, 26 March 1965, § 2, NIB, series A V, vol. 8.

on how to proceed.³⁷² The guiding ideas were largely the same as in the college's earlier proposal, from which a few sections had been directly copied, but were now presented in a more fleshed-out form. Inspired primarily by the Comilla project and to an extent by experiences from Israel, the group thus proposed a project characterized by an integrated system of agricultural efforts complemented by efforts in other areas:

Within the agricultural sector, it has therefore [since deficiencies in some areas could negate the effect of efforts in others] been considered desirable to combine experimentation, extension, credit provision, property structure, marketing of produce and inputs, etc., depending on the conditions in the area chosen. . . . In accordance with the theories of balanced development, and following experiences from Israel and Pakistan, agricultural as well as education, family planning, health care, industry, infrastructure efforts, etc., ought to complement each other in an extremely valuable way.³⁷³

An implication of the integrated understanding also meant a further shift in the type of project envisioned. The Agricultural College had initially taken an agricultural education problem and made it into a problem of research-based agricultural development. Building on the Comilla model now implied a further shift: while agriculture was still the centerpiece of the project, the ambitions had grown from agricultural development as such to regional rural development, including, but not limited to, efforts directly linked to the agrarian production.

Even so, increasing production was still the proposed project's centerpiece, and the agricultural group now explicitly referenced Theodore Schultz's work on the transformation of traditional agriculture in arguing that the key to any production increase in traditional agricultural systems was the introduction of modern factors of production. The small-farm focus was retained, and the proposal emphasized the importance of local knowledge production, local approaches to plant breeding, and extensive education and extension activities in order to provide small farmers with good incentives to change to more productive practices. This highlighting of adaptations *to* the local, instead of adaptations *of* the local, means the proposal was still firmly based on a localist understanding of agrarian development. But much like the Agricultural College's earlier project outline, the report was heavily slanted toward a technical and top-down perspective and paid little attention to complicating factors, such as the fact that any project of this type would be inserted into a

³⁷² "Preliminär rapport över formerna och möjligheterna för en utökad svensk biståndsinsats på jordbrukets område," 23 June 1965, attachment 1 to point 2 of the meeting minutes, Board of Directors of SIDA, 10 December 1965, SIDA, series A1 B, vol. 1.

³⁷³ "Preliminär rapport över formerna och möjligheterna," 7.

complex society with its own agricultural practices embedded in existing social systems. The critical condition of land tenure was mentioned only briefly and strictly as a potential obstacle to development: "Any insecurity concerning land-ownership conditions and/or high rents ought to significantly counteract any attempt to develop agriculture. Creating satisfactory conditions as regards the property questions must be a basic precondition for other work." 374

The report's final recommendation was that the project planning ought to go ahead by way of further studies of potentially suitable locations. Three countries selected by NIB as potential locations—Ethiopia, Afghanistan, and Tanzania—had already been presented in the report, but the presentations were superficial, with little information beyond brief technical accounts of the countries and their agricultural sectors. The group pointed out certain factors as especially important for future studies and for the eventual selection of a location: that the project could be part of a larger Swedish or Nordic aid context; that climates and other agricultural conditions were reasonably similar to those in which Swedish experts had been trained; and that the recipient country had a significant interest in development. These factors suggest that Ethiopia had already become the preferred choice of recipient country, as I will discuss further in the next chapter.

Exporting Swedish Agricultural Modernism

The agricultural group was a collective of Swedish agrarian experts strongly rooted in the Swedish agricultural research and education system. This shaped their understanding of agriculture and of agrarian societies in general, and thus also influenced how they planned their project. Some characteristics of this become clear if we consider how the group related to the models in Asia. These had a formative influence on the Swedish experts: Nekby's tour of Comilla and the IADP made it clear to him that there existed seemingly successful models of small-farmer-focused rural development projects, on which a Swedish effort could be based. The combination of the integrated approach with the application of scientific methods and the economic and agronomic competence available at Ultuna would allow for a wholly new type of rural development aid for Sweden. But the suitability of applying the Asian methods to other areas was hardly self-evident. Nekby acknowledged this in a presentation to the agriculture group, in which he raised the question of whether the system could be used in other areas. However, he only broached the subject in general terms and primarily focused on the role an aid organization could play rather

³⁷⁴ "Preliminär rapport över formerna och möjligheterna," 11.

³⁷⁵ "Preliminär rapport över formerna och möjligheterna," 14–25.

³⁷⁶ "Preliminär rapport över formerna och möjligheterna," 14.

than on institutional constraints in the target environment.³⁷⁷ The group did seemingly not probe the matter further, and its finished report did not seriously engage with the issue of whether there were specific constraints on the contexts in which the integrated model or the strategy of increasing smallholder production could be applied. The report noted that close cooperation with local and national authorities would be needed, and it contained some cursory remarks on the institutional conditions in the three locations, but beyond this had little to say on the topic.³⁷⁸

This lack of attention to the consequences of transferring an overarching strategy for development to a new location contrasts sharply with the strong awareness the group demonstrated of the problems involved in transferring agricultural knowledge. There was thus a certain ambivalence in the working group's proposal. On the one hand, it emphasized environmental adaptations of agricultural technologies; on the other hand, it was not particularly concerned with the society in which these technologies were to be applied. As written, the report did not ignore the problem of the local context, but it was limited in the range of factors it took into account: while arguing strongly for a local experimental program, it paid much less attention to the larger social setting into which this program would be embedded and which it would unavoidably affect and be affected by.

I understand this as resulting from a selective blindness during the planning process. Since the original impulse was less an idea about developing a particular region and more an argument for a particular kind of aid, the initial planning stages dealt with the project's location in highly abstract terms, and specific institutional constraints were not given much attention. The Agricultural College's first proposal located its experiment station only in a "developing-country environment," a phrase imbued with a profoundly high-modernist abstracted spatiality that left little room for the intricacies of particular societies. This is not to claim that the experts were unaware of the fact that economic and societal conditions differed from place to place and that this would need to be taken into account. The point is rather that they were from the outset concerned primarily with development as a technical process and that this shaped the continued planning.

The report's citation of Gunnar Myrdal's speech to the 1963 World Food Congress provides a good illustration of how the agricultural group

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³⁷⁷ Bengt Nekby, "Comillaprojektet," 9–10, attachment 1 to Hjelm and Nekby, "Preliminär rapport från studieresa."

³⁷⁸ This mirrors an argument made by John Cohen, but his version lacks the background I present here. Cohen, "Effects of Green Revolution Strategies," 341.

³⁷⁹ "Forskning och undervisning på jordbrukets område," 3.

downplayed social and institutional factors. Its report drew on Myrdal's argument that industrialization would not succeed if it was not preceded by a significant increase in agricultural productivity. But throughout much of that same speech, Myrdal had also forcefully argued for the importance of land and tenancy reforms to agricultural development. To an extent, the agricultural group acknowledged this in its passage on property questions, but the brevity of that passage and the failure to more fully integrate the problematic into the report show that they had not taken Myrdal's cue. On the very next page in the cited version of the speech, Myrdal highlighted the intrinsic political and practical differences in carrying out such reform even for well-intentioned governments, but this was not discussed in the report. Nor had the group taken full account of Myrdal's analysis of national and local power structures:

The economic, social and political power in most [of the developing] countries, yes, virtually in every village, are in the hands of a narrow stratum of landowners, merchants, money lenders, and other intermediaries who feel they have a direct interest in conserving the old order with regard to landownership, tenancy conditions, and other institutions and attitudes.³⁸⁰

This analysis would turn out to apply rather well to the later developments in Ethiopia, where a coalition of such conservative interests became a major obstacle for the project.

The primacy they afforded technical factors, from the initial proposal and on, reflects the authors' institutional background in the Swedish agricultural research system and policy framework. In the 1960s, there was little room at the Agricultural College for subjects such as agrarian history or rural sociology.³⁸¹ In its relation to domestic agriculture, the college represented a kind of Swedish *agricultural modernism* that paid very close attention to local conditions of agriculture and to the mechanisms of agricultural change but which was much less oriented toward analyzing the social conditions of farming and the social effects of agricultural change.³⁸² Stated somewhat bluntly, this modernism can be understood as an expression of a particular service science ideal geared much more to serving agricultural production than to serving rural communities. The same modernism, which had room for the local but not for the social to the same extent, also shaped the planning of early Swedish agricultural aid.

³⁸⁰ Gunnar Myrdal, Vår onda värld (Stockholm: Rabén & Sjögren, 1964), 197–98.

³⁸¹ Janken Myrdal, "SLU och det moderna samhällsprojektet," in Ramberg, Sammanhang, 24.

³⁸² Janken Myrdal suggested the notion of a Swedish agricultural modernism to me.

The Formative Moment

In the aftermath of a serious crisis for the newly created Swedish aid authorities, a group of professors from the Agricultural College, led by Vice-Chancellor Hielm, began to lobby to place their own science-based view of agriculture aid on the agenda of Swedish development aid. The government institutions of the day were generally receptive to expert authority, and so the college's experts were able to secure affiliation with the aid authorities and obtained prominent roles in shaping the future of Sweden's agrarian development aid. Several reasons explain their interest in linking up with the aid authorities. Such a link could provide expansion opportunities as well as a broader social role and thus a greater sociopolitical legitimacy, especially important because of the new debates about the troubling consequences of modern agriculture. It could also provide opportunities for scientific expansion, making new fields of research relevant to the college. Most importantly, as the traditional association with the Swedish agricultural sector was problematized by a changing social context, the college sought to associate itself with new sectors, one of which was the expanding development aid.

Hielm and his colleagues emphatically rejected both the idea of adapting their educational program to cater to students from developing countries, as NIB wanted them to, and the idea of developing large commercial farms abroad, which was what NIB did in its only ongoing agricultural aid project. Instead, they reformulated the problem in a way more directly compatible with the Agricultural College's expertise. As they conceptualized it, agricultural development became a problem of agricultural experimentation. They argued for a small-farmer-centered effort that would focus on researchdriven productivity improvements, complemented by simultaneous activities in related fields, such as marketing and education. Such productivity improvements were the basis of the Green Revolution projects that had been going on since the 1940s. But the college appropriated the Green Revolution in its own way: though committed to the basic premise of applying agricultural science to the problem of raising farm productivity in the developing countries, its representatives resisted the universalism shared by most green revolutionaries at the time. Although the development strategy the college's professors championed asserted the primacy of science, it was not informed by a universalistic view of easily transferable knowledge but of an understanding that agricultural knowledge production to a considerable degree had to be applied and localized in order to produce usable results in new settings. They united clearly high-modernist premises with a commitment to a significant role for local adaptations.

When beginning to design an actual project, the planners looked abroad, appropriating development models earlier employed in India, Israel, and above all, East Pakistan. But they did not seriously consider the question of whether these models could be adapted to any of the contexts where a Swedish aid project would be likely. Shaped by the conditions of the college's initial engagement, their ideology of agricultural research prioritized ecological particularism over scientific universalism, but they remained committed to an agricultural modernism that did not particularly concern itself with social development. As a consequence, they did not seriously analyze how the strategy they advocated would function in new settings. So even if the Agricultural College's approach to development was more technocentric, it still parallels Nils Lagerlöf's knowledge transfer project in an important respect. It is a second example of how Swedish agrarian expertise advocated a local, farmer-, and productivity-oriented approach that was nonetheless still embedded in a universalist framework rooted in a form of centrist thought.

Under the influence of, in particular, the East Pakistani Comilla project, the college's experts also raised the ambitions of the project, transforming it from being focused primarily on an experiment station to a larger-scale regional development project. In doing so they pushed the project to the limits of their own knowledge. Social development issues became increasingly important in a large rural development project but lay largely outside the experts' fields of competence. This implies that they, unintentionally, reopened the question of relevant expertise. While few could challenge the relevance of agronomic expertise to the operation of an agricultural experiment station, it was much less self-evident that agronomists were the best-suited experts for planning a regional development project with grand ambitions for socioeconomic transformation and with many components besides agriculture. The next chapter will return to this problem and its implications in the context of the subsequent fieldwork and later the project implementation in Ethiopia.

CHAPTER FOUR

Bringing Ultuna to Addis and Arussi

The Agricultural College and Swedish Rural Development Aid to Haile Selassie's Ethiopia, 1965–1974

ON JUNE 30, 1965, NIB ceased to exist. The crisis had made the limits of its unorthodox structure clear, and it was replaced by a new agency, the more conventionally organized Swedish International Development Authority, or SIDA.³⁸³ This marks a turning point in the history of Swedish development aid as well as in the planning of the agricultural project. When SIDA was created, Bengt Nekby left his position at Ultuna to work full-time there.³⁸⁴ He became head of SIDA's planning division for development aid, where he worked directly under Anders Forsse. The latter headed the entire department for development and humanitarian aid, SIDA's Department I, which was largely made up of the old NIB. Ernst Michanek was retained as head of the agency, now with the conventional title of director-general. With Nekby working for the development aid authorities, the project planning entered a new phase, and the members of the agricultural group—also transferred to the new agency—began to consider potential locations for the proposed new regional development project in more detail.

The purpose of this chapter, which is chronologically and topically linked to the preceding one, is to discuss the role of the Agricultural College's expertise in the final planning of the project as well as in its subsequent implementation in Ethiopia. So if the previous chapter mostly focused on how the college's expertise first came to be involved in development aid, this chapter considers how its involvement further shaped the theory and practice of Swedish aid. It also looks at the effects the development practices advocated by the college had on the natural and social environment in which they were employed. The primary questions I seek to answer relate to my

³⁸³ Whereas NIB had been an organization of its own kind, with several unconventional organizational elements (such as its advisory council and the composition of its board of directors), the new SIDA was organized as a normal government agency with a hierarchical structure and a board of directors chaired by the agency's director-general.

³⁸⁴ Nekby's career under Lennart Hjelm at the Agricultural College was thus cut short—he would not return to Ultuna. After working at SIDA and in Ethiopia, he took up a position at the World Bank where he stayed until retirement.

second research problem: How was the development strategy championed by the Agricultural College affected by the encounter with Ethiopia? And what effects did it have when implemented?

The Chilalo Agricultural Development Unit (CADU), as the project eventually became known, grew into one of the most influential, and most controversial, projects of early Swedish development aid. It was discussed and debated intensively in its time and later, and especially during the 1970s it was considered an important source of experience for international discussions of rural development.³⁸⁵ It also became a recurring point of reference both in the Swedish aid debate³⁸⁶ and in the historiography of late-imperial Ethiopia.³⁸⁷ It was highly influential in the context of post-1960s Swedish agricultural and rural development aid, having functioned, according to an anthology written by Swedish development assistance administrators, "as a laboratory and nursery for the first generation of SIDA's agricultural/rural development experts."388 It also had a number of effects on the recipient country. CADU formed a physical and mental zone of interaction where Swedish and Ethiopian scientists, bureaucrats, politicians, and farmers interacted and exchanged knowledge. An entire generation of Ethiopian agricultural experts was trained at or by CADU. and the project had a profound impact on the target population in the Chilalo area. It was also increasingly embroiled in the Ethiopian rural tensions and conflicts that eventually culminated with the 1974 revolution and the subsequent rural transformations in the country. Finally, CADU had a distinct influence on the Agricultural College in Ultuna, six thousand kilometers away. It helped establish close personal and organizational links between the college and the new SIDA and served as the original foundation of what I describe as the rural development pair.

Despite CADU's influence at the time, it has not been the subject of much historical research. There is, however, a significant body of literature devoted to the project in fields like development studies and political science, but

³⁸⁵ See, e.g., Lele, *Design of Rural Development*.

³⁸⁶ As late as 2006, CADU was referred to in the report of a public commission investigating Swedish development aid. Interestingly, the brief description of the project in the report is highly one-sided, reminiscent of the left-wing criticisms of the early 1970s (see my discussion below). This indicates that this biased view remains the "received view" of CADU. SOU 2006:108, Att ta itu med fattigdomen: Krediter och garantiers nya roll i svenskt bilateralt bistånd, note 14.

³⁸⁷ Many historical accounts of Haile Selassie's Ethiopia mention CADU as a significant foreignfunded rural development project in the context of Ethiopian agricultural policy. A few examples are Getnet Bekele, "Food Matters: The Place of Development in Building the Postwar Ethiopian State, 1941–1974," The International Journal of African Historical Studies 42, no. 1 (2009); Paul B. Henze, Layers of Time: A History of Ethiopia (London: C. Hurst, 2000), 272; Bahru Zewde, A History of Modern Ethiopia 1855-1991, 2nd ed. (Oxford: James Currey, 2001), 194-95.

³⁸⁸ Holtsberg, "Rural Development," 159.

lacking historical analyses, this literature pays little attention to the background and planning process and tends to downplay, if not miss altogether, the crucial fact that the project was essentially created at the Agricultural College. 389 The notable exception to this claim is Seleshi Sisaye's PhD dissertation Development Aid to Rural Ethiopia, 1954–1977.³⁹⁰ While not a study of history as such (it is a policy-oriented work that primarily examines the problem of how foreign aid has affected Ethiopian governmental efficiency), Seleshi's dissertation includes a chapter on CADU that analyzes historical source material in order to investigate how the project came about. He correctly identifies the central importance of the Agricultural College not just in providing expertise and personnel but also in initiating and planning the project. I use partially the same material as he does for my analysis of the latestage project planning, though with a different focus: in light of his research objectives, Seleshi does not attempt to trace the background of the college's involvement or the motives and standpoints of the participating actors. There is nonetheless some overlap with his work, but also several instances of diverging interpretations and conclusions.

I have primarily drawn on sources from the archives of NIB's agricultural group and the CADU dossier in the SIDA archives. I complement this with other material from the SIDA archives, published material on CADU, and interviews and unpublished memoirs. I have tried to contrast these last-mentioned sources with other sources to the extent possible and discuss source-critical matters in the text as necessary. One particular issue also needs to be pointed out with respect to the dossier sources. SIDA's dossier system, in

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³⁸⁹ The most comprehensive work on CADU is a book-length study by political scientist and development scholar John M. Cohen, in which he provides a very detailed overview of the project's activities and results, and employs this to make a more general argument about integrated rural development as a method. Cohen pays no attention to the Agricultural College connection, but I still draw extensively on his book for my account of the project and its effects, and reach many similar conclusions: Cohen, Integrated Rural Development. Cohen also wrote extensively (and critically) on CADU and rural development in Ethiopia when the project was active, see e.g. John M. Cohen, "Rural Change in Ethiopia: The Chilalo Agricultural Development Unit," Economic Development and Cultural Change 22, no. 4 (1974); Cohen, "Effects of Green Revolution Strategies." Two examples of Swedish work on CADU, from the respective disciplines of human geography and political science, are Olof Nordström, "Regionala utvecklingsprojekt i Ethiopien - CADU och EPID," (Lund: Department of Human Geography, Lund University, 1975); Michael Ståhl, Ethiopia: Political Contradictions in Agricultural Development (Stockholm: Rabén & Sjögren, 1974). None of these studies (and there are others; the cited works contain ample references) engage with the matter of how the project came about, or its background at and effects on the Agricultural College.

³⁹⁰ Seleshi Sisaye, *Development Aid to Rural Ethiopia, 1954–1977: The Political Economy of Swedish Rural Development Assistance Programs* (Ann Arbor: University Microfilms International, 1979).

which all documents relevant to a specific project are filed together, can be very convenient for the historian but also raises the issue of whether all relevant material actually has been included in the dossier. In one case, I have encountered a direct attempt by one of the involved actors to reorganize the dossiers, which gives some cause for concern. However, after going through the material and contrasting it with interviews and other sources, my judgment is that there are no significant gaps in the CADU dossier. Furthermore, in the introduction, I discussed the absence of foreign source material in the thesis. I will not reiterate my arguments here, but want to point out a particular problem as it relates to this chapter. One argument I will make is that the Swedish experts underestimated the agency with which different groups in Ethiopian society would come to relate to, and appropriate the lessons of, the CADU project. It would have been highly interesting to explore this matter further through an analysis of Ethiopian source material.

Developing Feudal Countrysides?

Though decorated with an archaic-sounding title, His Imperial Majesty Haile Selassie I, Conquering Lion of the Tribe of Judah, King of Kings of Ethiopia, Elect of God was known to take an interest in modernization and development.³⁹² He had aligned his country with the Western bloc, from which he had secured large amounts of foreign aid, primarily from the United States. Ethiopia had a historical relationship with Sweden as well. Alongside Pakistan, it had been the first recipient of Central Committee aid; however, the connections between Sweden and Ethiopia actually long predated the 1950s. Swedish missionaries had been active in the country since the nineteenth century, providing education and healthcare. The Ethiopian government had also employed a number of Swedes, and Sweden had supplied substantial military aid to Ethiopia: the Ethiopian Air Force was largely a Swedish creation and Swedish officers served in the Ethiopian army.³⁹³ Furthermore, by the mid-1960s, several Swedish development aid projects were underway in

³⁹¹ Nekby to Anders Forsse, 25 March 1966, SIDA, series F1 AB, vol. 768. Nekby suggested that since his letters to Forsse were part of an "informal exchange of ideas," they could perhaps be filed in a "special dossier."

³⁹² There are a number of histories of Ethiopia which give good accounts of the final two decades of Haile Selassie's regime. Unless otherwise specified, my account in this section is based on the excellent Bahru Zewde, *History of Modern Ethiopia*. The political power play embedded in strict ritual that characterized life at Haile Selassie's court has also been given a fascinating portrayal by Polish reporter Ryszard Kapuściński, based on postrevolutionary interviews with former courtiers: Ryszard Kapuściński, *The Emperor: Downfall of an Autocrat* (London: Penguin Books, 2006).

³⁹³ The pre-1952 Swedish contacts with Ethiopia are detailed in Halldin Norberg, *Swedes*.

the country: the Central Committee-initiated Ethio-Swedish Institute of Building Technology, a research-based nutrition project known as the Children's Nutrition Unit (CNU), and a healthcare effort, the Ethio-Swedish Pediatric Clinic. In total, more than five hundred Swedes were already working in the country at the end of the 1950s.³⁹⁴

Beyond the development projects, however, the state over which Haile Selassie ruled was gradually being torn apart by intrinsic conflicts of interest. A landholding feudal elite³⁹⁵ clung to its class-based privileges, while more Western-oriented radicals and aspiring reformers demanded changes and put increasing pressures on the imperial regime; in the countryside, heavy burdens on the peasantry had provoked a series of peasant rebellions since the 1940s. It was in this setting that the agricultural group eventually proposed to locate the planned regional development project. But the choice of Ethiopia as the recipient country became a complicated process, reflecting the complexities involved in locating a rural development project in a setting where, as it soon became apparent, it could not but generate friction.

Ethiopia became the main candidate for the location of the project after Bengt Nekby, Lennart Hjelm, Artur Hansson, and Ewert Åberg from the agricultural group, along with social anthropologist Karl Eric Knutsson from the University of Gothenburg and CNU, had spent a couple of weeks in the late summer of 1965 in East Africa. Their mission was to study agricultural management, agricultural development, existing aid efforts, and possible locations for the regional project. They traveled through Sudan, Uganda, Tanzania, and Ethiopia, and based on their experiences formally recommended that SIDA ought to proceed with the planning of a regional development project in Ethiopia.

However, the group was not in unanimous agreement over the recommendation. Citing the problematic political and property conditions in the country, Artur Hansson registered a dissenting opinion.³⁹⁷ That one of the members of this primarily collegial group *publicly* distanced himself from the group's recommendation is intriguing in its own right, suggesting as it does

³⁹⁴ Swedish International Development Cooperation Agency, *Ethiopia – Sweden* (Stockholm: Swedish International Development Cooperation Agency, 2004), 2.

³⁹⁵ Most scholars writing on the rural society of late Imperial Ethiopia use the term feudal or at least semifeudal to describe the prevailing socioeconomic relations, but not everyone. For a cautiously dissenting opinion, see Gene Ellis, "The Feudal Paradigm as a Hindrance to Understanding Ethiopia," *The Journal of Modern African Studies* 14, no. 2 (1976).

³⁹⁶ Nekby to the Swedish Ministry for Foreign Affairs, 2 July 1965, SIDA, series F1 AA, vol. 9. Knutsson is not mentioned in this document; he was added to the trip at a later stage.

³⁹⁷ Meeting minutes, NIB working group for agricultural issues, 29 October 1965, § 66–67, NIB, series F VIII, vol. 1.

that the matter of how the college's proposed strategy would work out in Ethiopia was seen not only as complex but also as controversial and, to a degree, contentious. It indicates that the question of land tenure had become a much more important issue for the group compared with how it was represented in the June proposal. Studying the discussion about Ethiopia and in particular the land tenure situation is thus revealing in terms of how the Agricultural College's experts actually considered the problematic of scientific interventions in developing-country agriculture, and how they came to understand the relation between the efforts they proposed and the social and political context of these efforts.

Conditions at the End of an Empire

The country the agricultural group suggested as a suitable project location was poor and little urbanized, certainly in line with how they might have expected a developing country to look. More than 90% of the Ethiopian population was illiterate and over 80% worked in the agricultural sector, which was strongly dominated by subsistence agriculture. The power of the aging emperor rested on an intricate balancing of different political interests as well as on the loyalty of his armed forces.³⁹⁸ While a constitutional revision in 1955 had given Ethiopia the outward appearance of having modern and democratic political institutions, in practice most political initiative remained in the hands of Haile Selassie.

Like other autocrats of his time, he arguably subscribed to the idea that economic development would eliminate or at least postpone the need for social and political reform.³⁹⁹ Acutely aware that the reform path would risk ripping his power base apart, Haile Selassie had accordingly prioritized development by supporting major infrastructure investments, mostly funded by the United States. Moreover, the emperor had taken measures to improve levels of education in the country. He established a university in Addis Ababa and also gave an increasing number of young Ethiopians the opportunity to study abroad. These educational endeavors had created a small, but growing, group of Western-educated technicians, administrators and would-be policymakers who were hungry for modernization and reform. Their efforts were, however, constrained by the conservative landholding elites, who were generally opposed to change, as well as by an older generation of politicians. The latter often aligned with conservative interests, but even when they did not, they were grossly inefficient as policymakers in the Western sense. Their

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³⁹⁸ An attempted coup d'état in 1960 had been put down by army and air force units loyal to the emperor.

³⁹⁹ This is suggested by Neal Ascherson in his introduction to Kapuściński, *The Emperor*, viii.

conception of statecraft was based not on policy initiatives but on palace intrigues aimed at winning the emperor's favor. So even though Ethiopia had undergone changes in certain respects by 1965 compared with the immediate postwar period, many of them were largely superficial. In his detailed study of Haile Selassie's government, Christopher Clapham describes the situation in 1969 thus:

One comes away not so much with the impression of development as of stagnation: despite changes the *ancien regime* is still basically with us; and the various reforms have not yet gone down to essentials.⁴⁰⁰

The development efforts that nonetheless were taking place included agricultural development, mostly linked to American development aid. As early as 1952, the land-grant Oklahoma Agricultural and Mechanical College (later renamed Oklahoma State University) had helped the Ethiopian Ministry of Agriculture establish an experiment station at Bishoftu, and experimental work was also carried out at a few other sites around the country. Furthermore, the Oklahomans established an agricultural technical school at Jimma and an agricultural college in Alemaya in eastern Ethiopia. The latter—the Imperial Ethiopian College of Agricultural and Mechanical Arts—was based directly on the American land-grant model. It was provided with considerable institutional support from Oklahoma and initially had an all-American teaching staff. In 1961, it became a faculty of the Addis Ababa University College, then soon to be renamed the Haile Selassie I University.

Before making any formal recommendation, the experts from the Agricultural College summarized their experiences from the East African trip in a series of travel reports. The one on Ethiopia was the most detailed and included an extensive presentation of the country and Ethiopian conditions relating to the proposed project. It was seen as reasonably fulfilling the criteria for the recipient country outlined in the earlier report in June, in all but the matter of institutional conditions and particularly land tenure. These factors were now, for the first time, discussed more extensively and in relation to a particular case. The tenure situation, with its traits of feudalism, was

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⁴⁰⁰ Christopher Clapham, Haile-Selassie's Government (London: Longman, 1969), 26.

⁴⁰¹ Donald E. Green, *A History of the Oklahoma State University Division of Agriculture* (Stillwater: Oklahoma State University, 1990), 300–04; James C. McCann, *People of the Plow: An Agricultural History of Ethiopia, 1800–1990* (Madison: University of Wisconsin Press, 1995), 229–30; Johan Toborn, "SLU och etiopisk skogsutbildning: En fråga om att lära eller läras," *Skog och forskning* 96, no. 1 (1996): 60.

⁴⁰² Lennart Hjelm, Artur Hansson, Ewert Åberg, and Bengt Nekby, "Reserapport nr 6," 10 September 1965, SIDA, series F1 AA, vol. 9. In comparison with the other reports, this one (on Ethiopia) is significantly more detailed.

understood as a significant obstacle to rural development. A large proportion of Ethiopian land was owned by the state, the church, or private landlords with extensive holdings, and this land was in most instances cultivated by tenant farmers under a sharecropping system; the rent being paid in kind with the harvest divided between tenant and landlord. 403 The agricultural group recognized that this system would make it "very difficult" to introduce new and improved cultivation techniques. 404 Sharecropping tenants would have little incentive to attempt to increase their production because any positive result would have to be shared with the landlord, whereas the costs and risks of experimenting would be borne by the subsistence-farming tenant. The group concluded that the project had to be carried out in an area with at least a somewhat more favorable tenure situation, especially as it was also pointed out that the possibilities of legal reform were limited due to many "vested interests."405 But though rightly noting that these conditions were constraints on the proposed project, the group also argued that this was a matter partly outside its field of expertise and that it had not had enough time to form a wellfounded opinion.

Not mentioned in the travel report was the impression made on the delegation by the Ethiopian vice-minister of agriculture, Tesfa Bushen, who would become an important facilitator of and driving force for the subsequent project. He was a development enthusiast who embraced the idea of an integrated project and who, together with a group of like-minded officials, favored rural development in Ethiopia. In meeting him, the Swedes had found not only a cooperative counterpart and a necessary contact in the Ministry of Agriculture, but also someone who shared their views on development and who perhaps indicated the possibility of future reforms that would mitigate the land tenure problems. Anders Forsse describes him in an account that, though partially inaccurate in its details and chronology, nonetheless serves as a good illustration of the impression he made on the Swedes:

In Ethiopia, Hjelm and Nekby got in touch with Tesfa Bushen, Vice Minister of Agriculture . . . and one of the few really dynamic forces in an otherwise stagnant ministry (which constituted no exception to the imperial political system as a whole). . . .

Here was a kindred spirit, a catalyst, someone who helped make something out of the rather vague initial thoughts behind the Hjelm mission. . . . The idea

⁴⁰³ For a more detailed description of Ethiopian land tenure and tenancy conditions in the 1960s, see Ståhl, *Ethiopia*, chapter 6.

⁴⁰⁴ Hjelm et al., "Reserapport nr 6," 7.

⁴⁰⁵ Hjelm et al., "Reserapport nr 6," 7.

⁴⁰⁶ Nekby, "Margareta och Bengt," 7:75.

of an integrated attack on underdevelopment, previously practically unheard of in Sweden, took form and was expressed in SIDA submissions to the Swedish Government. Lennart Hjelm, Tesfa Bushen and Bengt Nekby were its architects.⁴⁰⁷

Tesfa Bushen was a representative of the new kind of educated, reform-oriented expert that Haile Selassie's modernization and education efforts had created. To the Swedes he came across as a positive force, in contrast to the older policymakers who had little interest in making changes. The situation was similar throughout the Ethiopian government. Christopher Clapham's 1969 analysis discusses a "power vacuum" in the central government, where most ministers had neither the power nor the inclination for independent policy initiatives. This reflected Haile Selassie's attempts at navigating between conservative interests and the requests of the young technocrats. As noted, the Swedes were aware that what they called vested interests would obstruct any attempts at reform. But after meeting Tesfa Bushen, Nekby and his colleagues perceived that there was a group of potential reformers interested in their rural development ideas, with whom they could cooperate.

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⁴⁰⁷ Forsse, "CADU," 29.

⁴⁰⁸ Forsse, interview.

⁴⁰⁹ Clapham, *Haile-Selassie's Government*, 101. For an interesting inside account of this power vacuum, written from the perspective of a British-educated civil servant very critical of the regime's methods of governance and general stagnation, see the memoirs of Gaitachew Bekele, *The Emperor's Clothes: A Personal Viewpoint on Politics and Administration in the Imperial Ethiopian Government, 1941–1974* (East Lansing: Michigan State University Press, 1993).

Table 2. Timeline of important events in Ethiopian history between 1930 and 1974 (of relevance for the dissertation).

1930 –1955	1955–1974
1930: Haile Selassie crowned Emperor	1960: Attempted coup d'état by Haile Selassie's Imperial Guard; put down by other military units
1935–36: Italy invades and occupies Ethiopia; Haile Selassie goes into exile	1963–1970: A series of peasant rebellions take place in various provinces; grievances include tax burdens, mechanization and land alienation
1	1965: First major student demonstration against the government takes place during a parliamentary debate on agricultural tenancy; students demand "Land to the Tiller"
1952: Imperial Ethiopian College of Agricultural and Mechanical Arts founded at Alemaya	1967: CADU is initiated in Arussi south-east of Addis Ababa
± 2 ·	1973: Catastrophic famine in Wollo province; consequences exacerbated by government's inept handling
1955: Modern constitution prepared (with American help) and adopted	1974–1975: Ethiopian revolution; Haile Selassie deposed by the army in September 1974; power passes to a socialist military government

Ethiopian Tenancy Conditions and Swedish Aid Objectives

While the trip report from Ethiopia shows that the agricultural group had begun to pay more attention to the land tenure situation, it still bypassed the important question of what would happen if agricultural productivity did in fact increase in a society such as rural Ethiopia. It considered tenancy conditions a constraint on the possibilities of productivity increases, but not as a factor potentially shaping social developments in conjunction with such increases. To cast more light on what insights the group actually had in this regard, it is useful to look at the correspondence between Nekby and Harald Ståhlberg, a Swedish agronomist from the National Board of Agriculture who was working in Ethiopia at the time. Though concerned about the political consequences, the Ethiopian government had begun discussing the possibility of rural land reform and had even created a ministry of land reform to oversee the issue. Ståhlberg, who served in Ethiopia as an FAO expert, had been attached to this ministry and was tasked with working out a plan for reform legislation. After they had met when the group visited Ethiopia, he and Nekby stayed in touch throughout the second half of 1965. Though Ståhlberg's work had thus far been met with limited enthusiasm by the Ethiopian authorities, he had personal knowledge of the land tenure situation and was one of the few people able to provide the

agricultural group with direct and reliable information about the situation on the ground in rural Ethiopia.

The focal points of the Nekby-Ståhlberg correspondence were the state of affairs in different possible project areas, with a strong focus on tenure conditions and on the proportions of land being cultivated by tenants. Ståhlberg sought to describe conditions first in the Ambo and Sodo areas, later in Tigre, and finally in what would come to be the actual location, the Arussi province south-east of Addis Ababa. Ambo and Sodo were not suggested for the project, chiefly because other development-related activities were already taking place there. 410 Arussi, whose capital Asella also was the site of a Swedish mission which ran a primary school, was, however, seen as a favorable location. Much of Arussi were cereal-producing highlands where Swedish agronomic expertise could work under reasonably familiar climactic conditions. 411 Yet as Ståhlberg continued his inquiries, the suitability of Arussi province became less apparent. In November, he wrote to Nekby to say that the land tenure conditions in Arussi were unsuitable for the project and further discussed the unsecure tenancy agreements and the risks of tenant evictions if agricultural productivity was to increase. He suggested that, unless an area with better tenancy conditions could be found, a project in Arussi would need either a reform of the legal framework for land tenure, or a more ad hoc local operation tailored to project needs, in which tenants were given ownership rights to the land they cultivated while the original owners were compensated with other land. Nekby expressed disappointment at this but asked Ståhlberg to continue his investigations. In his following letter, Ståhlberg's attitude to Arussi as a project location had changed again. He wrote that "there are now several of us who believe the land tenure problems can be dealt with," but still argued that the project could only be successful if advance action was taken to somehow improve tenancy conditions. 412

This correspondence is noteworthy for two reasons. First, it demonstrates the conditions under which the agricultural group began to plan the project. With little reliable official information available, they had to depend on Ståhlberg for proxy information and personal judgments about conditions in areas that he visited. It was even difficult to locate good maps of the Ethiopian provinces, so Ståhlberg drew a map of Arussi and attached it to one of his

⁴¹⁰ Ståhlberg to Nekby, 8 September 1965; 15 October 1965; 22 October 1965; Nekby to Ståhlberg 13 October 1965; 20 October 1965; 22 November 1965, all in SIDA, series F1 AA, vol. 9.

⁴¹¹ I have not been able to find the first letter from Ståhlberg to Nekby detailing conditions in Arussi. This statement is constructed on the basis of contextual information from the others.

⁴¹² Ståhlberg to Nekby, 26 November 1965; Nekby to Ståhlberg, 3 December 1965; Ståhlberg to Nekby, 9 December 1965, 2, all in SIDA, series F1 AA, vol. 9.

letters to Nekby (see figure 10). Second, and more importantly, it shows that the planners were preoccupied with the question of land tenure during the fall of 1965, that tenure conditions were a decisive factor in selecting an area, that they found it hard to find an area with suitable tenancy conditions, and that they were well aware of the risk that prevailing tenancy conditions would shape the effects of the rural transformation under consideration, up to and including tenant evictions as a result of the intended increases in production. That would of course conflict not just with the project goal of supporting the development of small-farm agriculture but also with the Swedish aid policy objective of promoting social equity.

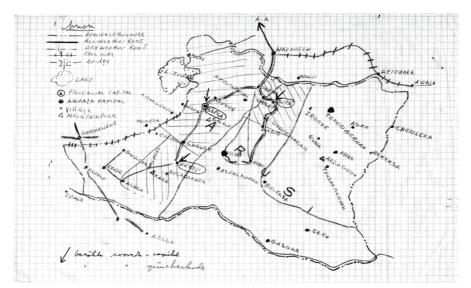


Figure 10. Map of Arussi province drawn by Harald Ståhlberg and sent to Nekby in November 1965. Asella, the capital of the province and of Chilalo awraja (district), is marked with an arrow.⁴¹³

Why Ethiopia?

Given the significant political and socioeconomic disadvantages, what were the *advantages* the group could see in situating the project in Ethiopia? A very important advantage appears to have been that the highland regions of the country had a climate and, at least in some areas, agricultural conditions not too far removed from Sweden's. ⁴¹⁴ This did not imply that there was no need to perform adaptive research in Ethiopia, but it did mean that the Swedish experts

⁴¹³ Ståhlberg to Nekby, 26 November 1965.

⁴¹⁴ The travel report noted that Ethiopia allowed for reasonable possibilities to "translate" Swdish experiences. Hjelm et al., "Reserapport nr 6," 8.

would be able to work with familiar plant species and under reasonably familiar conditions. There was a certain contradiction in this. The main reason for the second part of NIB's agriculture group's work—investigating how to secure a reservoir of expertise for Swedish agricultural aid—had been the almost total lack of Swedish expertise in tropical cultivation, 415 but a project situated in the Ethiopian highlands would not entail such cultivation and could do quite well with Swedish-trained expertise. However, given the fact that the work on the expertise question had so far only resulted in three Swedish agronomists being sent to Trinidad to study tropical agriculture at the University of the West Indies, for pragmatic reasons Ethiopia must have looked like a good choice. 416 In light of the personnel situation, it would have been difficult to implement a project of the intended type in a country where Swedish training and experiences were mostly inapplicable. And even if there were other regions of Africa where a project might have been practically feasible, conditions in Ethiopia were favorable for a speedy and technically successful implementation.

A second factor was the historical context of the rather special Ethio-Swedish relationship. The long-standing connections between the two countries meant that in some ways Ethiopia was comparatively well known in Sweden, and vice versa. A new project in Ethiopia would not have to face a completely unknown society and administration. It also meant that there were a number of existing projects to which the regional project could be linked. The agricultural group argued that in particular it would be relevant for the nutrition research at CNU to collaborate with the regional project. It was also an advantage that Ethiopia had never been colonized. Moreover, many in Sweden still sympathized with Ethiopia in light of the Italian invasion and occupation during World War II.

A third factor was that Ethiopia was impoverished even by developingcountry standards and was seen as in dire need of foreign aid. Henock Kifle,

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⁴¹⁵ This view was present already in the first proposal from the college. See "Forskning och undervisning på jordbrukets område," 10–12.

⁴¹⁶ The University of the West Indies was a typical postcolonial agricultural university—up until 1960 its Trinidad campus had been known as the Imperial College of Tropical Agriculture and had trained most agricultural experts for the British Colonial Service. This is thus an example of how Swedish aid efforts sometimes linked up with the old colonial knowledge networks. The agricultural group had also arranged a preparatory course in Sweden, at Jälla agricultural school outside of Uppsala. But this two-week course was designed as a general overview and recruitment drive, and in itself it was not sufficient preparation for a position abroad. See "Introduktionskurs i biståndsverksamhet på jordbruksområdet, 13–25 september 1965, PM nr 1, Preliminärt program," SIDA, series F1 AA, vol. 9.

⁴¹⁷ Hjelm et al., "Reserapport nr 6," 3.

later executive director of CADU, retrospectively describes the Ethiopian countryside as a "vast sea of rural backwardness," and political scientist Michael Ståhl, who visited Ethiopia in the late 1960s to study agricultural development, allochronically remembered the setting as evoking the Old Testament. 418 The impression made on the Swedish experts by the brutal poverty they encountered should not be underestimated. At the same time, while most Ethiopian peasant agriculture was indeed based on an ox-ard cultivation system that was distinctly old-fashioned compared with European agriculture at the time, it was less far removed from 1960s Sweden than its context might have led non-agriculturalists to believe. 419 Cultivation with the ard had been common practice in parts of nineteenth-century Sweden, and the components of the technological complex employed by Ethiopian peasants would have been easily recognizable to the Swedish agrarian experts (conversely, the hoe cultivation practiced in parts of the other East African countries the group visited would have struck the experts as more oldfashioned and likely harder to develop). This meant that they could easily envision improvements that could be made and so came to perceive Ethiopia as a place where the project could make a real difference. That Ethiopia needed aid of this kind was also validated by the fact that the World Bank had proposed a similar project in Ethiopia and was planning to send a delegation there to investigate further. 420

A final factor was that the agricultural group had made contacts in the Ethiopian government that they believed they could work with. Their encounter with Tesfa Bushen had given the Swedes a very positive view of both the vice-minister personally and the possibilities of him and other likeminded officials to contribute to positive change in Ethiopia. They also saw some signs of such change. When summarizing, in early 1967, why Ethiopia indeed would be a good location for the project, Forsse wrote that it was "the opinion of most Swedes who have worked or are working in Ethiopia . . . that several important initiatives for social and political reform have been taken or are being contemplated by the régime since the beginning of the present decade," and further that "it is interesting to note that the régime . . . has now at

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⁴¹⁸ Henock Kifle, "A Personal Retrospective of Swedish/Ethiopian Cooperation in Agricultural Development in the 1970s—Some Lessons from a Distant Past," in *A New Partnership for African Development: Issues and Parameters*, ed. Henock Kifle, Adebayo Olukoshi, and Lennart Wohlgemuth (Uppsala: Scandinavian Institute of African Studies, 1997), 86; Michael Ståhl, interview by author, 5 April 2013.

⁴¹⁹ The Ethiopian ox-ard system of farming is described and analyzed at length in McCann, *People of the Plow.*

⁴²⁰ Hjelm et al., "Reserapport nr 6," 8.

long last embarked on a programme of land reform."⁴²¹ Forsse was clearly influenced by his desire to see the regional project realized, and his comments should be approached with caution (it is enlightening to compare his analysis with the one by Christopher Clapham, which rather emphasized the stagnation of the imperial regime, cited at note 400 above). Even so, he would hardly have stood behind a deliberately misleading analysis (he also cautioned that rapid and efficient reform would meet with difficulties—in retrospect, this turned out to be quite an understatement), and thus his comments indicate that the planners, though mindful of the political problems, did not view Ethiopia as a hopeless case politically. Ethiopia also had a practical advantage. While an oppressive police state in most respects, it allowed total freedom for the experts to move around in order to make the requisite studies for the project. ⁴²²

Taken together, these factors were enough to make everybody but Artur Hansson overcome their concerns about the tenure situation, and so the working group recommended Ethiopia for the regional project. But why were the advantages afforded more weight than the disadvantages, given that the latter posed a real and recognized threat both to the project implementation and to Swedish aid policy objectives? A recurring explanation in the literature is that the planners did not significantly appreciate the fact that problems could arise due to the complicated social and political conditions. Bengt Nekby himself addresses this in his book on CADU and suggests that while the group recognized that the tenure situation was a potentially problematic issue, it had "neither instructions nor competence to judge the political situation in Ethiopia." Cohen, citing Nekby, also writes that "[i]nitially, little attention was given the [sic] larger policy environment and need for its reform."423 Both statements imply that the group did not, indeed could not be expected to, understand the potential socioeconomic and political complications and controversies that could arise from a peasant-oriented rural development project in Ethiopia. They were agronomists and economists, experts in increasing agricultural production and in making farms profitable, but they had no special knowledge of African politics or rural sociology, and did not—could not—take social or political issues sufficiently into account. This explanation, drawing on the stereotypical figure of the expert as a narrow-minded technician, has earlier been invoked to explain shortcomings in the 1960s

⁴²¹ Anders Forsse, "Memorandum Concerning a Proposal for a Number of Measures Jointly Aiming at Regional Rural Progress in Ethiopia," p. 6, 22 February 1967, SIDA, series F1 AB, vol. 770.

⁴²² Nekby, interview.

⁴²³ Bengt Nekby, *CADU: An Ethiopian Experiment in Developing Peasant Farming; A Summary of the Work of the Chilalo Agricultural Development Unit During the Period of the First Agreement, 1967–1970* (Stockholm: Prisma, 1971), 8; Cohen, *Integrated Rural Development*, 71.

Green Revolutions in general.⁴²⁴ It has some validity for CADU's Agricultural College planners as well, but I want to suggest that things were more complicated than that.

It is clear that if not before, then at least once Ethiopia became the focal country for the planning, the planners, no matter how deep or shallow their political insights in general, were well aware that the feudal characteristics of rural Ethiopian society would pose problems for the planned project.⁴²⁵ The problem was twofold. On the one hand, tenancy and sharecropping were obstacles to development. Sharecropping tenants would have little motivation to invest in their agricultural production, which implied that the desired agricultural development would be difficult to achieve in areas with high tenancy rates. On the other hand, there was the problem of insecure tenancy agreements and the subsequent risk of tenant evictions and displacements as a result of increased agricultural productivity in an area. This second aspect was much less emphasized in the material produced by the working group, but the project planners were well aware of it, as the correspondence between Nekby and Ståhlberg cited above illustrates. There was thus an awareness of a matter that can be rephrased more generally as a tension between modern, sciencebased agriculture with associated increases in production on the one hand, and social equity on the other. 426

As I understand it, it would have been hard to publicly acknowledge this tension in the discussions of the project at this stage. Doing so would mean opening up for a critical discussion about the extent to which the proposed project strategy was commensurable with the goals of Swedish development aid. The 1962 aid policy explicitly specified that "as far as it is possible to assess," Swedish aid should promote social equity.⁴²⁷ As it evidently was possible to assess already at this stage that the project risked promoting social inequity instead, an open discussion would have endangered the project's realization. As much as the planners might have hoped for political progress,

⁴²⁴ Alexis De Greiff A. and Mauricio Nieto Olarte, "What We Still Do Not Know About South-North Technoscientific Exchange: North-Centrism, Scientific Diffusion, and the Social Studies of Science," in Doel and Söderqvist, *The Historiography of Contemporary Science*, 250; Harwood, *Europe's Green Revolution*, 128.

⁴²⁵ Both Nekby and Cohen acknowledge this. See Cohen, *Integrated Rural Development*, 70–72; Nekby, *CADU*, 8–9.

⁴²⁶ This mirrors a simultaneous but explicit debate within the Indian National Congress, also nominally committed to social equality, as has been interestingly analyzed by Madhumita Saha, "Food for Soil, Food for People: Research on Food Crops, Fertilizers, and the Making of 'Modern' Indian Agriculture," *Technology and Culture* 54, no. 2 (2013): 304. About half a decade later, from the 1970s and onwards, the fundamental tension between green revolution techniques and social equality became widely acknowledged.

⁴²⁷ Government Bill 1962:100, 7.

there were certainly no guarantees of any speedy implementation of new land reform or tenancy legislation. As Ståhlberg had made clear to Nekby in several letters, progress on land reform matters was painfully slow and faced a lot of resistance. Cohen states that once this tension between the project strategy and the prevailing landownership structure and tenancy conditions became clear, the planners decided to proceed by simply ignoring the principle of equity, eager as they were to experiment with rural development. Ale In a sense, this is a valid claim, though Cohen's strong wording exaggerates and does not do justice to the complexity involved, as is shown if nothing else by the fact that the working group did not unanimously recommend Ethiopia.

Something missing from Cohen's analysis, but which supports and simultaneously nuances his conclusion, is the close link between the agricultural group and the interests of the Agricultural College in seeing the project realized. Opening up for a broader discussion of the social consequences of agricultural development would have risked undermining the strong focus on agricultural experimentation, which, in turn, was the justification for the dominance of the college's experts in the project planning, and the intended prominent role for the college in the project execution. Ultimately, such a discussion could thus have posed a threat to the Agricultural College's new strategy of incorporating development-aid-related work. The agricultural group, dominated by Agricultural College professors, was certainly aware of this.

Path-dependency and momentum also played a part. Once the planners began to fully grasp the constraints that the tenancy conditions might put on project activities, the planning had already proceeded quite far and Ethiopia—where suitable climates for the application of Swedish expertise could be found, freedom of movement was available, and a long-term relationship with Sweden existed—was arguably the only realistic choice if the project was to be implemented within a reasonable time, or at all. Under such circumstances, it is easy to see why the agricultural group would have been tempted to give greater consideration to the upsides.

As a bookend to this discussion of how Ethiopia came to be selected as the recipient country, I want to return to the possibility that Ethiopia was politically so strongly desired as an aid recipient that the agricultural group de facto had its hands tied if it wanted the project to be realized. There is no direct evidence of this in the material examined for the present study. But it is a fact that Ethiopia was one of the high-priority countries for Swedish aid. It is also

⁴²⁸ Cohen makes this point regarding the field planning in Ethiopia during 1966–67, but as we have seen, the same tension must have been apparent already in late 1965. Cohen, *Integrated Rural Development*, 71–72.

likely that the country selection criteria, as outlined in the agricultural group's June proposal, were tailored to Ethiopia in that they expressed a preference for a country with climates reasonably similar to Sweden's and in which the project could be linked to, for example, nutrition or education efforts. This could reflect a preference for Ethiopia from the group's members, but since they had not yet visited the country at the time, it is perhaps more likely that it reflected a preference of NIB, which might, in turn, have been attuned to political preferences. In one of his retrospections, Anders Forsse suggests that amid some Ethiopian concerns over the long-term outlook of Swedish development assistance to the empire, Michanek had personally reassured a high-level official that Sweden "would not desert Ethiopia," and that this was a factor in the choice. All in all, I cannot exclude the possibility that the working group's recommendation was shaped by political constraints above and beyond issues pertaining to the project as such. But neither would I conclude as much on the basis of the material analyzed in this study.

Be that as it may, Ethiopia was recommended by the agricultural group, and SIDA accepted this. In October 1965, Nekby and Forsse returned to Addis Ababa and presented the Swedish proposal for a regional development project to a number of government officials who "welcomed" the idea of more Swedish aid. Following the visit and a subsequent formal request for aid from Ethiopia, SIDA decided in December to petition the Swedish government for approval of further investigations in-country.

Field Planning

The Swedish cabinet approved SIDA's petition in early 1966, and after an exchange of notes between Sweden and Ethiopia in March, a Swedish team led by Nekby was put together in Addis Ababa during the spring. Its task was to further investigate the possibilities of a regional project in-country. This more extended encounter with Ethiopia triggered a broad spectrum of fieldwork as the planning team employed a range of ethnographic and scientific methods to investigate the social and natural conditions in their preferred project area. The final report that resulted from these studies then led to tensions with SIDA in Stockholm over the project design, tensions that reveal more about the links to

⁴²⁹ "Preliminär rapport över formerna och möjligheterna," 14.

⁴³⁰ Forsse, "CADU," 28.

⁴³¹ Meeting minutes, Board of Directors of SIDA, 10 December 1965, 5, SIDA, series A1 B, vol. 1.

⁴³² Meeting minutes, Board of Directors of SIDA 10 December 1965, § 3. The initial planning of the project was thus Swedish through-and-through; the Ethiopian government only put in a request for Swedish agricultural aid after it had been briefed about the already quite well-defined plan.

the Agricultural College and the development strategies advocated by the Ultuna-affiliated experts.

Anthropology and Agronomics: Early Project Preparations

Moving to Ethiopia meant that the planning team could now directly examine societies and agricultural practices of interest to the project. Empirical work started immediately with a three-week anthropological village study in Arussi. The newly hired Karl Eric Knutsson carried it out together with another anthropologist, Arne Lexander, and an Ethiopian counterpart, Tesfaye Akalou. Nekby approvingly considered their study potentially very useful for future work. 433 Besides the two anthropologists, the team that started working in Ethiopia employed a number of Ultuna-trained agronomists. 434 Nekby was the team leader and its specialist in agricultural economics. Its crop production specialist was Harald Linder, who had previously worked for the national experiment organization and the special counseling division at the Agricultural College (this division later evolved into the Research Information Center and was primarily tasked with providing research-based advice and information to the Swedish extension services). Both posts had given him a very practitioneroriented view of agricultural experimentation. 435 Carl Clason, who had previous experience from Ethiopia, was responsible for animal husbandry. 436 By summertime, the team further included forester Gunnar Poulsen, veterinarian Hans Patriksson, land surveyor Erland Gabrielsson, industrial economist Bo Wickström, and education specialist Lennart Ohlsson (who was also trained as an agronomist). In August, the three junior agronomists who had been trained at the University of the West Indies—Bo Bengtsson, Hans Johansson, and Lars Leander—joined too. All members of the team were Swedish, except for forester Gunnar Poulsen, who came from Denmark. As Cohen points out, no Ethiopian technical expertise took part in the planning at this stage, though the team worked with Mulegeta Ghebrewold and Beyene Chichaibelu, liaison officers from the Ministry of Agriculture. Beyond the above-mentioned Tesfaye, the team also employed Almaw Negassa and Mesfin Sahile as data collection assistants. Later, a number of Ethiopian

⁴³³ Nekby to Ståhlberg, 12 January 1966, SIDA, series F1 AB, vol. 768.

⁴³⁴ The whole staff is listed in SIDA Project Preparation Team, *Report No. I on the Establishment of a Rural Development Project in Ethiopia* (Addis Ababa: Swedish International Development Authority, 1966), iii.

⁴³⁵ Nekby, interview.

⁴³⁶ Clason had worked in Ethiopia in the immediate postwar period, setting up an agricultural school in Holeta west of Addis Ababa. He had then apparently emphasized the importance of studying local farming customs, an attitude very consistent with that of the agricultural group. See Halldin Norberg, *Swedes*, 264–65.

higher-level expert staff were also recruited, most notably economist Paulos Abraham and US-educated crop production expert Dagnatchew Yirgou.⁴³⁷

Nekby and the team's most pressing concern was to definitely decide the project's location. While ostensibly still an open question that depended on input both from the Ethiopian administration and the aforementioned World Bank delegation, the Swedes in fact seem to have been committed to locating the project in Arussi before Nekby had even arrived in Ethiopia. At the final meeting of the agricultural group, just before Nekby left Sweden, Ewert Åberg presented a memorandum on crop production based on the agricultural group's trip to Ethiopia and on information provided by Ståhlberg. In it, Åberg argued that of the areas considered in Ethiopia, agronomic reasons made Arussi the only one suitable, and that further planning of the crop production activities should be tailored to conditions in that province. 438 At the same meeting, a proposed organization plan for the project, tentatively named "Arussi Development Authority," was put forward. 439 In Ethiopia two months later, the same view prevailed. After deeming the anthropologists' first report interesting. Nekby asked Lexander to return to Arussi in May to spend the entire month in the province and to receive the technical experts one at a time for discussions with the local population on topics of relevance to each specific field. 440 A very important factor in the choice of Arussi was that Swedish missionary and physician Harald Nyström, who had spent most of his life in Ethiopia and lived in Asella, recommended the province and helped creating local connections there.441

The relatively strong emphasis on early field studies, anthropological and technical, indicates that once work started in Ethiopia, the interest in sociocultural factors increased markedly. While most members of the planning team were indeed "academics from the University of Agriculture at Uppsala," 442 as Cohen puts it, they made a conscious effort to unite their agronomic expertise with insights gained from ethnographic fieldwork. Lexander continued his field studies into 1967 and the project later published his findings in a

⁴³⁷ Nekby, "Margareta och Bengt," 8:82.

⁴³⁸ Ewert Åberg, "Växtodlingen vid SIDA:s projekt i Etiopien: P.M. för diskussion den 22 februari 1966," 2, NIB, series F VIII, vol. 1.

⁴³⁹ Lennart Hjelm, "Utkast till organisationsplan för SIDA:s regionala utvecklingsprojekt i Etiopien," attachment 2 to § 80, meeting minutes, SIDA working group for agricultural issues, 22 February 1966, NIB, series F VIII, vol. 1.

⁴⁴⁰ Nekby to Forsse, 1 April 1966; "Ethio-Swedish Reg. Dev. Project. Program Maj 1966," both in SIDA, series F1 AB, vol. 768.

⁴⁴¹ Nekby, "Margareta och Bengt," 8:96. This was also emphasized by Nekby when I interviewed him, and is corroborated by preserved letters from him to Nyström: Nekby to Harald Nyström, 19 January 1966; 18 February 1966, both in SIDA, series F1 AB, vol. 768.

⁴⁴² Cohen, *Integrated Rural Development*, chapter 4, note 4.

comprehensive report.⁴⁴³ The project planners also set up meetings and interviews in which its technical experts could meet with and talk to local farmers. In addition, the young agronomists Bo Bengtsson and Lars Leander both carried out ambitious field and survey studies of local agricultural practices and knowledge, which included extended periods of living in the countryside.⁴⁴⁴ Some of the Swedish experts thus received significant exposure to the conditions they were planning to change and were able to interact extensively with, and learn from, the people living in Arussi. Whether any true rapport was established is another matter; Leander recalled that even after living in the same area for six months, the local peasants still questioned his intentions and suspected him of wanting to claim their land.⁴⁴⁵

The primary purpose of the fieldwork was to facilitate the intended rural transformation. Gathering information through field studies and surveys, and structuring the resulting knowledge in a scientific report, implies a degree of simplification and represents an attempt to make local farming practices more visible and thus more open to the project whose outlines were already drawn up. There is no evidence that the fieldwork was intended to shape the strategic planning. 446 But it is still significant that some of the experts spent considerable time in the field interacting with farmers and that the project thus at least attempted to avoid some of what Robert Chambers has described as outsider biases, "biases against contact with and learning from the poorer people." 447 It was an approach congruent with the Swedish service science ideal, which arguably set the project apart from many contemporary efforts to increase food production in the developing world. 448 Local knowledge and societies, underplayed during the desk planning phase in Sweden, were for a while factors taken quite seriously, even if it was for the purposes of a project whose main outlines were not subject to change.

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⁴⁴³ Arne Lexander, *The Changing Rural Society in Arussi Land: Some Findings from a Field Study 1966–67* (Asella: Chilalo Agricultural Development Unit, 1968).

⁴⁴⁴ Both were published by CADU: Bo Bengtsson, *Cultivation Practices and the Weed, Pest and Disease Situation in Some Parts of the Chilalo Awraja* (Asella: Chilalo Agricultural Development Unit, 1968); Lars Leander, *A Case Study of Peasant Farming in the Digelu and Yeloma Areas, Chilalo Awraja, Ethiopia* (Asella: Chilalo Agricultural Development Unit, 1969).

⁴⁴⁵ Lars Leander, interview by author, 7 March 2014.

⁴⁴⁶ A later analysis of the project identified as a significant problem that the anthropological studies were initiated too late in relation to the rest of the planning activities. By the time Lexander's final report was published, the project was already under way and all strategic decisions taken. See SOU 1973:41, 236–37.

⁴⁴⁷ Robert Chambers, Rural Development: Putting the Last First (Harlow: Longman, 1983), 2.

⁴⁴⁸ Seleshi Sisaye draws a similar conclusion, highlighting the cooperation between technicians and social scientists and stating that "[o]ne of the more interesting aspects" of CADU "was the inclusion of various disciplines, both the social and physical sciences." Seleshi Sisaye, *Development Aid*, 147.

The first anthropological survey tentatively highlighted some of the relevant conditions in the Chilalo awraja (district, or sub-province) of Arussi. 449 Lexander, Knutsson and Tesfaye were not willing to draw any far-reaching conclusions from such a limited study but simply pointed out that Arussi was similar to a number of other highland provinces, thus making it a suitable location from the perspective of the possibility of later applying project experiences to other parts of the country. They also called attention to the fact that the population in Arussi largely consisted of internal migrants, which meant that they might be comparatively more open to change (or, as it might have been read by the more technocratic-minded planning staff, less able to mobilize resistance against the deployment of technical expertise). 450 Yet if these were advantages, the survey again brought the problematic tenure conditions to light. Many of the tenants interviewed expressed suspicion of attempts to increase agricultural productivity. They feared the loss of their tenure if yields were to increase. 451

Evidently, this did not much affect the view of Arussi as a befitting location. In mid-May, Nekby reported to Forsse in Stockholm that "the team concludes that Arussi would be the most suitable area for a regional development project."452 Tenancy conditions were considered better in Chilalo than elsewhere in the empire, and the planning team expressed some hope for a political solution to the problem of tenancy and land distribution. In the letter to Forsse cited above, Nekby describes how he had called on the new minister for land reform, whom he considered to go about his business with "seriousness" and who had been "favourably inclined" to a program for improving landlord-tenant relationships. 453 Whether Nekby actually believed in the prospect of immediate progress is another matter; I think these comments are best understood as positioning toward the SIDA management in Stockholm. While the minister for land reform might well have expressed a favorable inclination, he was neither in a position to initiate such reform himself nor presumably very interested in pressing the matter.⁴⁵⁴ At any rate,

⁴⁴⁹ Tesfave Akalou, Karl Eric Knutsson and Arne Lexander, "Preliminary survey för planerat regionalprojekt inom Cilallo Auradja, Arussi province," 30 March 1966, SIDA, series F1 AB,

⁴⁵⁰ Tesfaye, Knutsson and Lexander, "Preliminary survey," 23.

⁴⁵¹ Tesfaye, Knutsson and Lexander, "Preliminary survey," 22.

⁴⁵² Nekby to Forsse, 12 May 1966, 1, SIDA, series F1 AB, vol. 768.

⁴⁵³ Nekby to Forsse, 12 May 1966, 2. Seleshi also cites this letter (on his page 140, misdated as 12 April), and bases an assertion that the government agreed to initiate tenancy reform in the project area on it. This is probably the result of a misreading of one of Nekby's statements (that this was discussed). No such reform was forthcoming.

⁴⁵⁴ See the discussion about the "power vacuum" of the central government at note 409 above. Given the sensitivity of the matter of land reform, this particular minister was likely even less

Ethiopian approval for Arussi was not immediately obtained: in a letter from Nekby to Hjelm in late June, one of the few examples of preserved correspondence between them in the material examined, Nekby complained about the slowness of the Ethiopian Council of Ministers in approving Arussi as the project location. 455 He expressed his eagerness to continue with the acquisition of land if "only Messrs. Ministers see fit to establish that we shall be in Arussi."456

This informally written letter also reveals how Nekby and Hjelm viewed the relationship between the project and the Agricultural College. Regarding a planned visit to Ethiopia by Hjelm and Professor Eskil Brännäng from the college's Department of Animal Breeding, Nekby wrote that beyond placing their knowledge and experience at the project's disposal, such a visit would serve the purpose of "[tying] the planning of the project's experimental activities closer to [the Agricultural College] and thus facilitating this honorable institution's commitment to the professional management of these activities."457 Nekby was evidently still looking out for the college's interests. and the wording suggests that at the time both Nekby and Hielm envisioned at least a partially executory role for the college. Hielm had also raised this matter at an earlier meeting with the agricultural group. 458 They likely had in mind an arrangement in which the college would assume direct responsibilities for at least the agricultural experimentation activities. In the end, this did not materialize. The Ethiopian government favored a closer integration of the project into its own administrative system, and so CADU instead became an

interested than most in independent initatives. Furthermore, being the Minister for Land Reform in a state where large swathes of the social elite derived their influence and money from landholding was hardly an enviable position. Bahru Zewde also notes that the Amharic name for this new ministry did not actually contain the word reform; the word translated as such (yezota) means tenure. Bahru Zewde, History of Modern Ethiopia, 195.

⁴⁵⁵ The Council of Ministers had been established in 1943 as a body consisting of the ministerial collective, but it did not function as a cabinet as such. Until 1966, it was only an advisory body, and even after 1966, when it was empowered to make decisions on its own, it remained utterly dependent on the emperor. All ministerial appointments were his to make, and even though the Prime Minister's powers increased with time, the Emperor remained the final source of all executive authority. Clapham, Haile-Selassie's Government, 126-29; Bahru Zewde, History of Modern Ethiopia, 203-04.

⁴⁵⁶ Nekby to Lennart Hjelm, 30 June 1966, SIDA, series F1 AB, vol. 769. This letter not only attests to the close personal relationship between Hielm and Nekby, but with its references to common acquaintances and their opinions it also indicates the source value that more personal correspondence would have had for the present project.

⁴⁵⁷ Nekby to Hjelm, 30 June 1966, 2.

⁴⁵⁸ Meeting minutes, SIDA working group for agricultural issues, 10 December 1965, § 76, NIB, series F VIII, vol. 1.

autonomous division within the Imperial Ministry of Agriculture. 459 Nonetheless, the letter shows that the relationship between the planning team in Ethiopia and the college remained a close one.



Figure 11. Experts in the field, Arussi province, 1966. Horseback riding was a convenient way of getting around the mostly roadless rural areas. From left to right: Lennart Hjelm, Karl Wallgren, unidentified Ethiopian, Ewert Åberg, Hans Johansson, Bengt Nekby. Photo Harald Linder. 460

Agrarian Expertise Challenged: The Reception of Report No. I

In October 1966, Nekby's team delivered its project proposal to SIDA and the Ethiopian government. It consisted of two massive volumes plus appendices, and it contained an in-depth description of the Ethiopian administrative structure as well as of the project design. It also discussed international experiences of similar projects, with most attention being given to the Pakistani Comilla project, and one conclusion drawn was that it was crucial that the project must be designed to be flexible and open to modification based on experiences gained—indeed, that one of the project objectives should be the

⁴⁵⁹ Forsse, "Memorandum concerning a proposal," 9–10.

⁴⁶⁰ From *U-lantbruk*, no. 2 (1989), 26.

⁴⁶¹ SIDA Project Preparation Team, Report No. I.

development of methods and the training of staff in them. 462 The report proposed the Chilalo *awraja* of Arussi, eventually agreed to by the Ethiopian government, as the project location. In line with the strategy of integrated development, the project would—beyond research in crop production and animal husbandry—include agricultural marketing activities, attempts to find methods for the desired knowledge and technology transfer to the local farmers, education, and infrastructural investments in roads and in buildings for the project.

The population in Chilalo was dominated by two ethnic groups: Oromos and Amharas. Some of the Oromo people were descendants of a previous nomadic population in the area; others had moved in, along with most Amharas, as part of colonizing migration streams after Arussi was incorporated into the Ethiopian Empire in the 1880s. The Amharas, the old Christian elite of Ethiopia, made up a small minority of the rural population but dominated the towns. The urban population only amounted to approximately 5% of the total population of Chilalo, however, with Asella, the largest town, having about seventeen thousand inhabitants.

A little over 80% of the rural population were settled farmers and most of the rest semi-nomadic pastoralists. The farmers mostly grew barley and wheat, with slightly more than half of the cultivated land devoted to the former and a little less than 20% to the latter. 463 The vast majority practiced mixed farming and kept cattle for traction and for milk. The land was owned in part by major landowners who often had holdings of hundreds of hectares cultivated by tenants, and in part by freeholding peasants who farmed their own land and perhaps had one or a few tenants as well. The average smallholder had less than five hectares of land. About half of them were tenants; on average they had slightly smaller holdings than those who owned their land. The smallholders, who generally used traditional methods and implements, were subsistence farmers in the sense that most of the household consumption normally came from their own production. But market interaction was also important: self-owning farmers needed to sell part of their harvest as they had to pay taxes in cash (generally, the wheat was sold while barley was used for home consumption). Likewise, all farmers needed cash to buy clothes and other necessities not available on-farm or through local barter transactions. No real opportunity to sell milk was available except as ghee (clarified butter),

⁴⁶² SIDA Project Preparation Team, Report No. I, 123.

⁴⁶³ SIDA Project Preparation Team, Report No. I, 151.

which sold at a very low price. The milk was thus generally consumed by the household, in part as fresh milk but mostly churned into butter.⁴⁶⁴

Table 3. Basic statistics regarding Chilalo at the start of the project (for sources see notes 463 and 464).

Chilalo awraja, basic information (1966)	
Population	Ca 350 000
Number of farm households	Ca 65 000
Illiteracy rate	Ca 90 %
Most common crops	Barley (on 52% of the cultivated area) and wheat (on 18% of the cultivated area)
Average land-holding	Slightly less than 5 ha
Tenancy rate among small-holders	Approx. 50%, some on relatives' land

Being a proposal for an actual project design, Report No. I was much more detailed than the agricultural group's earlier outlines, but in terms of the overall approach it did not diverge much. For the first time, explicit, though rather vague, project purposes were stated: these were to stimulate the ability of the local population to participate in the development effort, and thus to improve economic and social conditions in Chilalo, and to create possibilities for an expansion of the development program. 465 The project was thus intended as help to self-help and as a way to empower the local population so that they themselves could take on increasing responsibilities for development. One section of the report also discussed the Agricultural College's role in the project. It proposed to tie the project's research activities to the college, but with the latter in an advisory rather than an executory role. It also suggested that the college should employ a liaison officer to perform tasks in support of the project. 466 In general, however, the report was mostly descriptive. Its accounts of the Ethiopian administration and social setting, and of the international models that had inspired the project approach, were little more than extended descriptions.

On receiving the report, many of the SIDA managers in Stockholm reacted negatively to what they saw as a lack of critical analysis of the proposed project and to what some considered lax financial planning. The report was heavily criticized, and for a while the entire project seemingly risked either

⁴⁶⁴ Cohen, *Integrated Rural Development*, 52–55; Lexander, *Changing Rural Society*, 56–60; Nekby, *CADU*, 53. Note that it was notoriously hard to find reliable data on land ownership in rural Ethiopia at the time. The figures on landholdings and tenancy rates are project estimates.

⁴⁶⁵ SIDA Project Preparation Team, Report No. I, 189.

⁴⁶⁶ SIDA Project Preparation Team, Report No. I, 198.

being canceled or being drastically reduced in scope.⁴⁶⁷ This reception was not a complete surprise to the planning team. Forsse had privately informed Nekby about the fundaments of what people at SIDA thought during a visit to Addis and had expressed similar concerns in a letter already during the summer.⁴⁶⁸ But even if Nekby and his colleagues had expected to be asked to provide additional information and calculations, they were startled by the level of resistance their proposal encountered.⁴⁶⁹

To reduce initial project costs, an option suggested in Stockholm was that the project at first ought to focus on validating methods by which knowledge could be transferred to the target population, rather than start with a broad research and development program. In effect, this amounted to examining how well its transfer mechanism functioned before creating the knowledge to be transferred. This idea was not positively received by Nekby. In an irritated letter to Forsse, he reiterated the importance of focusing on an integrated approach and adaptive research, but now with a clear productivist slant which contrasted sharply with his earlier positive pronouncements about anthropological studies:

This [referring to an example of an innovation not adapted to its context] illustrates again the international experience of the need for a goal-directed experiment activity. With all due respect to the social anthropologists, I consider it empirically proven that the most important thing in development is to be able to create economic opportunities for the farmers to increase and sell their production. If one can do that, then demonstrating these opportunities ought to be relatively simple. If one cannot, then an ever so thorough understanding of local conditions is unlikely to lead to development.⁴⁷⁰

Not everybody in the planning team shared Nekby's view that knowledge transfer would be "relatively simple" once a profitable innovation with a direct, positive impact on production was developed. The pointed comment about social anthropologists was probably directed at Knutsson, who earlier that year had argued that it would be risky to establish the project's central institutions before making sure that the local population was organized in a way which would make them see the project as a relevant concern for them and help them

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⁴⁶⁷ For an example of the criticism, see Istvan Vukovich, "Sammanfattning och några kommentarer till 'Report No. I on the establishment of a Regional Development Project in Ethiopia'," 29 November 1966, SIDA, series F1 AB, vol. 769. By December 15th, Tomas Bergendal at SIDA raised as matters of principle whether SIDA should engage in integrated rural development at all, and if such a project then should be situated in Ethiopia: Untitled document, 15 December 1966, SIDA, series F1 AB, vol. 769.

⁴⁶⁸ Forsse to Nekby, 12 July 1966, SIDA, series F1 AB, vol. 769.

⁴⁶⁹ See e.g. Nekby to Forsse, 4 November 1966, SIDA, series F1 AB, vol. 769.

⁴⁷⁰ Nekby to Forsse, 4 November 1966, 3-4.

adopt its innovations.⁴⁷¹ Nekby and Knutsson thus advocated divergent goals for the project's start-up phase. They both favored a localistic approach to development but focused on different parts of the technology transfer process. Knutsson wanted to start by organizing the local population and then devise a transfer mechanism based on a deeper understanding of the local society. Nekby, for his part, advocated focusing on the local development of profitable innovations that would tangibly demonstrate the benefits of the project. This is not to say that he did not acknowledge the need for adapting innovations to the context; on the contrary, the report emphasized the importance of the continued study of Chilalo society.⁴⁷² But to Nekby, obtaining a demonstrably profitable innovation was an absolute priority and in fact a precondition for any meaningful project. Without it, he suggested, no amount of organizing work would help.

The Schultzian stance Nekby took reiterated the viewpoint the Agricultural College's professors had held throughout the planning. They had continuously emphasized that experimentation was the central element of the planned project, even if it had to be complemented by marketing and extension to be effective.⁴⁷³ Nekby's argument also mirrored earlier colonial discussions about agricultural development. Joseph Morgan Hodge quotes an agricultural research officer working in Nigeria in the late 1950s, whose opinion was that a "lack of a proven product is more likely the cause" than a lack of extension facilities when farmers are resistant to change.⁴⁷⁴ That this understanding was completely in tune with the one Nekby promoted in 1966 suggests that he had been influenced by these late-colonial debates when working in Nigeria.⁴⁷⁵

"A Slap in the Face": Negotiations with SIDA

To further analyze the report and to find a way out of the impasse the criticism had created, Forsse put together a reference group in Stockholm, consisting of himself as chairman, several other SIDA managers as members, and three external experts who were to evaluate the proposed project: Hjelm, Knutsson, and Lund University economics professor Torsten Gårdlund. Neither Hjelm nor Knutsson could claim to be neutral evaluators: Hjelm had been one of the driving forces behind the project from its inception, and Knutsson had been in

⁴⁷¹ Karl Eric Knutsson to Nekby, 20 June 1966, SIDA, series F1 AB, vol. 768.

⁴⁷² SIDA Project Preparation Team, Report No. I, 249.

⁴⁷³ This also motivated the central role of the Agricultural College in the project, as Lennart Hjelm later would go on to state more explicitly (see below).

⁴⁷⁴ Hodge, Triumph of the Expert, 252.

⁴⁷⁵ In my interview with him, Nekby himself recalled how he learned a lot from his interactions with former colonial officials in Nigeria.

the employ of the planning team.⁴⁷⁶ Gårdlund, a well-known Swedish economist and an authority on development issues, was ostensibly a more neutral choice, but he too knew the people involved, having lectured at a preparatory/recruiting course the agricultural group organized in 1965.⁴⁷⁷ The three experts could be expected to each advance a particular point of view: Hjelm in favor of the strategy, Knutsson critical, and Gårdlund perhaps in the middle. Forsse himself had to balance a number of interests against each other in his role as department head, but personally he was by this time strongly committed to the project: in a letter to Nekby he stated that "from my perspective, no other possible project is more essential than this."⁴⁷⁸

The discussions in the reference group appear to have been quite tense.⁴⁷⁹ Opinions diverged over priorities and the importance attributed to the integrated approach, and many of the SIDA staff who participated remained critical of the project proposal and wanted significant reductions in scope. Predictably, Hjelm fully supported the strategy outlined in the report, but he was the only participant to do so. Gårdlund was more hesitant but did express an opinion similar to Nekby's when he argued that economic incentives were of primary importance. Knutsson, for his part, reiterated his earlier concerns, with his views being summarized in the minutes as follows: "It is not possible to start as ambitious an operation as the team wants. But a test of social conditions and of the transfer mechanism is absolutely important." ⁴⁸⁰

Following the discussion, Tomas Bergendal at SIDA composed a summarizing memorandum, which remained critical of the project as outlined in Report No. 1 and suggested ways to scale it down. This was distributed to the participants for comments, and Hjelm responded in a forceful and illuminating way. He returned his copy full of crossed-out paragraphs and with extensive marginal notes, together with a cover letter that left no doubts in the reader's mind as to his dim view of SIDA's handling of the matter. He understood the memorandum as an "expression of an ongoing policy change

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⁴⁷⁶ They were both mentioned by name in the introduction to the report they now were supposed to evaluate: Knutsson was listed as staff, and Hjelm as an associate.

⁴⁷⁷ See note 416 above. Gårdlund's book *Att arbeta i u-land* (Working in Developing Countries) had been mandatory reading for the participants.

⁴⁷⁸ Forsse to Nekby, 10 November 1966, SIDA, series F1 AB, vol. 769.

⁴⁷⁹ See the minutes of the meeting: "Protokoll 15/12-1966, arbetsgrupp för reg. proj," SIDA, series F1 AB, vol. 769.

⁴⁸⁰ "Protokoll 15/12-1966, arbetsgrupp för reg. proj.," 4. Knutsson would later expand on the need to fully understand local societies and ongoing processes of change in a written opinion on CADU, which expressed concern over evictions and rural alienation as a possible consequence of the project strategy. His comments are reproduced in an interview with a SIDA magazine: Mats Kihlberg, "En radikal perspektivförskjutning' – Intervju med Karl-Eric Knutsson," *Rapport från SIDA* 1, no. 3 (1970).

within SIDA," which would make it "extremely difficult" to plan rationally and "substantially more difficult" to realize any plans. He further stated that the guiding idea all along had been to develop the project around agriculture and animal husbandry experimentation, and that this idea also had shaped the composition of the agriculture group. In light of this, he charged that "at this stage beginning to talk about limiting the project to 'marketing' or 'road construction' . . . is incomprehensible to me. . . . In that case we ought to have sent engineers and not agronomists to plan the regional project." Changing the nature of the project now, Hjelm argued, would spoil several years of method development. It would also require SIDA to find other institutional partners given that agricultural competence was no longer relevant. Hjelm also sarcastically proposed that the Ethiopian nutrition project should immediately be canceled as it would no longer be able to benefit from synergies with agricultural research. Finally, reiterating his personal commitment to Nekby and the staff, he stated that

the working group, which has been in Ethiopia for almost a year, has gone about its work with remarkable energy and carefulness and has presented a proposal which really seems a sound base for a whole-hearted and well-integrated effort for, primarily, agricultural development. Against this, proposing the delimitations suggested in the PM is nearly tantamount to a slap in the face of the team leader and his colleagues.⁴⁸²

Hjelm was defending standpoints that he had invested some measure of personal prestige in. But he also stuck up for what he viewed as the interests of his college. As Hjelm explicitly suggested in his letter, only by sticking to a conception of the project as being primarily about agricultural experimentation would agrarian expertise have a clear and apparent role. Without such a role, the college would lose influence and its involvement in future activities would be a lot less certain. This letter thus further goes to show the very intimate link that had developed between the college and the project, and how (most of) the planning team in Ethiopia had fully appropriated the particular conception of agricultural aid developed at the college. That SIDA was now formally in charge had done little to undermine these linkages.

Both Hjelm's and Nekby's writings at the time betray surprise and anger at what they perceived as an incomprehensible and unfair change of policy at SIDA.⁴⁸³ And they had a point: if many at SIDA were this hesitant, then why had so much planning been entrusted to agronomists, and why had SIDA sent a

⁴⁸¹ Hjelm to Forsse, 4 January 1967, 1–2, SIDA, series F1 AB, vol. 770.

⁴⁸² Hjelm to Forsse, 4 January 1967, 2.

⁴⁸³ See also the further comments on the memorandum from Nekby, which he sent to Forsse with a copy to Hielm: Nekby to Forsse, 18 January 1967, SIDA, series F1 AB, vol. 770.

team to Ethiopia based on the recommendations of the agricultural group? Its members had made no secret of their ideas about development, and SIDA, for its part, had earlier shown a strong commitment to an agricultural project in Ethiopia. This was apparent from its hiring policies, which included two-year contracts and long-term living arrangements for many of the planning staff, who were agricultural experts.⁴⁸⁴

Several factors can help explain the new attitude at SIDA. What the team proposed was truly a mammoth project that could well have threatened to become a cuckoo in a Swedish aid nest still very much under construction. The report calculated total costs (including Ethiopian contributions) of SEK 33 million for the first three years, with Swedish costs for the first year estimated at SEK 12.5 million. The latter amounted to more than three times the budget of the single largest Swedish development aid project in 1965, which had an annual cost of SEK 3.7 million. In fact it exceeded the *total* Swedish payments to the largest recipient country of development aid (in the sense of technical rather than financial assistance), Pakistan, which annually received around SEK 10 million at the time. 486

Beyond these financial factors, there were most likely also diverging expectations between the agronomic expertise in Ethiopia and the aid bureaucrats in Stockholm as to what the first report should contain and how it should be written. The report's appraisal in Stockholm was complicated by the fact that the new SIDA had been created by merging the staff from NIB (SIDA's Department I) with the financial aid administrators from the Ministry of Finance (SIDA's Department II), who primarily looked to the strict procedures of the World Bank for inspiration. This had given rise to a clash of cultures within SIDA and its management. All The Gösta Westring at Department II recalls how, from his perspective, the staff at Department I had no "principle-based inhibitions," but happily launched ill-defined, Swedish-styled projects, "preferably in the Empire of Ethiopia." Slightly later, Bengt Sandberg, also

⁴⁸⁴ This was pointed out and criticized by Erland Kleen, the Swedish ambassador to Ethiopia. Erland Kleen to Forsse, 4 March 1966, 3–4, SIDA, series F1 AB, vol. 769.

⁴⁸⁵ 33 million SEK in 1965 prices corresponds to slightly less than 330 million SEK in 2015, according to the historical currency converter designed by Rodney Edvinsson (http://www.historia.se/Jamforelsepris.htm). See also Rodney Edvinsson and Johan Söderberg, "A Consumer Price Index for Sweden 1290–2008," *Review of Income and Wealth* 57, no. 2 (2011).

⁴⁸⁶ The comparative figures are from Michanek, *Vår insats*, 28. The 33 million figure is from Tomas Bergendal, "Regionalt jordbruksprojekt, Etiopien," p. 3, 10 July 1967, SIDA, series A1 B, vol. 4.

⁴⁸⁷ Odén, Biståndets idéhistoria, 68.

⁴⁸⁸ Gösta Westring, "Biståndet och lagen," in Gumbel, Kärre, and Wieslander, ...och världen växte, 393. Westring notes, however, that CADU was a step in the right direction as it became

at Department II, wrote a critical memorandum faulting the planning team for its unwillingness to prioritize and schedule its activities on the grounds that they were supposed to be "integrated." He further pointed out that the project idea "emanated" from the agricultural group, "which also 'chose' Ethiopia."⁴⁸⁹

Sandberg's remarks suggest that behind the fiscal worries lay an ideological conflict, manifested as criticism of entrusting so much of the planning of a regional development project to a group with virtually only agricultural expertise (and, presumably, also lacking the "principle-based inhibitions" of Department II). The particular conception of rural development as an agricultural science project that the Agricultural College had promoted was thus somewhat belatedly challenged. There is an irony in this, for by expanding the project into regional development, the agricultural group had opened itself up to this attack. As long as the problem they formulated was limited to one of agricultural experimentation, no one could have proposed reducing it to marketing or road construction.

The sarcastic quotation marks that Sandberg put around the word chose were primarily intended to convey his general annoyance at an ad hoc body such as the agricultural group having so much influence over the location of an aid project, but he might also have had his concerns about Ethiopia in particular. It is at least clear that members of the SIDA board of directors had begun to express doubts about Ethiopia's suitability as a recipient of Swedish development assistance, much to Nekby's annoyance. At the time, the comprehensive aid to Ethiopia was in fact increasingly becoming a Swedish foreign policy anomaly. Sweden's Social Democratic government did not necessarily demand impeccable democratic credentials from its aid partners, but they had to present some meaningful claim to strive for equality and for the empowerment of ordinary people. Haile Selassie's Ethiopia, however much in need of foreign aid, had little credibility in that regard. This was increasingly recognized by policymakers and debaters and would be an important reason for the controversies that would later arise over CADU.

In Ethiopia itself, *Report No. 1* had initially been received more positively, no doubt influenced by the fact that it was first reviewed by a technical committee chaired by Tesfa Bushen.⁴⁹² This committee endorsed the report's proposals and

part of the regular Ethiopian administration; I cite his comments here to indicate something of the attitude at Department II and how it likely affected the planning process.

⁴⁸⁹ Bengt Sandberg, "Synpunkter på "Region"-projektet i Etiopien," p. 3, 10 February 1967, SIDA, series F1 AB, vol. 770.

⁴⁹⁰ Nekby to Forsse, 4 November 1966, 4. He was however reassured by Forsse that this would not be a problem: Forsse to Nekby, 10 November 1966, 2.

⁴⁹¹ See Nilsson, Den moraliska stormakten, 135–44.

⁴⁹² Nekby to Forsse, 6 February 1967, SIDA, series F1 AB, vol. 770.

passed their recommendation on to a ministerial committee for political review. But there the process stalled. According to Cohen, the Ethiopian officials "were concerned with the political difficulties likely to arise from the introduction in a limited area of concentrated resources aimed at economic and social change for small-holders." Cohen cites no sources, but he is undoubtedly correct. If Sweden hesitated to aid regimes that did not actively promote equality, the Ethiopian government, for its part, was put in a bind by proposals for projects that were intended to improve the conditions of ordinary people. As historian Larry Grubbs argues, many African states found themselves in a similar paradoxical situation at this time: "They sought rapid development—symbolized by big projects, plans, and big aid packages—but feared the political and social consequences of empowering (economically and politically) ordinary farmers, workers, and women." Eventually, this paradox would prove unresolvable in the Ethiopian empire.

The Ethiopian government's hesitation gave SIDA time to find a way to overcome its concerns about the project. The project preparation team was requested to work out a reduced program, but the Stockholm office eventually conceded the main strategic point and gave instructions to the effect that the new plan should encompass, among other things, "such experimental activities in the field of agriculture as would seem particularly likely to result in interesting 'innovations' within an initial period of three years." 496 Most likely because of Hjelm and Nekby's strong resistance to changes in that regard, SIDA thus remained committed to an integrated rural development program based on scientific interventions in agricultural production. The challenge posed to the role of the college's agrarian expertise faded away, and the project planning continued along the lines originally envisioned by Hjelm, Nekby, and their colleagues. A productivist, scientific focus came to guide the first phase of the project.

The Ethiopian government eventually also overcame its concerns. Cohen suggests that it concluded that the project's impact could be compatible with the existing political system, which presumably meant that the government believed that the social implications of technical progress could be contained.⁴⁹⁷ The final negotiations were conducted by Forsse and Tesfa Bushen during the late summer of 1967, resulting in the conclusion of an

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⁴⁹³ Nekby to Forsse, 6 February 1967. See also Cohen, *Integrated Rural Development*, 71.

⁴⁹⁴ Cohen, Integrated Rural Development, 71.

⁴⁹⁵ Larry Grubbs, *Secular Missionaries: Americans and African Development in the 1960s* (Amherst: University of Massachusetts Press, 2009), 189.

⁴⁹⁶ Forsse, "Memorandum concerning a proposal," 11.

⁴⁹⁷ Cohen, Integrated Rural Development, 71.

agreement in early September. Sweden agreed to provide the project with competent expatriate staff as required and to bear 67% of the financial costs of the project, excluding salaries for Ethiopian high- and mid-level staff. Besides paying 33% of the financial costs, Ethiopia would also contribute land and perform some road construction.⁴⁹⁸ The agreement would be in effect for three years, from 1967 to 1970, after which the suitability of an extension would be evaluated.

An *U-tuna* in Ethiopia

Project activities, with preliminary studies of local climates, vegetation, and farming practices, had already been ongoing in Chilalo for some time. With the formal signing of the Ethio-Swedish agreement in September 1967, the *U-tuna*, as SIDA officials now playfully called it, could also be formally initiated. ⁴⁹⁹ *U-tuna* is an untranslatable, but very telling, piece of wordplay: the u-prefix stood for development or possibly developing (*utveckling* in Swedish), and at the time was widely used in Swedish concepts referring to the developing world: *u-land* (developing country), *u-hjälp* (development aid), and so on. The U-tuna notion thus described CADU as a developing country instantiation of the Agricultural College in Ultuna, succinctly summarizing how clear the important role of the college in the project was to SIDA's decision-makers.

CADU was established as an agency within the Ethiopian Ministry of Agriculture, overseen by an inter-ministerial committee chaired by the Minister of Agriculture and with Bengt Nekby as its executive director. It thus became the first Swedish aid project to be organized as an integrated part of the recipient country's administration, even if it came to have considerable autonomy in practice. Nekby summarizes the official objectives as follows:

- > To bring about economic and social development in the project area
- ➤ To give the local population an increased awareness of and responsibility for the development work
- > To verify methods of agricultural development
- ➤ To train staff⁵⁰¹

^{498 &}quot;Agreement," SIDA, series F1 AB, vol. 772.

⁴⁹⁹ The term seems to have been coined by Lars Kalderén, the head of SIDA's Department II: Lars Kalderén, "Promemoria med synpunkter på det etiopiska jordbruksprojektet," p. 2, 8 August 1967, SIDA, series F1 AB, vol. 772. Anders Forsse then used it when exchanging telegrams with Stockholm during the final negotiations with the Ethiopian government, negotiations he referred to as *U-tunaleken*, the U-tuna game. See, e.g., Forsse to Lars Kalderén/Bengt Sandberg (telegram), 25 August 1967, SIDA, series F1 AB, vol. 772.

⁵⁰⁰ Cohen, *Integrated Rural Development*, 72.

⁵⁰¹ Nekby, *CADU*, 47.

These goals were not in any official order of priority, but creating economic incentives was de facto prioritized in the early stages of the project, with social development expected to follow from this. ⁵⁰² In practice, this meant creating innovations with the potential to increase farmers' production and providing new outlets for selling the increased production.

The project was organized into five departments, most of them with a number of subsections, as well as six independent sections under the executive director (see the organizational plan in figure 12).

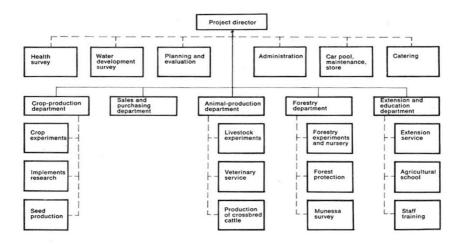


Figure 12. CADU's organizational structure during the period of the first Ethio-Swedish agreement, 1967–1970.⁵⁰³

This organizational structure suggests that the project, even after the reductions mandated by SIDA, retained a wide scope of activities. The central ones, in line with the general strategy, were those related directly to agricultural production and marketing—agricultural and animal husbandry experimentation, extension and education, marketing activities, and the provision of credit for the purchase of inputs. Also central to the project was the planning and evaluation section, tasked with gathering data and monitoring project developments and effects as well as developing new methods based on project experiences. ⁵⁰⁴

⁵⁰³ From Nekby, CADU, 95.

⁵⁰² Nekby, *CADU*, 47.

⁵⁰⁴ Cohen, *Integrated Rural Development*, 76.

Local Science and Centrist Thinking: Research and Extension for Agrarian Transformation

CADU's research activities made up the center of the project; it was from them all development incentives would be generated. Its crop production and protection experiments were carried out by the crop production department. Led by Harald Linder and Dagnatchew Yirgou, it began to implement the program of adaptive research envisioned by the project planners, experimenting with twenty-one different cereals, legumes and oilseed crops. Most significantly for the project, trials with various kinds of wheat, including Ethiopian material as well as material collected from research programs in Mexico and Kenya, soon produced well-adapted varieties. The most notable successes were made with varieties of wheat bred in Mexico. When supplemented by a tested fertilizer package, these yielded harvests up to twice as large as the local material. CADU also ran its own seed production operation at the project farm in Kulumsa, where the improved seed varieties were produced, cleaned and tested before being sold to farmers. Other activities included crop protection and weeding experiments.

The focus of the animal husbandry research was cattle breeding. Though oxen were central to the rural economy of Chilalo, the breeding program did not aim to improve draft animals but instead centered on establishing a viable dairy production in the region. Though oxer Chilalo cattle yielded little milk, so CADU crossbred local heifers with higher-yielding breeds imported from Europe. The department's research focused on devising methods of feeding and housing the new crossbreeds in ways well adapted to the local conditions: this included research on milking, feeding, fencing, and cattle shed design. When tended correctly and fed sufficient amounts, yield increases could be enormous: the crossbreeds yielded up to 1500 liters of milk annually, whereas the yield from indigenous cattle normally was around 200 liters. Farmers were instructed on the basis of the research results and were then provided with crossbreeds as a kind of test. Those who successfully managed the higher-

⁵⁰⁵ A detailed account of this research can be found in Harald Linder, *Crop Produktion* [sic] *Improvement: Activities in Chilalo Agricultural Development Unit in Ethiopia, 1966–1970; Abridged Version of an Agricultural Thesis* (Uppsala: Swedish University of Agriculture, Forestry and Veterinary Medicine, 1976). See also Cohen, *Integrated Rural Development*, 88–89. ⁵⁰⁶ Linder, *Crop Produktion Improvement*, 65–67.

⁵⁰⁷ I have not found an explicit explanation for why the project did not attempt to improve the draft animals, but the likely explanation is that the prospects of producing, and selling, more milk was deemed a more significant incentive to participate as well as a stronger development factor.

⁵⁰⁸ Nekby, *CADU*, 72.

Nekby, CADO, 12

yielding animals were given the opportunity to buy them, or alternatively were offered artificial insemination of their own cattle.⁵⁰⁹

CADU also performed research on agricultural implements with the aim of developing new and more efficient farm tools. The research focused on creating alternatives or new implements for soil preparation, harvest and postharvest activities, and transport. A new iron plow was developed as an alternative to the ard, a harrow was introduced, and other research focused on sickles, scythes, threshing, grain storage, wheelbarrows, and ox-carts. Though its planners had rejected the idea of introducing capital-intensive technologies, during its first years the project also provided hire services for mechanized equipment. 510

In order to transfer the research results to local farmers and encourage them to take up the new innovations, CADU operated extension and marketing activities. The premise for the latter was that farmers needed to know that they could easily turn increased production into increased incomes if they were to have reason to experiment with new agricultural approaches. CADU thus established a number of trade centers throughout Chilalo where the project bought wheat and milk from farmers. These centers competed with traditional wheat merchants, who, according to Nekby and Cohen, tended to take advantage of the local farmers' ignorance of the prices at larger markets. The milk trade, for its part, was effectively created by CADU. LADU also attempted to form peasant cooperatives for marketing and procurement but decided to move slowly in this regard and first build local trust in the project. Status differences among farmers and resistance from local elites were also constraints on the formation of cooperatives, and in the end, they had little impact in Chilalo before the revolution.

Extension activities were based on a system of model farmers and extension agents. Model farmers were elected by farmers living in designated 800-hectare areas and were then given instructions by CADU's extension agents, early in the project primarily in the use of the new crop production inputs. Part of the model farmers' land was also used as demonstration plots where extension agents held field days. Further demonstration plots were established in locations where people would gather, on major roads and around churches and marketplaces. This demonstration approach, which had a long history in Sweden and in Western societies more generally, was chosen as a way to spread information and illustrate what the project offered in an illiterate

⁵⁰⁹ Cohen, Integrated Rural Development, 89–90.

⁵¹⁰ Nekby, *CADU*, 70.

⁵¹¹ Cohen, Integrated Rural Development, 81–82; Nekby, CADU, 53–56.

⁵¹² Cohen, *Integrated Rural Development*, 116–17.

society. The project also emphasized the importance of identifying innovative farmers, who were ready to experiment and whose example could inspire more cautious neighbors. The number of model farmers grew steadily, exceeding four hundred by 1973. As a whole, these extension methods proved effective in terms of outreach. [A]ll but the most remote farmers in Chilalo became aware of the project's message, according to Cohen. 515



Figure 13. A CADU extension agent outside the extension office in Itaya. Offices like these were established in the extension districts set up throughout Chilalo awraja, and the extension agents working there provided instruction to model farmers and held field days throughout the district to disseminate the project's message. ⁵¹⁶ Photo Per L-B Nilsson.

The final piece of the package intended to generate agricultural development in Chilalo was the provision of cheap credit to farmers, specifically to enable them to buy the inputs provided by the project. The interest rates on these loans were low enough to make them de facto subsidies.⁵¹⁷ It was an early

⁵¹³ Leander, interview.

⁵¹⁴ Dagnatchew Yirgou et al., "Final Report on the Appraisal of CADU and EPID" (Addis Ababa, 1974). 9.

⁵¹⁵ Cohen, *Integrated Rural Development*, 85.

⁵¹⁶ From Nekby, CADU, 59.

⁵¹⁷ Cohen, *Integrated Rural Development*, 92.

form of microcredit, something that had also been an important part of the Comilla project. Credit provision was handled at the trade centers under the supervision of CADU extension agents and credit was only given in kind, as seed and fertilizer.

The activities carried out by CADU's research departments were wideranging and in many ways successful. But on close inspection, they also highlight that it proved difficult for the project to fully reconcile modern agronomic techniques with the idea of local adaptation. The project's innovations made farming a significantly more complex activity. The new wheat varieties and the crossbred cattle were great technical successes in the sense that they drastically increased yield potentials. However, they demanded much more attention than traditional cultivars and cows if the potential was to be realized. They also needed more in terms of input. The crossbred cattle produced significantly more milk, but at the expense of significantly more feed. Similarly, the new wheat varieties required fertilizer inputs, which, in turn, increased the demand for either labor for weeding or the application of herbicides. In both cases, it was easier for the already better-off farmers to experiment with new methods and inputs. So although the technologies CADU developed were technically well-adapted to their environment, they were in some ways less well-adapted to the task of supporting low-income farmers.

Other technologies exemplify more serious problems of adaptation. Notably, CADU's European-style iron plow, designed to improve soil preparation and reduce the time needed for plowing, was largely rejected by farmers. While they recognized the benefits of a more efficient plow, they considered CADU's design too heavy for the farmers who had to carry the plow to the field but particularly for the oxen that were to pull it.⁵¹⁸ In this case, the problems with the new technology in fact vindicated conclusions already drawn, as insufficient traction power was a risk that the project planners had earlier highlighted in their Report No. 1.519 Similar trends could be found in the crop production department as well. CADU attempted to promote other crops—mainly maize, legumes, and teff—besides the new wheat varieties, but with little success. Farmers also rejected CADU's attempts to sell them clean seed produced by the project, preferring to use their own.⁵²⁰ The new and more complex crop rotations and weed control methods advocated by CADU likewise failed to become popular, and a later evaluation of the department suggested that the problems had resulted from a lack of research.

⁵¹⁸ Cohen, Integrated Rural Development, 92.

⁵¹⁹ SIDA Project Preparation Team, Report No. I, 225.

⁵²⁰ Dagnatchew Yirgou et al., "Final Report," 10.

For the weed control methods, the evaluation specifically blamed the lack of investigations under "actual farm conditions." 521

Many of these problems arguably were due to continued centrist thinking. It proved hard for the Swedish experts to escape from their habitual way of relating to a rural environment, even when this conflicted with the adaptation ideology that constituted the core of the project's research strategy. Traces of this centrist thinking can be found in rather innocent examples, such as when Harald Linder, who had been instrumental in building up CADU's crop production department, wrote about his travels through a "wonderful" agricultural landscape in Ethiopia in an article in the Agricultural College's staff magazine. Linder, a major proponent of the service science ideal, had long experience of working with farmers in Sweden and had been pivotal in planning and carrying out the practical adaptive research that enabled very significant yield increases in Chilalo. He would also later explicitly argue for the importance of foreign aid focusing on practical agriculture and farmers' actual problems. 522 Even so, his article described how he daydreamed about seeing the wonderful landscape exploited by "large-scale, highly mechanized agriculture," before he snapped back to reality and reminded himself that he and his colleagues were in Ethiopia to help small farmers and needed to keep agriculture labor intensive. 523 This is not to suggest that Linder could not distinguish daydream from reality, nor to discount the profound value of his research at CADU, but rather to indicate that the context in which one's expertise has developed unavoidably keeps influencing how one relates to one's surroundings.

I will also present a wholly different example that shows clearly how centrist thinking can undermine the entire project of producing knowledge. CADU included a set of activities oriented to what was identified as women's issues. These activities went through several incarnations, from being part of adult education in general to a separate project division for women's extension and finally a division for what was labeled home economics. CADU's reports on them provide interesting insights into how CADU staff understood, or failed to understand, some basic premises of the society in which they were operating. One of the reports contains a survey used to gather information on the activities of women in one part of Chilalo. In one of the questions, the women were asked to indicate how long they cooked certain common

521 Dagnatchew Yirgou et al., "Final Report," 18.

⁵²² Harald Linder, "En biståndsarbetares vedermödor," SLU-ringen 6, no. 4 (1983): 20-21.

⁵²³ Harald Linder, "Brev från Harald Linder," *Axplock: Lantbrukshögskolan informerar*, p. 4, March 1971, AC-SS, series Ö1, vol. 2.

⁵²⁴ This is summarized in Hanna Kebede, *Home Economics Extension Study* (Asella: Chilalo Agricultural Development Unit, 1975).

foodstuffs: "Not at all," "To boiling point," "1–10 min," "10–20 min," or "More." That counting time in minutes was a central organizing principle of most activities for the Western or educated Ethiopian person evidently obscured the fact that few rural women owned watches or, even if they did, would not time their cooking and thus could not answer this question in the way intended by the survey's designer. Et is a good example of how centrist biases, in this case likely also shaped by gender biases, limited what could be learned and how that knowledge could be used.

Rural Transformation in Practice

Experimentation, marketing, extension and credit constituted the core of CADU's efforts to transform Chilalo agriculture, much as had been envisioned by its creators at the Agricultural College. 527 After two years of these activities, CADU was evaluated by a team of experts appointed by SIDA and the Ethiopian government. The evaluation was generally favorable and recommended a geographical expansion of the project, though it noted that the project had had difficulty in achieving its social mobilization objectives. One of the Ethiopian-appointed experts, Professor Brana Milosavljevic, was particularly critical in this respect and noted that it would be impossible for a "production-oriented project such as CADU, under what might be described as the paternalistic control of agricultural technicians," to stimulate the local population's ability to participate in a development project.⁵²⁸ What Milosavljevic referred to here was not participation in the narrow sense of taking advantage of what the project offered but in the broader sense of participation in processes of social change. He suggested, ultimately, that CADU's methods and goals were incompatible; that the technocentric approach concerned primarily with the economic effects derivable from the project's research, extension, and credit facilities would not lead to the desired local empowerment in Chilalo.

Milosavljevic was more or less correct in this regard. CADU's promotion of participation struggled in the face of a hostile political environment. Its management had come to distrust the conservative local government officials

⁵²⁵ Chilalo Agricultural Development Unit, *CADU Evaluation Studies: Women's Extension* (Asella: Chilalo Agricultural Development Unit, 1970), Appendix 2, 6.

⁵²⁶ As pointed out in a later project report: Hanna Kebede, *Home Economics*, 5.

⁵²⁷ Complementary activities included education as well as activities linked to the project but under the auspices of the interministerial committee that supervised the project, such as the construction of roads. See Cohen for a more detailed account.

⁵²⁸ "Preliminary Report of the Appraisal Team on the Chilalo Agricultural Development Unit CADU," p. 30, November 1969, SIDA, series F1 AB, vol. 777.

and attempted to isolate the project from them as much as possible. 529 These officials, for their part, tended to see CADU as a threat to their own power base and could, together with other local elites, discourage smallholders from participation.⁵³⁰ The estrangement from large swaths of the local community is well illustrated by the failure of the awraja development committee, an organ intended to facilitate dialog between the project and its environment. Most local interests were represented on the committee, which consisted of the "awraja governor, the mayor of Asella, the governors of woredas [awraja subparts] in the project area, the provincial education officer, health officer, agriculture officer, and land reform officer, the executive and assistant executive directors of CADU, representatives of farmers in each of the six extension areas, and representatives of the major area businessmen and landowners."531 But this broad representation was itself a reason for the committee's failure. Cohen notes how, when the committee first met in early 1969, it became obvious that "its members varied considerably in terms of status and power," something that "inhibited discussion." The farmers' representatives were in fact hesitant even to speak, not to mention put forward criticism, in the presence of elites. Thus the meeting led to nothing, and no further meetings were held.⁵³² This failure is somewhat ironic given that the planning documents attached considerable importance to good relations with local officials. As it turned out, CADU's best relations in Ethiopian politics were with Tesfa Bushen and a few other high-ranking central government officials in Addis Ababa (notably Belay Abal and Baleba Demeksa),⁵³³ while the local government turned out to be largely in the hands of the social and economic elite and became seen by the project as something best avoided. In the end, much of the coordination between CADU and the local administration had to go through Addis Ababa.534

Though the project had good connections in the national government and the project's promoters in Sweden tended to emphasize its role as a progressive force in Ethiopian politics, there was in fact little headway being made on tenancy or land reform legislation. ⁵³⁵ While the Ethiopian government had

⁵²⁹ Nekby, CADU, 83-85.

⁵³⁰ Seleshi Sisaye, Development Aid, 162.

⁵³¹ Cohen, Integrated Rural Development, 114.

⁵³² Cohen, *Integrated Rural Development*, 114; Peter Wallensteen, *CADU - Ett biståndsprojekt: Nio problem ur ett utvecklingsprojekts historia* (Stockholm, 1975), 7–11.

⁵³³ Bengt Nekby, "Start Up and World Bank Perspective," U-Lantbruk, no. 2 (1989): 6.

⁵³⁴ Seleshi Sisaye, *Development Aid*, 162. Seleshi draws on correspondence between CADU and the Ethiopian Ministry of Agriculture, an interesting material that I have not had access to.

⁵³⁵ On the belief in the project as a progressive force, see Forsse to Hans Wetterhall, 15 February 1968, SIDA, series F1 AB, vol. 773.

issued a proclamation of its intention to reform tenancy laws and to make other changes with regards to land ownership and distribution, little of this had actually taken place. When the first three-year agreement on CADU neared its expiry date and negotiations started about a five-year extension, this lack of a proven willingness to reform made the future of the project uncertain. The Swedish side was particularly concerned about the lack of progress on new tenancy legislation, which was considered a precondition for reaching the large tenant population in Chilalo.

Part of the problems of reaching a new agreement resulted from the fact that the social consequences of agricultural development were more acute issues in 1970 than they had been when the project was planned. The context of the new negotiations was thus different from when the project's principal guidelines had first been drawn up by the experts from the Agricultural College. They had acknowledged the need for reform but had put most of their efforts into their own areas of expertise, a prioritization they shared with most agricultural development expertise at the time. In 1970, Erich Jacoby, who had headed FAO's Land Reform Branch from 1951 to 1967, was interviewed in a SIDApublished magazine. Jacoby criticized FAO for not having succeeded in integrating technical and social aspects of development during the 1950s and 1960s and generally for prioritizing technical factors while, for political reasons, being "very afraid of touching upon the whole problem of income distribution."536 Jacoby was an important authority, who after his time at FAO had moved to Gunnar Myrdal's Institute for International Economic Studies at Stockholm University (as discussed above, Myrdal himself strongly emphasized the social and institutional dimensions of agricultural development).

Though directed at FAO, it would have been clear to all involved that parts of Jacoby's criticism applied to CADU as well (the editors of the SIDA magazine had, rather pointedly, put the interview with Jacoby on the same page spread as a full-page photograph of grazing animals in Chilalo). This is not to say that everybody fully shared his views, but to suggest that the matter could not be avoided and thus that it would be politically difficult for SIDA to sign a new agreement with the foot-dragging Ethiopian government. This was further exacerbated by the fact that the Swedish Ministry for Foreign Affairs had established a new department for development aid, staffed to a large extent

⁵³⁶ Karin Himmelstrand, "FAO, en opolitisk organisation i en politisk verklighet: Erich Jacoby intervjuas av Karin Himmelstrand," *Rapport från SIDA* 1, no. 7–8 (1970): 8. Jacoby also mentioned that FAO's long-term plan for agricultural development included a good chapter on land reform, but that the analysis presented in the chapter had not had any impact on the report as a whole. This is an interesting parallel to the June 1965 report from the agricultural group, which included a paragraph on property conditions without integrating that factor into the rest of its arguments.

by younger and more radical diplomats hostile to Sweden's provision of aid to such a distinctly non-progressive regime as Haile Selassie's. 537

In the end, Sweden agreed to a six-month temporary extension, at the end of which its support would be withdrawn if the Ethiopian government had not made tangible reform progress. Further activities by the Ethiopian government in late 1970 were however received positively by the Swedish negotiators, and CADU was eventually extended through 1975, on the condition that reform progress continued. Point 2 of Article VI of the new agreement explicitly made this a responsibility of the Ethiopian government:

In support of but not included in the Project, the Imperial Ethiopian Government shall carry out as specified in the Plan of Operation agricultural tenancy and other land reform measures and undertake or cause to be undertaken such other measures as are essential prerequisites for the accomplishment of the purpose of the Project. In particular, the Imperial Ethiopian Government shall start the implementation throughout the Project Area of agricultural tenancy legislation not later than one year after its promulgation.⁵³⁹

Sweden thus formally predicated its support for CADU during the period of the second agreement on an Ethiopian commitment to tenancy and land reform. In fact, little progress would be made before the revolution in 1974. A limited bill on agricultural tenancy reform made it to the Ethiopian parliament but no further. SIDA, however, never exercised its possibility to withdraw Swedish funding, for reasons not explored here.

Another part of the friction over the extension had to do with the fact that by 1970 experiences from Chilalo had further heightened awareness of the need for reform. In the early 1970s, a local agrarian revolution was taking place in the area and CADU was its driving force. Contemporaneous accounts make it clear that it was visibly apparent that Chilalo was rapidly changing. In a 1970 article in the Agricultural College's staff magazine, Swedish CADU employee Martin Wik described the return to the *awraja* (after vacationing in

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⁵³⁷ Cf. Anders Forsse's bemused recollection of the young aid radicals and the havoc they wrought on Michanek's political platform in Forsse, "Ämbetsman i biståndet," 66–67. See also the memoirs of the State Secretary for Foreign Affairs, in which he discusses these changes under the heading "[19]68 under the Chandeliers": Sverker Åström, Ögonblick: Från ett halvsekel i UD-tjänst (Stockholm: Bonnier Alba, 1992), 142–54.

⁵³⁸ Anders Forsse, "Redogörelse till Utrikesdepartementet för CADU II-förhandlingarna i Addis Abeba maj-juni 1970"; Forsse to Carl Bergenstråhle (telegram), 11 June 1970; Bergenstråhle to Forsse (telegram), 28 July 1970, all in SIDA, series F1 AB, vol. 778.

⁵³⁹ "Agreement," p. 5, 31 December 1970, SIDA Development Cooperation Office in Ethiopia, series F71, vol. 3, National Archives of Sweden (hereafter cited as SIDA-ETI).

⁵⁴⁰ Bahru Zewde, History of Modern Ethiopia, 195.

Sweden) as going back to an area moving forward amid Ethiopia's general poverty and stagnation:

We were not very happy when we thus reacquainted ourselves with Addis Ababa. We suddenly saw everything clearly again. The dirt and the poverty hit us with almost the same withering force as the time when we first set foot on Ethiopian soil. . . . We enter Chilalo. Something has happened here. The road is lined with undulating wheat fields. Just maybe! Our spirits rise. Kilometer after kilometer. We pass Kulumsa. The maize stands tall and fine. We stretch our necks. Yes, the fodder beets look like they should. So last year's astounding results were no coincidence.

Asella town usually makes no one happy. Most of it is much the same, yet something has happened. There is eager digging on both sides of the road. A store of pipes confirms the thought. The Asella residents will finally be rid of having to fetch their water from the polluted little brooks that meander among the chicka houses.⁵⁴¹

The "undulating wheat fields," which to Wik represented some of CADU's achievements, did indeed signify important change. Wheat was the crop that CADU's crop production department had been the most successful at adapting, and the area under wheat cultivation in Chilalo was steadily increasing. The number of farmers taking part in the credit scheme increased as well. By 1971, the project reached 25% of its target population, and those participating stood to significantly increase their harvests and incomes.⁵⁴² But the benefits did not always reach the intended target group of low-income farmers. For by the early 1970s, the tenancy conditions and social relations of rural Ethiopia had clearly begun to shape the effects of the project's interventions, just as Ståhlberg and the early anthropological studies had predicted. While incomes were up across the population, the distribution was skewed, with large farmers' incomes increasing much faster. 543 One reason had been recognized all along: the poorest farmers were generally sharecropping tenants with little incentive to increase their production. Another reason was that it was easier and less risky for more prosperous farmers to experiment with the increased farming complexity brought on by CADU's innovations.

Most crucially however, the aforementioned alienation from the local structures of power meant that the project's effects were shaped by a social environment that it had little power to influence. The prevailing patron-client relations, rigid social structures, and prolandowner policies of local officials all

⁵⁴¹ "Utdrag ur brev till konsulentavdelningen från statskonsulent Martin Wik," *Axplock: Lantbrukshögskolan informerar*, p. 13, November 1970, AC-SS, series Ö1, vol. 1.

⁵⁴² Cohen, "Effects of Green Revolution Strategies," 340.

⁵⁴³ Cohen, Integrated Rural Development, 112–13.

tended to steer project benefits disproportionally toward the larger farmers and the local elite.⁵⁴⁴ In the clear-cut language of agricultural economist Winfried Manig's analysis of the project, "[t]he productivity growth achieved by utilizing modern technologies was redistributed along the lines of existing societal modes of distribution."545 This problem was not unique to CADU but was a more general problem of the Green Revolution. For example, the situation in Chilalo bears clear resemblance to Harwood's conclusions about the Mexican Agricultural Program (MAP), one of the early Green Revolution projects from the 1940s.546 MAP's agronomists developed cultivars welltailored to the Mexican environments, and initially wanted to promote these among small-holding farmers. But the project lacked a good knowledge transfer mechanism and MAP's staff was eventually pressured into adjusting their breeding work with the goal of rapid uptake in mind. This brought with it a shift toward a focus on large-scale farming. CADU did not experience such a shift, but the basic tension was the same. In Chilalo as in Mexico, it was easier for larger farmers to experiment with agricultural innovations.

That the project found it difficult to reach its primary target group was a serious problem in itself. But a more sinister process that would come to seriously damage the project's external reputation was also well under way: a large number of tenants had been evicted from their land by landowners to whom CADU had made it abundantly clear that modern agriculture, in particular in its mechanized form, could be a profitable commercial endeavor. The development was aggravated by the fact that the Ethiopian government supported landowners who wanted to mechanize agricultural operations on their holdings.⁵⁴⁷ The Second Ethiopian Five-Year Development Plan, in effect from 1962 to 1967, stated that "[t]he Government will help and stimulate, by all convenient economic measures, the establishment and development of big private commercial farms." These measures included tax exemptions, credit on favorable terms and access to government land. 548 They had helped bring about a new group of landowning entrepreneurs interested in large-scale commercial agriculture, which they wanted to undertake themselves, in contrast to the traditional absentee landlords, who were content with extracting rent from their tenants.⁵⁴⁹

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⁵⁴⁴ All these constraints are discussed extensively in Cohen, *Integrated Rural Development*, chapter 5.

⁵⁴⁵ Winfried Manig, "'Green Revolution' Technologies Reconsidered: Another View; The Ethiopian Example," *Africa Spectrum* 24, no. 3 (1989): 281.

⁵⁴⁶ Harwood, "Peasant Friendly Plant Breeding."

⁵⁴⁷ Cohen, *Integrated Rural Development*, 125–27.

⁵⁴⁸ Cited in Wallensteen, CADU, 5-2.

⁵⁴⁹ Getnet Bekele, "Food Matters," 49.

The scale of the evictions in Chilalo became apparent to SIDA and the project through a study by Henock Kifle at CADU's planning and evaluation department, made available by the project in August 1970 (before the new five-year agreement had been signed). A cover letter to the study by CADU's new executive director, Paulos Abraham, expressed concern about developments in the project area:

As you can gather from this study, mechanization has taken place at a fast rate especially during the last three years; CADU as an agent of improved practices seems to have contributed to the process; the process seems likely to continue. The consequence of primary concern to CADU are [sic] the likely effects on tenants, the worsening of the terms of contract for tenants and increased skewedness of income distribution. ⁵⁵¹

SIDA took Henock's findings seriously. At a follow-up meeting, all present considered the contents of his report "very serious" with regard to the future of CADU. A number of mitigating strategies were discussed, including the hiring of evicted tenants by CADU and the suggestion that the project might itself lease land from absentee landlords, and then, in turn, lease this land to some of those evicted.⁵⁵² Mitigation strategies were also eventually implemented, and most likely had some positive impact, though Cohen suggests that none was fully successful. Evictions continued in areas affected by the project until the revolution.⁵⁵³

In his dissertation, Seleshi Sisaye raises the important question of whether the evictions or other socioeconomic problems related to CADU were foreseen by the project planners. He argues that "examination of the internal correspondence and interviews with people who were actively involved in the project planning and administration made it clear that eviction [sic] was not anticipated in advance."554 In contrast, the internal correspondence and working material I have examined for this study show that it was repeatedly pointed out during the planning stages that tenant evictions would be a likely consequence of productivity-stimulating interventions in Chilalo agriculture, unless these interventions were preceded by land and/or tenancy reforms. My conclusion is that although the planners and managers could not officially admit it, they must have considered the risk of a

⁵⁵⁰ Paulos Abraham to Lars Leander, 18 August 1970; Henock Kifle, "Preliminary Investigations on Mechanized Farming and Its Effects on Peasant Agriculture," both in SIDA, series F1 AB, vol. 778.

⁵⁵¹ Paulos to Leander, 18 August 1970, 1, SIDA, series F1 AB, vol. 778.

⁵⁵² Lars Leander, "Anteckningar från sammanträde på SIDA den 10.9.1970 beträffande rapport från CADU: Preliminary Investigations on Mechanized Farming and Its Effects on Peasant Agriculture by Henock Kifle," SIDA, series F1 AB, vol. 778.

⁵⁵³ Cohen, Integrated Rural Development, 127–29.

⁵⁵⁴ Seleshi Sisaye, Development Aid, 164.

certain number of evictions acceptable (if unfortunate) in light of the greater good the project was assumed to bring. Perhaps this was still a sensitive issue for SIDA in the late 1970s, when Seleshi performed his research.

Seleshi also presents a second conclusion: that no one at SIDA or none of the planning staff had expected CADU to make such a noticeable impact so quickly. I believe this is correct. The *scale* of the eviction problem came as a surprise and caused genuine and serious concern among project managers and SIDA staff. The evictions also turned the project into a politically sensitive matter, as they began to take place at a time when the question of what sort of societies Swedish aid should support, and whether there were more palatable candidates than Haile Selassie's stagnating empire, was increasingly being discussed.

The Appropriation of Project Knowledge

One reason why CADU's planners and managers were surprised by the project's impact is that they underestimated the ability of actors in Chilalo to appropriate project knowledge. The mechanized operation of the project's experiment and seed production farm at Kulumsa is a case in point. According to Cohen, Kulumsa was a main source of inspiration to many of the landlords who evicted tenants.⁵⁵⁵ Its development into a Western-style farm had been deemed necessary for the project's purposes: in a trip report by the Agricultural College's Ewert Åberg, in which he detailed his travels through the project area in late 1966, his view of the matter is clear:

With the current agricultural operations at the [Kulumsa Seed Improvement Station], the present resources are not utilized. The crop rotation needs to be radically changed. In conjunction with this, managers with good practical experience are needed, such as agricultural managers with experience of intensive operations in Swedish agriculture. . . . It seems however possible that the farm could be developed into a seed production farm if measures for a rational agricultural operation are taken. ⁵⁵⁶

However, the discussion about the project's need for a rationally organized seed production farm apparently did not consider the possible knowledge transfer effects of operating a farm according to a Western model of mechanized farming in the project area, especially in an Ethiopian context where government subsidies were available for mechanization.

As Michael Ståhl has pointed out, there was also a deeper contradiction at play here: all of CADU's attempts to support small-farm agriculture were embedded in

⁵⁵⁵ Cohen, Integrated Rural Development, 125-27.

⁵⁵⁶ Ewert Åberg, "Rapport över resa den 25 oktober – 12 november 1966 för utredningsarbete rörande det regionala utvecklingsprojektet i Etiopien," p. 6, 4 January 1967, SIDA, series F1 AB, vol. 770.

a political environment where large-scale commercial farming was simultaneously encouraged by the Imperial government.⁵⁵⁷ The project planners underestimated the implications of this contradiction. This conclusion can be stated more generally: they underestimated the extent to which Chilalo society could shape the project's effects because (in spite of their commitment to peasant agency) they did not fully grasp that this society was full of actors who could appropriate project knowledge in their own ways and for their own purposes. This top-down bias reflects the conditions of the project's initial conception at the Agricultural College, where, as noted, there was little research in fields such as rural sociology, history, or anthropology. The underappreciation of the agency of actors in Chilalo society is well illustrated by the fact that while the project's strategy largely rested on the power of the model, with an elaborate system of extension agents and model farmers created to disseminate knowledge among the peasants, no one seems to have considered that the example of Kulumsa could likewise work as a model for an audience of larger landowners.⁵⁵⁸ As a consequence of this underappreciation, the Swedish experts had not prepared for what in fact happened: CADU became involved in a rural transformation process that increased social tensions and became devastating for a significant number of tenant farmers in Chilalo.

This point is also perhaps the most significant instance in this dissertation in which my use of Swedish sources limits my analysis. It would have been very interesting to gain more detailed insight into Ethiopian agency with regard to the knowledge offered by, and represented at, CADU; to study how different actors in Ethiopia understood and related to the project and what purposes they thought it could serve for them. It is clear that different parts of the project were actively appropriated in different ways by different actors, and studying this would have brought me closer to a reciprocal understanding of CADU and what it meant in the setting in which it was situated. Further research contrasting my views on the Swedish expertise with an analysis of CADU from an Ethiopian perspective would be very welcome, in particular in relation to the ensuing revolution which partly originated and fed on rural tensions, including in Chilalo (see below).

As knowledge of the evictions and their links to CADU spread, the debates about the project became increasingly polarized. Those who emphasized the technical side and focused on quantitative measures such as the number of farmers reached, agricultural yields, or average household incomes saw the

⁵⁵⁷ Ståhl, Ethiopia, 105.

⁵⁵⁸ At least I have found no evidence of such considerations in the archives. The project preparation team's Report No. I did note (p. 247) that it would be unsuitable to demonstrate the project's experimental farms to farmers as they would not be able compare what was being done there to their own work, but did not extend this line of thought to consider whether there were other people in Chilalo who would be able to make such comparisons.

project as a great success, if with some inadvertent side effects. 559 Most SIDA decision-makers as well as the project's planners at the Agricultural College belonged in this camp. On the other hand, those who factored in social equity as a measure of success tended to have attitudes ranging from hesitant to denunciatory. The fiercest criticisms came from leftist radicals who understood CADU as doing little but promoting private ownership and increasing social disparities.⁵⁶⁰ In a review of Bengt Nekby's book on CADU for the socialist periodical Kommentar, economist Anders Sjöberg even claimed that the real if secret—goal of CADU was to accelerate Ethiopia's transition to capitalism by mechanizing agriculture and contributing to the creation of a landless proletariat available for industrial labor.⁵⁶¹

My study provides little empirical support for Sjöberg's Marxist analysis of CADU's ultimate goal, 562 but it still draws attention to an important point. Even if we assume that CADU had no hidden agenda, it still proved beneficial to those Chilalo landowners who had an interest in mechanized agriculture, though this was never a project goal; it likewise proved disastrous for those tenants who were evicted, even if they were part of the group of smallholding Chilalo farmers whom the project was intended to empower. Secret agendas are not needed to explain the fact that complex projects such as CADU generally accomplish a variety of things, many of which often go well beyond the intentions of the designers.⁵⁶³ In this case, a small-holder-focused project was inserted into a sociopolitical setting supportive of large-scale farming and, as a consequence, came to function as a much broader knowledge transfer instrument than had been intended; came to serve more interests than those envisioned. The chief value of Sjöberg and his less extreme comrades' criticisms lay in their drawing attention to this, and in their consequent analyses of how the design of the project's interventions shaped who was able to benefit.

⁵⁵⁹ Cohen, Integrated Rural Development, 137.

⁵⁶⁰ See, e.g., a couple of articles published in the socialist periodical *Kommentar* in 1970: "Bistå folket, inte förtryckarna," Kommentar, no. 4-5 (1970); Elisabeth Hedborg and Agneta Lind, "Svenskt jordbruksbistånd till Etiopien ökar produktionen och vidgar klyftorna," Kommentar, no. 4-5 (1970); Clas-Örjan Spång, "Varför kommer bara Etiopiens överklass att tjäna på en modernisering av jordbruket?," Kommentar, no. 4-5 (1970).

⁵⁶¹ Anders Sjöberg, "Svenskt jordbruksprojekt stöder jordägarna - lantarbetarna proletariseras," review of CADU: Etiopisk utmaning, by Bengt Nekby, Kommentar, no. 5-6 (1972).

⁵⁶² Here it is however of some importance that my study does not engage with Ethiopian reasons for inviting the Swedish expertise. While it seems far-fetched to believe that the Agricultural College or SIDA had this sort of political interest in Ethiopia, it is a more credible hypothesis that there were interests in Ethiopia that saw foreign expertise in this light. See the discussion in Ståhl, Ethiopia, 97-98.

⁵⁶³ Cf. the historiographical argument by Suzanne Moon about the need to move beyond failure narratives toward asking questions about "what [a technology] accomplishes in a given setting." Moon, "Place, Voice, Interdisciplinarity," 199.

The merits of this argumentation were not always recognized by the project's defenders, such as Lennart Hjelm. He toured Chilalo in 1971 and then wrote a travel report to SIDA that downplayed the evictions and CADU's causal role in the ongoing rural transformation:

An earlier investigation has showed that some landowners now terminate tenancy agreements and go on to run their own agricultural operations. This would, however, only affect some one hundred tenants. [The project] intended to further study this development, which probably would have taken place without CADU since fertilizer, seed and machinery can easily be bought and utilized with good economic benefit. Through CADU the technological advances can instead also be used by small farmers, who, moreover, have received stable marketing conditions. CADU has also convinced many landowners to establish contracts with their tenants and improve the tenancy conditions. ⁵⁶⁴

Hjelm's suggestion that the number of evictions was limited to a hundred tenants is remarkable, given that CADU's own estimates indicated well over four hundred evictions in 1969 and 1970 alone. This number also continued to increase, though it is impossible to judge how many of these evictions would have taken place also in the absence of the project. The experiences from Chilalo had thus done little to make Hjelm reconsider the development strategy he had promoted. In fact, he was ready to take serious liberties with statistics in order to defend it, perhaps because he considered this necessary for the ongoing evolution of the Agricultural College, or because he genuinely believed in CADU as a force of good in the long term—or possibly for personal reasons, as the project, at least in certain circles, was closely associated with his name.

Hjelm continued his defense of the project by lambasting, in his characteristically acerbic fashion, those who saw fit to criticize CADU while themselves lacking all agricultural experience:

It is naive and unfair to claim that CADU has strongly stimulated [the commercialization of Ethiopian agriculture]. The ignorance exhibited by a number of Swedish youth, journalists and even visiting administrators and members of parliament could perhaps be excusable, were it not for the fact that they propagate these falsehoods in contexts of significance. They very confidently pronounce on agricultural matters while never having had any practical or theoretical contact with the field and despite never having caused a single seed to sprout. 566

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 $^{^{564}}$ Lennart Hjelm, "Rapport från besök i Etiopien 3 – 14 februari 1971," 4, SIDA, series F1 AB, vol. 802.

⁵⁶⁵ Kifle, "Preliminary Investigations on Mechanized Farming," 10.

⁵⁶⁶ Hjelm, "Rapport från besök i Etiopien," 5.

Hjelm also stood by these points publicly. He reworked the travel report for a general audience and published it in the major daily newspaper *Svenska Dagbladet* as a contribution to the by-then quite heated public debate about CADU and Swedish aid to Ethiopia in general.⁵⁶⁷

It must be acknowledged that while he grossly underestimated the number of evictions in his efforts to defend the project, Hjelm still had some good points. He was right in suggesting that CADU had helped many small farmers, both tenants and freeholders, to gain access to new technology and stabler marketing conditions. He was also correct in pointing out that outside the project, few institutions in Ethiopia cared for peasants and their interests. Even so, it is still easy to read Hjelm's defense of the project, complete with a statement implying that only the opinions of those with agricultural experience carry any weight, as unwitting evidence of the socially blind technocracy the project was accused of being based on. He ignored—intentionally or not is hard to tell—the most crucial aspect of the debate, which was less about the causal effects of CADU as such, and more about the significance of a Swedish aid project being inadvertently drawn into and partly accentuating a rural conflict in which many poor farmers did in fact suffer.

But even though CADU's planners underestimated the rural tensions in Chilalo and how they would shape the results of the project, CADU did not create these tensions, nor can it be said to have directly caused any rural transformation by itself, except in some very particular and localized situations. And it is clear that CADU had a positive impact in Chilalo as well, as it gave many poor farmers an opportunity to improve their fortunes. The importance of the project's demonstration of how food production could be increased in a national setting where, to use Cristopher Clapham's words, "the relationship between food production and death by starvation is brutally clear," should also not be underestimated. One can turn here to the concept of friction, as employed by Anna Lowenhaupt Tsing. She uses it as a metaphor for what can happen when knowledge moves between different contexts, and it is meant to signify that such movement has constructive as well as destructive potential. Both forms were realized when the development strategy devised at the Agricultural College was put to use in Chilalo.

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⁵⁶⁷ Lennart Hjelm, "Jordbruksutveckling i Etiopien," Svenska Dagbladet, 16 April 1971.

⁵⁶⁸ For example, project road construction apparently opened up some new areas for mechanization, which then led to more tenants risking eviction. Cohen, *Integrated Rural Development*, 128.

⁵⁶⁹ Christopher Clapham, "The Modes-of-Production Debate in Ethiopian Agriculture," review of *Integrated Rural Development*, by John M. Cohen (and several other works), *Africa: Journal of the International African Institute* 58, no. 3 (1988): 365.

⁵⁷⁰ Lowenhaupt Tsing, Friction.

CADU in Context

From its inception, one of CADU's goals had been to verify methods of agricultural development. As it proved very successful in increasing agricultural production, its core activities—credit provision and the demonstration of new inputs—were extended across Ethiopia in the early 1970s, in what was called the Minimum Package Program (in contrast to CADU, which with its plethora of activities was seen as the maximum package for rural development). The Minimum Package Program was linked to the creation of the Ministry of Agriculture's Extension and Project Implementation Department (EPID), itself a project with links to the Agricultural College. The SIDA-supported EPID aimed to strengthen the administrative capabilities of the Ethiopian Ministry of Agriculture, and it oversaw the implementation of the Minimum Package Program. I will not elaborate further on this here, but it is relevant to this dissertation, and to the historical record, to note the Ultuna connection: EPID, originally named the Agricultural Services Unit, was largely designed and set up by Nekby and another of Hielm's students, Nils-Ivar Isaksson, with Hjelm himself lobbying for the project in Sweden. During the early 1970s debate on Swedish aid to Ethiopia, Hjelm wrote a letter to the SIDA board of directors in which he argued in his familiar exasperated style that the Agricultural Services Unit was necessary to complete the work started by CADU, and that taking the "inexplicable" decision to cancel the planning would be a "considerable waste" of resources.⁵⁷¹

Though it initially had been hesitant about CADU's goals, once in operation the Ethiopian government thus ostensibly supported the project and its extension across the country. CADU was regularly praised in the government's English-language organ, the *Ethiopian Herald*, and was often shown to visiting foreign dignitaries, both heads of state and powerful development figures, including the director of the World Bank and former US Secretary of Defense. Robert McNamara. Haile Selassie himself also went to see the project on more than one occasion. But an incident in conjunction with an imperial visit in 1971 betrays that fundamental tensions still existed over the project's function and purposes. In preparation for the visit, Swedish ambassador Carl Bergenstråhle had prepared an address to the emperor. After submitting it to the Ethiopian Ministry of Agriculture for comments, Tesfa Bushen strongly recommended him to delete an offending passage. The passage, which both Tesfa and the minister of agriculture deemed wholly inappropriate to publicly put to Haile Selassie, dealt with the imperative to improve the conditions of the common man who "works in the fields." Bergenstråhle relented and wrote a new speech,

⁵⁷¹ Hjelm to the Board of Directors of SIDA, 16 February 1971, SIDA, series F1 AB, vol. 779.

but also sent a report to Stockholm in which he suggested that he considered Tesfa's reaction exaggerated and to which he added the handwritten comment that, for his part, he did not think the emperor would have been disturbed by the original passage.⁵⁷²

I cannot judge Bergenstråhle's knowledge of court protocol, but his report to Stockholm betrays the limited insight he seemingly had into the sore spots of Ethiopian politics and CADU's position in intra-Ethiopian conflicts. For one thing, increasing land alienation and other forms of socioeconomic pressure on peasants had given rise to a series of rural rebellions in Ethiopia since the end of the Italian occupation. A new uprising had taken place in Wollo province as late as 1970, directly linked to the introduction of mechanized farming. 573 Furthermore, political tensions were generally rising at the time, and rural issues played a major part. The most important opposition to the regime came from the radical student movement, centered at the Haile Selassie I University in Addis Ababa. It was growing into a revolutionary mass movement, and the government employed increasingly violent methods in its attempts to repress it. Land reform and peasant empowerment were core issues for the students who had promoted them since the mid-1960s under the slogan "land to the tiller." 574 Bergenstråhle's intended comments about the common peasants thus touched on issues much too sensitive to belong in a ceremonial address like the one he was to give.

CADU, of course, focused its work on peasants, and this meant that it was becoming both an object and a subject of the political tension. The student movement was generally critical of CADU, seeing it as a government project that favored private interests at the expense of tenants and the most disenfranchised of the rural poor. Within CADU itself, many of the Ethiopian staff opposed the prevailing order as well, though they rather tended to view the project in a similar way to some at SIDA: that it in fact did not reinforce existing power relations but could help bring about the necessary conditions for change. The his regard, the project increasingly differed from other projects employing Green Revolution techniques, many of which were guided by a technocratic vision of problems solvable without political intervention.

⁵⁷² Carl Bergenstråhle to Lennart Klackenberg, 3 November 1971, SIDA, series F1 AB, vol. 780.

⁵⁷³ Bahru Zewde, *History of Modern Ethiopia*, 215–18.

⁵⁷⁴ Bahru Zewde, *History of Modern Ethiopia*, 220–26.

⁵⁷⁵ Cohen, *Integrated Rural Development*, 136–37.

 $^{^{576}}$ Johan Holmberg (interview by author, 29 October 2013), who worked at CADU in the early 1970s, recalled that many of his Ethiopian colleagues had held this view.

⁵⁷⁷ "Promoters of the Green Revolution," write historians of science Alexis De Greiff A. and Mauricio Nieto Olarte, "assumed that a technical solution could solve deep social problems such as

have discussed above, CADU's development strategy certainly put primacy on technical factors, but the Swedish aid administrators and diplomats' push for social and legal reform in conjunction with CADU and, particularly, the Agricultural College's strategy of focusing on poor peasants helped create conditions for a radicalization of the project (cf. figure 15 below), another thing that the Swedish ambassador perhaps ought not to remind the emperor of in public. The radicalization especially came with the rapid Ethiopianization during the second project period. Nekby stepped down at the end of 1970 and was replaced as executive director by first Paulos Abraham and then Henock Kifle. 578 The latter became involved in drafting plans for a rural land reform while directing CADU, and was at the center of a controversy that engulfed the project in the final months of Haile Selassie's rule as a coalition of landlords engaged in a struggle against him and the project.⁵⁷⁹

The rising rural tensions, of which CADU had become a part, contributed to the further mounting of political pressures in Ethiopia as the 1970s progressed. The military conflict in Eritrea (where an independence movement had arisen after its post-war federation with, and later annexation by, Ethiopia), the government's inept handling of the catastrophic famine in the Wollo province in 1973, and the increasingly active and uncontainable student movement added further fuel to the fire. Eventually, the situation overtook the octogenarian emperor, who had lost touch with political developments and was unable to maintain the balance of power on which his position rested. In 1974, a coup d'état deposed Haile Selassie and ultimately led to a new socialist and Soviet-backed military regime. This meant that the social and political conditions that had shaped CADU's activities and effects were overturned. The military junta, known as the Derg, was not hampered by any of the connections to the feudal elite that had prevented the imperial government from implementing a land reform. In early 1975, the military government thus abolished private ownership of land and allotted up to ten hectares to

land distribution and the exploitation of the work force." De Greiff A. and Nieto Olarte, "South-North Technoscientific Exchange," 250; see also Harwood, Europe's Green Revolution, 115.

⁵⁷⁸ The pattern was similar throughout the project, with forty Swedes in senior positions in 1968 being reduced to five in 1974. The total number of contract staff was around a thousand, complemented by another thousand daily laborers. Cohen, Integrated Rural Development, 80.

⁵⁷⁹ The political tensions and struggles that arose around CADU at the end of the emperor's reign have not been part of my analysis, but are discussed in a fairly recent master's thesis from Ethiopia: Tariku Degu, "Transformation of Land Tenure and the Role of Peasant Associations in Eastern Arsii (1974–1991)" (MA Thesis, School of Graduate Studies, Addis Ababa University, July 2008), 23-32, http://etd.aau.edu.et/bitstream/123456789/6712/1/1.%20Tariku%20Degu.pdf. See also Andargachew Tiruneh, The Ethiopian Revolution, 1974-1987: A Transformation from an Aristocratic to a Totalitarian Autocracy (Cambridge: Cambridge University Press, 1993), 99-100.

cultivators. CADU was expanded to cover all of Arussi—renamed Arsi—province and then became known as the Arsi Rural Development Unit (ARDU). The new political and property regimes meant that the conditions under which ARDU operated, and the tasks it had to fulfill, were very different from CADU,⁵⁸⁰ and an analysis of ARDU and SEAD, as the final incarnation of the project was known, is beyond the scope of this book.⁵⁸¹



Figure 14. CADU crop production expert Dagnatchew Yirgou demonstrates an experimental plot to H.I.M. Haile Selassie, who is accompanied by his dog, Lulu. Photographer unknown.⁵⁸²

Bringing Ultuna to Addis and Arussi

The Agricultural College's integrated development and technology transfer strategy was characterized by a strong commitment to the application of agricultural science to the problem of developing agrarian societies. It was founded on a conception of applicable knowledge as highly localized, and so the project aimed to adapt knowledge to contexts rather than contexts to knowledge. When it became the basis of an actual development effort in

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⁵⁸⁰ The new regime, infamous for its bloody purges, had a direct impact on many of CADU's Ethiopian staff. Dagnatchew Yirgou briefly became Minister of Agriculture but later disappeared and is presumed to have been murdered. Tesfa Bushen narrowly escaped the same fate. Bengt Nekby's successors as project director, Paulos Abraham and Henock Kifle, were given top government positions, but both eventually left Ethiopia, as did many other CADU-trained officials. Nekby, "Margareta och Bengt," 8:90; Nekby, "Start Up and World Bank Perspective," 6.

⁵⁸¹ For information on project developments after 1974, see Cohen, *Integrated Rural Development*, chapter 6.

⁵⁸² From Ulf Renborg, Birger Granström, and Nils-Erik Kasberg, eds., *Lantbrukets högskola 50* år: *Utbildning, forskning, försök, information 1932–82* (Uppsala: Swedish University of Agricultural Sciences, 1982), 61.

Ethiopia, its planners and managers also paid attention to the characteristics of local societies and local farming practices, and they ensured that the project would have a built-in evaluation section to provide continuous self-reflection and method development. But for all the attention to the local, the planner's perspective was limited by certain technocentric biases that came with their background as experts in agricultural production and economics. From their point of view, anthropological surveys and in-depth studies of local societies were very interesting but could ultimately only be auxiliary to the central part of the project, namely, agricultural experiments resulting in profit-generating innovations. They downplayed how social aspects would shape the uptake and effect of the new technologies utilized within the project. The very choices of Ethiopia and Chilalo as the location of the project were in important respects based on agronomic factors, in the face of socially disadvantageous conditions. And while the planners were aware of the risks inherent in economic development that had not been preceded by land and tenancy reform, the vested interests of the Agricultural College and their belief in science as a positive social force meant that they were ready to initiate the project even before any real reform progress had been made. The chapter thus shows how the Agricultural College's proposed development strategy, which rested on a kind of localism embedded in a universalistic and centrist framework, went on to shape CADU as well.

Its most clear expression, which is central to any understanding of CADU, was the gradually apparent imbalance between the in parts very successful production and the much more ambivalent knowledge dissemination. The project's research activities were able to lay the foundation for very impressive cereal and milk yields in the area. But while these new seeds and cows had the potential to lift participants out of poverty, much of the benefits in fact went to farmers that were already better off. These problems with CADU's knowledge transfer mechanism partly resulted from rigid social structures that could not be overcome, and partly from the fact that over time it became less sharply focused on local adaptations. Many failures of the knowledge transfer effort, such as the new iron plow, resulted from shortfalls in adaptation and in fact vindicated conclusions already drawn. Thus, even when cognizant of the need for adaptations and explicitly committed to this as a strategy, the Swedish experts easily fell back into their habitual patterns of relating to an agricultural environment. This is, I think, symptomatic of a more general problem, namely that they were unlikely to have fully understood that adaptation of technologies, in its strong sense, implied an extensive mobilization of local people in the adaptation process and the use of methods beyond the standard repertoire of experimentation and extension.

Another expression of the centrist localism is the project planners and managers' underestimation of the extent to which different parts of Chilalo society would be able to actively appropriate selected parts of the project's message. The clearest example is that while the project attempted to spread knowledge using model farmers and demonstration plots, the idea that the project's own mechanized farm at Kulumsa could also function as a model to another group of actors was seemingly never taken into account. Ultimately, this meant CADU came to fuel a rural transformation that looked different from the one envisioned and intended. Though some negative social consequences, including evictions of tenants, must have been expected, the speed and scale of the transformation caught the project off guard. The obvious and well-publicized negative impact on some of the poor farmers in Chilalo then problematized CADU's status in the context of an increasingly activist Swedish aid program. Aid policymakers, especially of the newer and more radical kind, who heard about evicted tenants and then contrasted Haile Selassie's cautious speeches from the throne with Julius Nyerere's Arusha Declaration found it very hard to view the former as a suitable candidate for further aid, and CADU's supporters at SIDA were lucky that the project was not cancelled in 1970.

It is difficult to conclude with certainty what determines the results of complex projects like CADU, and it has not been my aim to do so here. But the background I have presented at least suggests that both CADU's successes and its failures can be understood as consequences of the encounter between the overall strategy developed at the Agricultural College and the Ethiopian natural and social environment. Under the prevailing conditions in Chilalo, this strategy stimulated a socioeconomic change that in several respects diverged from the one intended. This is not to say that the original idea of development through the creation of economic incentives for small-holding farmers was necessarily flawed as such, but once committed to this strategy and to the Ethiopian location (which, to some extent, was necessary for its technically successful implementation), there was probably little the project could have done to avoid negative social effects. And from the perspective of Hjelm, Nekby, and their colleagues, their help to self-help strategy was the only viable road toward development. It was also, as they clearly appreciated, necessary in order to legitimize the central role of the Agricultural College in a field project.

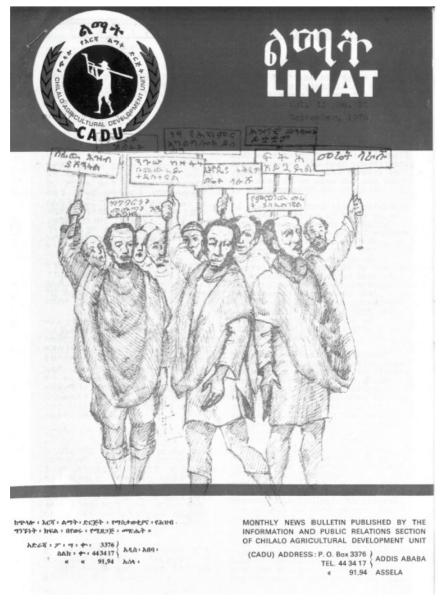


Figure 15. CADU was increasingly radicalized in the early 1970s and by the time of the revolution openly dissident factions were in control. The image shows the front page of the CADU newsletter, "Limat" (the Amharic word for development), from the September 1974 issue, the very month Haile Selassie was imprisoned by the army. Its editorial begins by stating: "History has time and again taught us that at a transitional stage, the ruling class makes a frantic and desperate attempt to hold on to the old order." It later makes the (somewhat revisionist) claim that "[e]nd to all feudalist oppression has been CADU's goal ever since its inception" and that "[t]here should be no illusion that the forces of reaction will peacefully accept fundamental changes." My thanks to Lars Leander for letting me borrow the newsletter.

CHAPTER FIVE

The Rise and Fall of the Rural Development Pair

The Institutional Collaboration between SIDA and SLU, 1966–1996

SIDA's cooperation with [SLU] is particularly substantial. [SLU's] new and integrated rural development division, which has been created from the development sections of the former Agricultural College as well as the College of Forestry and the Veterinary College, employs around 20 people – more than are working at SIDA's agricultural division. 583

IN 1978, A government inquiry published the quote above in its final report on the organization of Swedish development aid. It describes the growth of institutional structures for cooperation between SIDA and the then newly formed SLU. Over a ten-year period, these had grown from a one-man operation specifically servicing the CADU project into a twenty-person division at the university that employed more staff than its counterpart and principal at SIDA and handled a wide range of tasks including education, recruiting, and project-related consulting. On the face of it, this growth would seem to indicate that the college's attempts at obtaining benefits, legitimacy, and institutional security by linking up with the growing Swedish development aid had been successful. In fact, however, it was at most a partial success. Despite what is suggested in the quote above, the planned research program had proved hard to realize. Though theses and dissertations were written in the context of CADU, a permanent research agenda focused on development problems had not been established. The rural development division remained for the most part a consultant to SIDA and functioned more as an extension of the aid agency than as an integrated part of SLU.⁵⁸⁴ As such, the division was, however, of considerable importance to aid policy and practice. It acted as an institutional consultant to SIDA's agricultural division, and in particular after it was reorganized in conjunction with the establishment of SLU in 1977, the rural development division—later re-branded as SLU's International Rural Development Center—was the focal point of a significant and institutionalized

⁵⁸³ SOU 1978:61, Biståndets organisation, 42.

⁵⁸⁴ An early presentation of the division in SIDA's staff magazine acknowledges this in its title, describing the division as a "branch of SIDA": Maria Larsson and Gunilla Åkerlund, "En SIDA-filial i Ultuna," *SIDA Inside*, no. 6 (1978).

collaborative relationship between SIDA's decision-makers and project administrators and SLU's experts (I will henceforth refer to the rural development division as it existed from 1978 to 1996 with the English name or the IRDC acronym. This terminology was sometimes used in English-language documents even before it was officially adopted as a name).

I describe this relationship as a *rural development pair*. This plays on Mats Fridlund's use of the term development pair in his work on the cooperation between Swedish industrial firms and public authorities. It is not, however, meant to imply that the SIDA-SLU collaboration was the same kind of relationship as those that Fridlund describes. SIDA was not organized like an infrastructure-building public utility and SLU not like a commercial firm. Also, the SIDA-SLU collaboration came about as the result of purposive strategic work from both sides and was always regulated by a formal contract, whereas Fridlund's development pair grew out of joint activities, with the involved actors only gradually beginning to conceptualize the relationship as something beyond their particular undertakings. Even so, enough characteristics are shared for the label to be relevant. Crucially, it signifies the relationship's interactive and mutually constructive character as well as its foundation in strong interpersonal connections, derived from shared educational experiences as well as from joint development activities.

As already indicated, the rural development pair had its roots in the cooperation that evolved between the Agricultural College and NIB/SIDA when CADU was planned and executed. In this chapter, which deals with the growth and subsequent decline of the institutional collaboration, I seek to understand its developments from CADU until the closure of IRDC in 1996, at which point the rural development pair also ceased to exist. My primary concern is with research questions that relate to my third research problem: Why and how was the institutional, long-term collaboration created? What characterized it? How did it develop over time? Which activities did it enable and which did it constrain?

Instead of the chronological account employed until now, this chapter has a partially thematic structure. I will, however, begin with a chronological analysis of the early stages of the rural development pair, based on an examination of the background and the formation of organizational structures for development aid at the three colleges. This is followed by a discussion of the amalgamation of these structures into one rural development center when the colleges themselves were merged to form SLU in 1977. Thereafter, I will, in turn, analyze two parallel processes central to the evolution of the rural development pair throughout its existence. First, I consider IRDC's extensive consulting activities, with special focus on its attempt to find new

organizational forms for its consulting expertise in order to change its relationship to SIDA. Second, I look at SLU's attempt to establish a rural development research program at IRDC linked to the cooperation with SIDA. Following these analyses, I will return to a chronological narrative when discussing the decline and fall of the rural development pair, which involved the end of IRDC and the creation of the Department of Rural Development Studies at SLU. These processes both followed from and reinforced a reconfiguration of the relationship, so that by the time they concluded in 1996, a break with the institutional and social structures that originally were created through CADU had taken place, and the SIDA-SLU rural development pair, in the sense understood here, had come to an end.

The source material used for this chapter comes primarily from IRDC's and SLU's central administration's archives. I have, furthermore, made use of the SIDA dossier on the institutional collaboration with SLU and have reviewed some of IRDC's and SLU's publications. This material gives a reasonably good view of the development of IRDC and its relationship with SIDA, but I have also used my interviews as sources on some occasions where the written material has not answered my questions. There is, however, still one notable gap: my prioritization of SLU and SIDA material means I do not draw on any material from the Ministry of Agriculture. Being SLU's principal and, as will be clear, an important constraint on its aid activities, examining directly how the ministry appraised the situation at various points in time would have contributed considerably to the chapter.

CADU and the Rural Development Pair

In the fall of 1966, with the planning for CADU was in full swing, Lennart Hjelm visited Ethiopia to advise the planning team. He also took the opportunity to discuss with Nekby the Agricultural College's future role within the project. Having at this point had to abandon the idea of giving the college an executory position with respect to CADU's experimental activities, Hjelm and Nekby nonetheless strived to make sure that there would be a close link between Ultuna and the project. In a letter to SIDA in Stockholm, Nekby referred to his consultations with Hjelm and stressed that there would be an "acute" need for cooperation with the Agricultural College if and when the project was initiated. He urged the agency to consider this issue of collaboration side by side with the larger issue of the regional project itself.⁵⁸⁵

⁵⁸⁵ Nekby to SIDA, 17 October 1966, SIDA, series F1 AB, vol. 769.

To the letter, Nekby attached a document he and Hielm had drawn up, which spelled out the forms of cooperation they deemed necessary. They envisioned five areas of work: education, experiments, service activities, general advice, and recruitment.⁵⁸⁶ As the main education activity, they proposed that the college should offer a special course on Third World agricultural development problems, open to students both before and after they had finished their agronomy degree. As for the CADU experimental activities, the proposal was that a group of experts should be constituted at Ultuna to follow up, provide scientific advice, and at least informally oversee the project, by, for example, reviewing annual experiment plans. The college's proposed involvement in recruitment was based on the argument that suitable staff for CADU would probably need to be headhunted and that the college, having trained more or less every agronomist in Sweden, would be in a good position to handle this.⁵⁸⁷ The two final areas—service and general advice—had to do with the provision of technology and expertise not available in Ethiopia. The college could help with things such as chemical analyses, and also provide links with the expertise at hand within the college's various departments as well as in other Swedish institutions. To coordinate all these activities, they suggested that SIDA ought to pay for a permanent position at the Agricultural College; the person appointed could be responsible for organizing the education activities, be the point of contact at the college for CADU personnel, and otherwise act as a liaison as needed between the project and the college, for example, by providing contacts to the various research departments.

This proposal was incorporated into the final project proposal for CADU and was realized as the project got under way. In 1967, SIDA and the college signed a formal agreement which specified that the latter should place its expertise at CADU's disposal roughly along the lines proposed by Hjelm and Nekby.⁵⁸⁸ Bo Bengtsson, who had returned to the college after his tenure in

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⁵⁸⁶ "Samverkan SIDA-Lantbrukshogskolan i faltprojekt," SIDA, series F1 AB, vol. 769.

⁵⁸⁷ Agricultural managers, also good candidates for field positions in development aid, were at this point not trained by the college but by an independent institute in Alnarp. Even so, it can be assumed that a knowledgeable person at Ultuna would have been in a good position to reach out to them as well. By 1967, the Alnarp institute was subsumed under the board of directors of the Agricultural College, and by 1974 it was wholly integrated into the college.

⁵⁸⁸ Meeting minutes, Board of Directors of the Agricultural College, 12 October 1967, § 38 with attachments, AC-SS, series A1 a, vol. 7. While the Agricultural College was the most important one, CADU had other external consultants in Sweden as well. For example, the National Association for A.I., Cattle-Breeding and Milk Recording played an important role in the cattle-breeding activities.

Ethiopia, was recruited to act as the Ultuna liaison.⁵⁸⁹ He established what became known as the Developing-Country Section, a small organizational unit that coordinated the CADU-related activities. An expert committee, initially known as the CADU committee and later as the developing-country advisory committee, was also constituted, consisting of Vice-Chancellor Hjelm as chairman, Bo Bengtsson as secretary, agronomist Lars Augustinsson as SIDA's representative, professors Ewert Åberg and Eskil Brännäng as senior representatives of the college's scientific expertise, and Håkan Åkerman, deputy director-general of the National Board of Agriculture, as a representative of the public interest in the agricultural sector. ⁵⁹⁰ This committee oversaw Bengtsson's work, provided advice as requested, and approved, in consultation with SIDA, the proposed recruits for CADU. SIDA was impressed with some successful early recruitments made by Bengtsson, and this led to the college taking over responsibility for all of SIDA's recruiting of agricultural field experts, extending the college's aid responsibilities beyond the limits of CADU in 1969. It was eventually also given documentation responsibilities and began to collect books and other publications of relevance to agricultural and rural development. It produced published work of its own as well, mostly reports on various countries to which Sweden considered giving rural-oriented aid, and expanded its number of staff.⁵⁹¹

The section was also responsible for some educational activities. In accordance with a point added to the agreement with SIDA, it nominated candidates for a program in which interested students could conduct smaller research tasks on behalf of CADU.⁵⁹² It also began to offer a course on developing-country agriculture (which was then taught for decades and became an important way of introducing the students to developing-country topics). When designing the course, Bengtsson decided to mostly use teachers with field experience. This meant that most of the teaching was done by external lecturers, which, according to Bengtsson's recollections made it popular among the students, but less popular among many of the college faculty.⁵⁹³ It would

⁵⁸⁹ According to his own recollection, Bengtsson was Ewert Åberg's candidate. Lennart Hjelm had much preferred an agricultural economist to hold the position. Bo Bengtsson, interview by author, 24 May 2013.

⁵⁹⁰ Hjelm, Åberg and Brännäng were proposed by the faculty of the Agricultural College, see meeting minutes, Board of Directors of the Agricultural College, 12 October 1967, § 38. The other members can be identified through some of the meeting minutes of the committee itself, which can be found in International Rural Development Center archives, series A2 A, vol. 1, Swedish University of Agricultural Sciences archives (hereafter cited as IRDC).

⁵⁹¹ Bengtsson, interview.

⁵⁹² This was a first step toward what today is the Sida-funded Minor Field Studies program.

⁵⁹³ Bengtsson, interview.

prove an influential decision as it meant that the course and, by extension, the wider activities of the Developing-Country Section, became somewhat distant from the regular research and teaching departments. This gap between the departments and the section—and later IRDC—would remain for the next thirty years and became formative for future developments.

The gap is also interesting in a broader sense. It reflects how conditions for expertise in development aid were changing, in ways that the career of a person like Bengt Nekby can illustrate. He went through a professional transformation, from a Swedish agricultural economist to an international expert in development. He never returned to his teaching post at Ultuna, instead moving to SIDA, CADU, EPID, and then on to the World Bank. His career exemplifies the ongoing reconfiguration of professional networks at the time. It was a consequence both of decolonization and the expansion of development bureaucracies during this period, and it made development aid a viable career path in itself.⁵⁹⁴ At Ultuna, IRDC would come to house development professionals rather than academic researchers.

While organizational structures for the cooperation with SIDA were built up at the Agricultural College, the Swedish forestry sector's interest in development was also increasing. An influential paper published in 1962 by, among others, the chief of FAO's Forest Economics Branch, Jack Westoby, had outlined a model in which forest industries were to play an important part in promoting growth in developing countries. 595 Citing Westoby, Swedish forester and FAO employee Erland von Hofsten argued a few years later that given the advanced state of forestry in Sweden, SIDA should turn its attention to this field.⁵⁹⁶ These arguments also stimulated the interest of the College of Forestry in Stockholm, something that eventually culminated in the establishment of a development-oriented course and subsequently a developing-country section at the college in 1970. It was modeled on the one at Ultuna and had similar tasks: recruitment for SIDA and instruction in developing-country forestry. Its director was forester Sten Norén, who had earlier been an FAO associate expert in Iran. As he recalled it, he looked to Ultuna, where Bengtsson ran his section in an expansionist fashion. Norén strove to expand his own section in a similar manner, eventually recruiting

⁵⁹⁴ See e.g. Gold, "Scientific Career Networks."

⁵⁹⁵ Jack C. Westoby et al., "Forest Industries in the Attack on Economic Underdevelopment," *Unasylva* 16, no. 4 (1962).

⁵⁹⁶ Erland von Hofsten, "Skall SIDA satsa på u-ländernas skogsnäring?," *Skogen*, no. 17 (1968); Erland von Hofsten, "SIDA och skogsnäringen: Skäl för svensk satsning," *Skogen*, no. 22 (1968).

three more people and broadening the scope of its tasks much as Bengtsson had done. ⁵⁹⁷

At the Veterinary College, the emphasis was on the SIDA/FAO courses in animal reproduction and in pathology. Nils Lagerlöf had taught one SIPAR course in 1967 and another in 1969, and was preparing for one scheduled for 1971 when he passed away in late 1970. His former student Ingemar Settergren then took over responsibility for the program. Since the courses were mostly a self-contained activity within the respective department, the Veterinary College did not establish a developing-country section similar to the two other colleges. But in 1973, it too signed a more general agreement with SIDA and set up an international office, ran by Börje Danell together with Katarina Carlqvist. Like Settergren, Danell had been a student and close associate of Lagerlöf's.

These three organizational units had all grown out of a mutual desire to place the expertise available at the colleges at the disposal of the new government agency for development aid. The Agricultural College was formative in this regard, and the collaborative relationship between SIDA and the college that emerged in the context of CADU became the model for the cooperation SIDA later established with the other two colleges. When first instituted, the colleges' development sections were only envisioned as facilitators of contacts between SIDA (which paid for their work) and the Swedish base of expertise (inside and outside the colleges) in relevant fields. They were supervised by committees on which core scientific expertise was represented, providing SIDA with expert advice as necessary. The divisions at the Agricultural College and the College of Forestry soon outgrew this basic role, however, and began to function as recruiting and documentation centers servicing broader needs of Swedish agriculture and forestry aid. This step was crucial to the further development of the relationship I term the rural development pair, as it meant that other forms of expertise, beyond the purely scientific, became increasingly important. This would come to be both a central tension point and a defining feature of the pair.

⁵⁹⁷ Sten Norén, interview by author, 13 June 2013; Sten Norén, "Hej U-landsskogisar!," *U-landsskogisen* 3 (1973): 1.

⁵⁹⁸ Settergren, "Kurser i husdjursreproduktion 2," 333.

⁵⁹⁹ "Samarbetsavtal," 26 April 1973, IRDC, series A2 A, vol. 2. Also Börje Danell, letter to author, 9 February 2014.

Development at the Agricultural University

For a number of reasons beyond the scope of my study, the three colleges which came under the Ministry of Agriculture were spatially reorganized in the mid-1970s. The Veterinary College was gradually moved from Stockholm to Uppsala and Ultuna, while the College of Forestry ended up being split between four locations: Stockholm, Uppsala, Garpenberg, and Umeå. The largest part was in Umeå, far north of the college's earlier site in Stockholm as well as of the Ultuna campus, which the other two colleges had been moved to. Despite this geographical obstacle, the three institutions were increasingly coordinated with each other. First, a hybrid form was created in what was called the Swedish University of Agriculture, Forestry and Veterinary Medicine, in which the separate colleges were merged into a joint organization but retained their own collegial structures. This soon proved an unworkable solution, and so a single university, SLU, with three faculties, one for each college, was created out of it in 1977. This is not the place to analyze the complicated and conflict-ridden process of relocating and merging the three colleges. 600 Suffice it to say that the SLU which emerged was largely modelled on the Agricultural College, with Lennart Hjelm, whose creation it essentially was, being named its first vice-chancellor. At the two other colleges, now faculties in the new university, there was widespread dissatisfaction with the process and its outcome, and for a long time, intrauniversity relations were noticeably chilly.

As a result of the merger, the development-related sections at the different colleges were more closely coordinated with each other, and it was eventually decided to merge them, too. This likewise proved a difficult task. It was relatively easy to settle for Ultuna as the location for the new unit. The question of how it should be organized was more problematic. Bengtsson and the Agricultural College advocated a functional structure, that is, internal subdivisions for the separate functions (recruitment, education, documentation, etc.), each with staff from all three colleges. A sector-based structure, preferred by veterinarian Börje Danell and forester Sten Norén, would instead mean that the separate existing development sections would in a sense be maintained as their own organizations, each handling the same functions but exclusively for its own professional domain.⁶⁰¹ The discussion mirrored the university-level

⁶⁰⁰ This will be dealt with in a forthcoming book by Per Lundin, which is written as part of the same project as this dissertation. See also Erland Mårald & Anna Sténs, "Lantbråksuniversitetet: Om Skogis flytt till Umeå och skogsvetenskapens förändringar" (unpublished manuscript, April 2015). For a retrospective account by Lennart Hjelm himself, see Hjelm, *Lärdom på Ultuna*, 110–21.

⁶⁰¹ See e.g. Sten Norén, "Synpunkter på frågan om samordning av de u-landsinriktade aktiviteterna på jordbrukets högskolor," 30 January 1975, IRDC, series A1, vol. 1. Norén's

developments, where—simply put—the Agricultural College's representatives were the ones most in favor of integration, while the other two colleges strove to protect their independence and their own professional and collegiate identities. In the end, Bengtsson's suggested organization won out, no doubt mostly because he had the support of Vice-Chancellor Hjelm and of SIDA, and he was named head of the new rural development division. But Bengtsson would not remain long in this post. He had found a position in the recently formed SAREC and left Ultuna relatively soon after the new rural development division was founded. The directorship then fell to Börje Danell. But Bengtson

SLU and Rural Development

The first years were rocky for the new joint division. It struggled not only with its internal organization and with the integration of experts from three professional domains but also with its tasks and with its relationship to SIDA and the university. Not until another reorganization in 1978 did it find a stabler form, which became constitutive of a more integrated SIDA-SLU relationship. To understand this process, it is necessary to first consider some earlier developments at the division's main financier.

Within SIDA's Department I, a new organization with subdivisions for different technical sectors had developed in the late 1960s, a change that reflected early experiences of planning and managing aid projects. Because of the agency's heavy involvement in rural development through CADU, a section for rural development and nutrition was among the new subdivisions formed. A reorganization of the entire agency, effected by the directorgeneral in 1971, took this organizational idea a step further. The departments were abolished and the old hierarchical organization replaced with a flatter structure in which different specialized divisions, technical or administrative, came directly under the agency's central management. The food supply and rural development section was renamed the agricultural division, but it was often just identified as LANT, short for its Swedish name *Lantbruksbyrån*. 605

The agricultural division's work was shaped by the fact that the threat posed by the population-resource dilemma had begun to seem less acute after the

memorandum summarizes arguments for the two alternatives. The same archive series contains an extensive material detailing these discussions of the future organization of the division.

 $^{^{602}}$ Meeting minutes, division meeting of the Rural Development Division, 8 October 1975, IRDC, series A1, vol. 1.

⁶⁰³ Renborg, Granström, and Kasberg, Lantbrukets högskola 50 år, 61.

⁶⁰⁴ SOU 1978:61, 27.

 $^{^{605}}$ SIDA employed such capitalized short-forms for its internal subdivisions. The agricultural division was known as LANT, the industrial division as IND, the personnel aid division as PB, and so on.

Green Revolution had demonstrated agriculture's potential to feed the world. But the same process that had sent agricultural yields soaring had also accentuated the differences between rich and poor; urban and rural, something that SIDA's own CADU project had made perfectly clear to its administrators in Stockholm. They thus became increasingly concerned with the challenge of rural poverty, and particularly with how rural development aid could be designed so as to combat rural poverty. To this end, LANT's director, Gösta Ericsson, previously one of the members of NIB's agricultural group, and who had since left his position at the National Board of Agriculture to work at SIDA, turned to the Agricultural College for help. Ericsson, who was an agronomist with good links with Ultuna, decided in the mid-1970s that his division lacked both the in-house knowledge and the time to focus on conceptual issues. He contacted Nils-Ivar Isaksson, the Agricultural College's professor of agricultural economics, and asked whether he would be interested in doing a SIDA-funded study of integrated rural development.

This meant that experiences from Ethiopia would continue to affect developments, for Isaksson had rather recently returned from there. Another of Hjelm's former students and a good friend of Bengt Nekby's, he had, after graduating from Ultuna, worked for the Agricultural Economics Research Institute and the Federation of Agricultural Societies, but returned to the Agricultural College to take up a post in the Department of Economics after Nekby left for Ethiopia. A few years later, at the behest of Hjelm, Isaksson too went to work in Ethiopia, replacing Nekby at EPID, the Ministry of Agriculture department created as a result of the experiences from CADU. After his tenure in Ethiopia, Isaksson returned to the economics department at Ultuna. To work out the SIDA assignment, he recruited Johan Holmberg, who, in turn, had succeeded him at EPID. Holmberg, an economist with a degree from the Gothenburg School of Economics, had come into contact with rural development through his work in Ethiopia rather than through any previous connection with the Agricultural College. 607

At the same time, there was an ongoing discussion at the newly integrated rural development division about expanding the capacity for planning and inquiries.⁶⁰⁸ Beyond recruiting for SIDA and handling education and documentation tasks, the latest agreement, in force since 1975, specified as its

⁶⁰⁶ Nils-Ivar Isaksson, interview by author, 27 March 2014.

⁶⁰⁷ The result of Holmberg's work was published as Johan Holmberg, "Integrated Rural Development: A Discussion of This Concept and Its Implications for Swedish Aid" (Department of Economics and Statistics, Swedish University of Agricultural Sciences, 1977).

⁶⁰⁸ See Ingemar Croon, "Utökning av planerings- och utredningskapaciteten vid lantbruksuniversitetet inom området lantbruks- och landsbygdsutveckling i u-länder," 30 March 1977, SIDA, series F1 AD, vol. 1718.

very first point that the university should "help with advice and inquiries, both of a general character and in relation to the preparation, management and evaluation of efforts/projects with connections to rural development." The director of the division, Ingemar Croon (who had replaced Börje Danell), was concerned that this latter part of the division's work had never really gotten off the ground. In March 1977, he had raised the question of how to organize a "field study unit" (which would be responsible for such assignments), along with the question of whether this was in line with the university's mission. Vice-Chancellor Hjelm evidently also shared Croon's concerns. As he knew that Isaksson and Holmberg were studying rural development at SIDA's behest and that both had field experience in the area, Croon asked them to outline a proposal for how the division could be (re-)organized to include these tasks.

Reorganizing the Rural Development Division: SIDA's New Needs for Expertise Croon's concerns were matched by an increasingly felt need at SIDA to draw more broadly on external expertise. An important contributing factor was ongoing changes in the way SIDA managed its aid projects, as the idea of country programming was being implemented in the planning of Swedish aid. Country programming was a concept that had gained influence in international and Swedish aid circles in the 1970s, after it was promoted in the well-known Jackson report, which proposed reforms of the United Nations Development Program. It could mean different things in different contexts, but at the core it was a method of organizing aid that sought to give responsibility for development planning to the recipient rather than the donor countries. Instead of locking funding into particular projects or sectors, the programming method worked from financial frameworks within which the recipient countries had the final responsibility for planning and implementing their own development activities. 612 The gradual switch to country programming meant that SIDA needed access to a practice-oriented knowledge base that it could put at the disposal of the aid recipients, who needed more technical competence of their

 $^{^{609}}$ Agreement between SIDA and the Swedish University of Agriculture, Forestry and Veterinary Medicine, p. 1, 1 July 1975, IRDC, series A1, vol. 1.

⁶¹⁰ Ingemar Croon, "U-landsavdelningens arbete: Några kommentarer som bakgrund för en diskussion i kommittén," 30 March 1977, IRDC, series A2 A, vol. 2. For Hjelm's concerns, see Börje Danell, "Utökning av planerings- och utredningskapaciteten vid lantbruksuniversitetet inom området lantbruks- och landsbygdsutveckling i u-länder," 27 June 1977, SIDA, series F1 AD, vol. 1718.

⁶¹¹ Isaksson, interview.

⁶¹² For a contemporary presentation of the country programming system and how SIDA used it in the 1970s, see Bertil Odén, "Landprogrammering: Biståndsteknik och biståndsfilosofi," in Wohlgemuth, *Bistånd på mottagarens villkor*.

own under the new system.⁶¹³ SIDA also retained its own demands for technical expertise to plan and follow up its activities and increasingly had to rely on outside consultants. It had limited means to expand its own staff, and, moreover, considered the use of external consultants as one way to make the agency's work more effective. As SIDA's board of directors would put it in the agency's appropriations request for 1978/79, there was "to a growing extent the contracting out of subtasks that alternatively could have been performed inhouse. This can include procurements, recruiting, project appraisals, result evaluations, etc."⁶¹⁴

Within the agricultural sector, few commercial firms could provide consultants with both the requisite rural development expertise and with developing-country experience. SLU, on the other hand, already performed some of these tasks and could conceivably also handle the others within the framework of its ongoing relationship with SIDA. A few years earlier, Bo Bengtsson had, at the behest of LANT, studied the interaction between agrarian universities and development aid agencies in the United States, Canada, England, Germany, and the Netherlands. The first point of his recommendation, which drew on experiences from USAID and American universities, stressed how universities acting as permanent consultants could provide access "to the collected knowledge existing within the sector" and thus "contribute to an effective development cooperation."

LANT's management was mainly concerned with securing access to external expertise that could perform what it called "field studies," which in this context did not solely refer to fieldwork as such but to a broad spectrum of appraisal, evaluation and planning activities LANT wanted to outsource. Sven Pellbäck, LANT's new director, stated in a meeting at SLU in the summer of 1977 that SIDA's main interest in the rural development division at SLU lay in the agency's "difficulties in finding people for field studies." So although there was an agreement in force between SIDA and SLU, there was not yet a collaboration structure that satisfied SIDA's increasing need for consultants. SIDA's push for "field studies" to be performed by SLU came to be a crucial juncture for the rural development pair. It led to such activities being given a

⁶¹³ See Björn Mothander & Bo Sedin, "Översyn av samarbetet mellan SIDA och Sveriges lantbruksuniversitet," p. 7, 16 January 1990, SIDA, series F1 AD, vol. 5213A.

⁶¹⁴ Quoted in SOU 1978:61, 40.

⁶¹⁵ Bo Bengtsson, "Erfarenheter vid utvalda universitet och institutioner i England, Tyskland och Holland inom sektorn lantbruk och landsbygdsutveckling i utvecklingsländer," (Uppsala: Developing-Country section, Swedish University of Agriculture, Forestry and Veterinary Medicine, 1975), 2.

 $^{^{616}}$ Meeting minutes, division meeting of the Rural Development Division, p. 1, 15 June 1977, IRDC, series A1, vol. 1.

prominent place in the proposal for a new rural development division that Croon had asked Isaksson and Holmberg to work out, and they came to be the focal point of the future collaboration.

Isaksson and Holmberg sent their proposal to Hjelm, who approved and passed it on to SIDA. After modifications by Hjelm,⁶¹⁷ it listed four goals for SLU's participation in development aid:

- a) to do documentation, education and information work relating to developing-country agriculture and rural development
- b) to help SIDA recruit staff
- c) to actively engage the resources of SLU in investigation and planning for SIDA and other clients
- d) to increase the amount of developing-country research at SLU, in particular related to rural development
- a) and b) were already established fields of work, c) referred to the new type of "field studies" requested by SIDA, and d) was a matter pushed for by SLU rather than SIDA, to which I will return below.

As mentioned, the director of LANT was now Sven Pellbäck. He was a crop production agronomist who had matriculated at the Agricultural College a year after Isaksson and knew the latter well. He had been involved in agricultural aid since the mid-1960s, when he worked with the Swedish Peace Corps in Zambia, and had been at LANT since its creation. Like Gösta Ericsson, who had been promoted and left the division, Pellbäck was an enthusiastic supporter of tying SLU closer to SIDA. This facilitated the next decision: Hjelm, who favored the reorganization but also looked out for the university's interests, had insisted that SIDA needed to provide long-term financial guarantees for a new rural development center so as to ensure its survival even if SIDA's demand for its services fluctuated. With both Pellbäck and Ericsson strongly in favor of finding a solution, a proposal was worked out that satisfied both parties.⁶¹⁸ According to Isaksson, a final condition from SIDA was that he accepted the position as division manager. SIDA wanted someone it knew, and Isaksson accepted.⁶¹⁹

⁶¹⁷ I have not found the original draft by Isaksson and Holmberg, only the final document (noting Hjelm as its author) used in negotiations with SIDA and SLU's board of directors. Lennart Hjelm, "Lantbruksuniversitetets engagemang i internationellt biståndsarbete," 19 August 1977, IRDC, series A4, vol. 1.

⁶¹⁸ Sven Pellbäck to Hjelm, 12 October 1977, SIDA, series F1 AD, vol. 1718.

⁶¹⁹ Isaksson, interview.

The new International Rural Development Center was organized into four units: one for recruitment; one for education, documentation and information; one for the consulting work (initially known as the field study unit but later only as the consultant unit); and one for research. The research unit had a mostly theoretical existence, to which I will return below. Linking the center to SLU, SIDA, and SAREC was a new advisory board, appointed by SLU's board of directors. It was chaired by Hjelm and consisted of representatives



Figure 16. Professor Nils-Ivar Isaksson (b. 1932), head of IRDC 1978–1981 and 1987–1996. Photographer unknown. From the collections of the Royal Swedish Academy of Agriculture and Forestry.

from SLU's faculties and staff organizations, as well as from SIDA and SAREC. Unlike the earlier advisory committees at the colleges, such the initial CADU committee at the Agricultural College, this advisory board was not tasked with giving scientific advice. It was intended as a coordinating organ, and, in practice, functioned as a board of directors for the rural development division, making decisions on its budget proposals, organization, and the general orientation of its work. The link to the expertise represented at the university's departments was instead supposed to be reference groups established at each of the three faculties. These were intended primarily to support recruitment efforts but were also available for other subject-related discussions. 620

Shaping the Rural Development Pair

The new organization was the outcome of a process in which actors at both SIDA and SLU attempted to cultivate the rural development pair. SIDA's agricultural division needed better access to external expertise, and its management, staffed with Ultuna-trained agronomists, tried to use its existing relationship with SLU to fill this need. SLU's rural development division favored deepening the relationship, but it struggled with the consequences of merging the three colleges and found it hard to come to grips with this task. Only after interventions by Lennart Hjelm could the process continue. Though Hjelm was preoccupied in the mid-1970s with the creation of SLU and could devote less attention to the aid activities compared with the 1960s, he interceded at important junctures to secure the future of the rural development division. First, he supported Ingemar Croon when the latter wanted to develop a new organization for the division, and then he put

⁶²⁰ Hjelm, "Lantbruksuniversitetets engagemang i internationellt biståndsarbete," 7.

his weight behind the Isaksson-Holmberg proposal for SLU's role in the collaboration with SIDA, specifically demanding and securing financial guarantees from the aid authorities.

As should be clear, the establishment of the new IRDC hinged on the existence of informal personal networks both within SLU and between SLU and SIDA. These networks, which thus underpinned the rural development pair, were built up both within the student life at the Agricultural College, with its generally close-knit relations among many of the students and staff, and through the experiences from CADU and its successor project EPID (consider, e.g., figure 11 above). 621 They wielded profound influence, as we have seen in the previous two chapters as well. I have not attempted to analyze the networks as such, mostly because I have had very limited access to personal correspondence between the involved actors, but their shape is still apparent enough. Hjelm was the central figure, with whom both Nekby and Isaksson enjoyed a very good relationship. Both were his former students and could rely on access to him; Isaksson recalled that he could get in touch with Hielm at any time. 622 Hjelm and Isaksson (and Nekby as well, though he was not as central to the future developments at Ultuna) were both well connected at SIDA. Hjelm enjoyed particularly good relationships with Ernst Michanek and Anders Forsse. Since his involvement with CADU, the latter, who succeeded Michanek as director-general in 1979, was also favorably disposed both to SLU and to rural development. Furthermore, LANT's first two directors, Gösta Ericsson and Sven Pellbäck, were both agronomists, as was Lars Augustinsson, another influential LANT employee who represented SIDA on IRDC's advisory board and who would later come to direct the agricultural division. All three enjoyed good relations with Ultuna. These partly social and partly professional connections not only facilitated the expansion of SLU's engagement but also ensured a very informal relationship between IRDC and LANT.

In the following, I will first discuss what came to be the central organizing feature of the pair: the consulting activities IRDC performed on behalf of LANT. Through the good personal relationships and the perceived need for SLU to fill manpower and competence gaps at SIDA, these activities propelled IRDC into a period of sustained growth that lasted for most of the 1980s. This period was also characterized by a growing realization at SLU that the strong dependency on SIDA was problematic, and so attempts were continuously

⁶²¹ For an impression of the Ultuna student life and social relations in the 1950s, the decade when Hjelm taught there and Nekby, Isaksson and Pellbäck (among others) were students, see Bengt Lindhé, *Vägen till Ultuna* (Skara: Bengt Lindhé förlag, 2004), chapter 11.

⁶²² Isaksson, interview.

made to redefine the relationship by diversifying the division's activities and finding other clients besides SIDA. These were, however, all ultimately unsuccessful. I will then discuss the flip side of the consulting: the idea of establishing a permanent developing-country research agenda related to the collaboration with SIDA. Outlined in the Isaksson–Holmberg plan as a task parallel to consulting, such research never really got off the ground within IRDC. Only as the consulting activities wound down could it, for other reasons, be established more permanently at SLU. By then, however, the rural development pair had ceased to be of relevance.

Development Consulting and Service Export

A main impetus for reorganizing SLU's development aid activities was, as we have seen, SIDA's agricultural division's need of external expertise. At the outset, the new organization was also seen as a way to provide returning field experts with short-term employment; to function as a platform from which they could share their experiences while managing the sometimes difficult readjustment to the Swedish labor market, or while looking for new foreign assignments. But this idea, suggested already in the Agricultural College's first project sketch from 1964, never really came to fruition: most of the consultants came to remain at the center once employed there. IRDC never became the intended temporary platform for returning experts. Instead the consultants became permanent SLU employees, while the consulting unit evolved into a specialized extension of LANT. According to an analysis IRDC presented in 1984, the consulting unit was a "practical arrangement" that provided SIDA with a "permanent reserve capacity" to deal with arising needs. 624

While self-appraisals need to be read with some skepticism, the center did fill a manpower and knowledge gap at LANT in the late 1970s and early 1980s. Moreover, LANT's officers seem indeed to have seen it as a practical arrangement. Instead of having to go through a procurement procedure when outside expertise was needed, the IRDC staff was on permanent standby at Ultuna, ready to help with anything from simple advice to more complex analytical tasks or fieldwork. In this context, IRDC's optimism about its own future was very strong. At a meeting during the reorganization in 1978, Isaksson estimated that the division could employ fifty people by 1985, which would

⁶²³ U-landsavdelningen, "SLUs u-landsengagemang," p. 3, 9 August 1984, IRDC, series A4, vol. 1.

⁶²⁴ U-landsavdelningen, "SLUs u-landsengagemang," 3.

amount to more than doubling its size in seven years.⁶²⁵ This never materialized, but the division did expand continuously during most of the 1980s.

While the expansion suggests that its expertise was in high demand, IRDC was nonetheless in a fundamentally uncertain position on account of its hybrid nature and its one-sided relationship to SIDA. Though nominally a part of SLU, its only real relevance was in the context of the rural development pair. It was wholly dependent on SIDA funding, and its sole link with the rest of the university's activities was the courses on developing-country agriculture it held for SLU students. Attempts to integrate IRDC more with the rest of SLU by bringing its consultants into contact with the regular university departments and by setting up reference groups at the faculties largely failed. 626

Struggles over Agricultural Service Export

SIDA never claimed exclusive rights to IRDC's expertise. On the contrary, the way in which the center was set up opened up the possibility to sell services outside of the context of the rural development pair, and this idea had in fact been on the agenda since the reorganization period in 1975–1978.627 Little came of it initially, but it was pushed to the forefront in 1979 by the work of the Consultant Export Inquiry (Konsultexportutredningen), a government inquiry appointed by the center-right coalition government in late 1978 to examine the possibilities of increasing the export of services from public utilities and other government agencies. Its background lav in an ongoing discussion of Sweden's negative trade balance and its rapidly growing public sector. From their traditional distant supervisory role, the public authorities had expanded to "plan, control, and supervise developments in entire sectors of society," as it was phrased in the summary of the inquiry's report. 628 In many cases, this meant that government agencies had developed in-house expertise that could in principle be sold on an international market, primarily to developing countries, thus helping to offset the negative trade balance.

In 1980, a few government agencies were already active exporters, notably the Swedish National Land Survey, which operated abroad under the trade name SwedSurvey. Other agencies had founded subsidiary companies to perform international consulting. Important examples of such companies were Swedtel, SwedPower, and SwedForest, which belonged to the Swedish

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⁶²⁵ Meeting minutes, management team of IRDC, 28 September 1978, 2, IRDC, series A3, vol. 1.

⁶²⁶ The reference groups ceased working in 1980 and 1981. See IRDC, series A5 A; A5 B; A5 C. Later, similar attempts were made with what was known as subject groups; they were a bit more long-lasting, though not without their problems.

⁶²⁷ See, e.g., Ingemar Croon, "Utökning av planerings- och utredningskapaciteten."

⁶²⁸ SOU 1980:23, Statligt kunnande till salu, 11

Telecommunications Administration, the Swedish State Power Administration, and the Swedish Forest Service, respectively. Looking at these examples, the Consultant Export Inquiry proposed ways to further stimulate the export of services from public authorities and public companies, including those of the agricultural sector. After studies of the present setup of how SLU and other institutional consultants provided services to SIDA's agricultural division, the committee proposed the formation of a new consultancy company that would export services from the public agricultural sector as a whole. It was to work in close conjunction with existing companies in related areas (this particularly referred to SwedForest), and its presumed clients would be foreign governments interested in agricultural development, most likely those already working with SIDA. IRDC's consultant unit, or at least parts of it, would constitute the core of the new company. Silventices of the new company.

The proposal implied yet another reorganization of IRDC. While it would keep some of its staff and tasks, the new company would take over responsibility for much of the consulting work. The company would then be able to hire SLU staff as well as experts from other parts of the sector, on a contract basis to carry out its assignments. In the inquiry's report, this structure was motivated by its ability to gather relevant competencies not just from SLU, but from all the agencies under the Ministry of Agriculture. SIDA and SLU initially supported the proposal, with both having reasons to believe that the proposed new organization would be beneficial. There are indications that SIDA, while positive to the services provided by its institutional consultants, was beginning to have concerns about how the system worked. The Consultant Export Inquiry noted that an internal SIDA investigation had suggested that the present system of using institutional consultants created improper mutual dependencies and limited both competition and SIDA's ability to manage its consultants, all of which could increase expenses. 632 If nothing else, a company representing the whole sector would reduce mutual dependency effects by virtue of being a broader enterprise. SLU, for its part, might have seen a strategic advantage in involving the entire public agriculture sector, including perhaps its own principal, the Ministry of Agriculture, in development-aidrelated service export. A study performed mainly by representatives of the three major stakeholders (SLU, SIDA, and the Ministry of Agriculture),

⁶²⁹ SOU 1980:23, 13.

⁶³⁰ SIDA's agricultural division had a group of institutional consultants providing services under similar terms, though SLU was by far the most important of them. The others were the Swedish Cooperative Centre, the land surveying section at the Royal Institute of Technology, the Department of Social Anthropology at Stockholm University, and the Fishery Board of Sweden.

⁶³¹ SOU 1980:23, 296-99.

⁶³² SOU 1980:23, 128.

appended to the Consultant Export Inquiry's main report, noted that the proposed organizational structure presumed such an arrangement:

One demand on the organization is that it facilitates connections with the entire public agricultural sector, including research and experimentation. This ought to presuppose active participation from the Ministry of Agriculture, for example by the ministry representing the owner. The present rural development division at SLU, or parts thereof, can constitute the core of the new company. In that way, the present experience of consulting activities abroad can best be utilized. 633

If the ministry's interest in aid matters could be increased by a company of this kind, it could also facilitate SLU's developing-country work more generally. A chief obstacle to that work, and which indeed had been formative of the setup of IRDC as a SIDA consultant, was that SLU deemed it impossible to internally redistribute ministry funding to support development-oriented work (a point I will return to below). If this was to change, SLU would find itself in a very different position with respect to its relation to the developing world.

In early 1980, IRDC's advisory board decided to adopt a cautiously positive attitude to the creation of an independent company out of parts of the consulting unit. 634 Other parts would work directly with SIDA as before, as is clear from a set of joint SIDA-SLU comments on the Consultant Export Inquiry's subreport on service export from the public agriculture sector. These comments suggested that some tasks could be handled by a company; for others, SIDA needed to maintain SLU as an institutional consultant. 635 A crucial factor if this reorganization was to be achieved, stated by the advisory board and reiterated in the SIDA-SLU comments, was that the government would have to come up with financial guarantees for the company, separate from either SIDA's or SLU's budget. 636

The latter point is interesting, for both the advisory board and the comments strongly emphasized the need to establish the new company in close proximity to, and for it to collaborate closely with, IRDC. Some new areas of expertise might be added, representing other sectors under the Ministry of Agriculture, but for most intents and purposes, the new company would be very closely linked to IRDC, which SIDA provided financial guarantees for. Of course, underwriting the finances of what was intended to be a company competing on the open market was something quite different from guaranteeing the budget of

⁶³³ SOU 1980:23, 299.

⁶³⁴ Meeting minutes, Advisory Board to IRDC, 15 January 1980, §2, IRDC, series A4, vol. 1.

^{635 &}quot;SIDAs och Lantbruksuniversitetets preliminära synpunkter på ett bolag för export av konsulttjänster från den statliga lantbrukssektorn," 10 March 1980, IRDC, series A4, vol. 1.

^{636 &}quot;SIDAs och Lantbruksuniversitetets preliminära synpunkter"; Meeting minutes, Advisory Board to IRDC, 15 January 1980, §2.

IRDC, to which SIDA had a privileged relationship. But it is also likely that both SIDA and SLU used the new situation to try to bring in funding from the Ministry of Agriculture, thus increasing the latter's interests in development aid. That was something which could well help secure the future not only of the new company but also of developing-country activities at SLU.

Money from the ministry would not be forthcoming, however. Following consultations with the Center Party minister of agriculture, Anders Dahlgren, the government bill that was based on the inquiry's report forwent proposing the formation of a company and instead suggested that further analysis of the matter was needed. 637 After more deliberation, the Ministry of Agriculture clarified its stance by issuing a memorandum. Among other things, the ministry argued that the boundary between the proposed new company and the existing SwedForest company would become a problematic issue.⁶³⁸ By 1982, SIDA had also begun to hesitate, arguing that as a government agency it could not provide any sort of financial guarantees to a commercial company, that the present organizational structure was adequate, and that there was no need to introduce another actor. 639 As an alternative, the Ministry of Agriculture suggested that one person in every agency under the ministry should be appointed responsible for coordinating service export matters. SLU found this option insufficient, but had little possibility to push the matter further. 640 Following the parliamentary election in 1982, a Social Democratic cabinet replaced the previous center-right one, and the formation of public service export companies faded somewhat from the political agenda.

Further Expansion of the Rural Development Pair

Concurrent with the negotiations over the company formation, the scale of the SIDA-SLU cooperation continued to grow. The number of tasks SIDA gave to IRDC increased through the early 1980s, a development further stimulated by the naming of Sven Pellbäck as acting director of IRDC in 1982, when Nils-Ivar Isaksson took up an assignment in Kenya.⁶⁴¹ Johan Holmberg, who had

 $^{^{637}}$ Government Bill 1980/81:171, om export av tjänster från statliga myndigheter och bolag m.m., 16.

⁶³⁸ I have not seen the memorandum itself, but see the summary in "Sammanfattning av tidigare utredningar och remissvar," Central Administration archives, list I, series F1, vol. 619, Swedish University of Agricultural Sciences archives (hereafter cited as SLU-CF I).

^{639 &}quot;Sammanfattning av tidigare utredningar och remissvar."

⁶⁴⁰ Sveriges lantbruksuniversitet, "Yttrande över promemoria angående tjänsteexport från jordbruksdepartementets verksamhetsområde," 8 November 1982, IRDC, series A4, vol. 1.

⁶⁴¹ Görel Oscarsson to Forsse, "Angående professor Lennart Hjelms och byråchefen Pellbäcks engagement i U-landsavdelningens verksamhet m m," 16 August 1982, SIDA, series F1 AD, vol. 1726.

been instrumental in creating IRDC, succeeded him as the director of LANT. Pellbäck soon became heavily involved in expanding IRDC and its role in Swedish development aid, and the center grew rapidly (see table 4).⁶⁴²

Table 4. Payments in millions of SEK from SIDA to SLU during the period 1978–1988. All amounts in 1979 prices. 643

78/79	79/80	80/81	81/82	82/83	83/84	84/85	85/86	86/87	87/88
3.1	3.3	3.5	3.5	4.0	5.7	9.5	11.0	14.9	15.6

These increased costs did not only pertain to the consulting unit. As discussed above, IRDC performed a range of other tasks, including education, recruiting (the primary SIDA counterpart for this task was not LANT, but PB, the agency's personnel aid division), and documentation. By the mid-1980s, IRDC was also given funding for what was known as trial and method development, carried out in cooperation with academic departments at the university. This was a very broadly defined area of activity aimed at testing and evaluating methods and techniques of relevance to SIDA's rural development programs.⁶⁴⁴

The rapid growth of SLU's engagement created a number of issues of cooperation and coordination with LANT in Stockholm. The mutual trust (and need) and good personal relations between IRDC and LANT that undergirded both operative and managerial work had resulted in largely informal and oftenunstructured ways of working. The very boundary between LANT and IRDC was also growing blurred. Consultants from IRDC would sometimes work at SIDA without a formal specification of their task or a clear delimitation from SIDA's own staff. Furthermore, IRDC would at times initiate work on a project before a budget had been drawn up and an official decision had been taken at LANT. By the mid-1980s, these and other issues made LANT's management increasingly concerned about work routines and its ability to follow up on IRDC's work. This is evident from a 1985 letter from Inge Gerremo at LANT to Sven Pellbäck in which the former summarized a number of new routines intended to improve the institutional collaboration. 645 Some of the routines Gerremo proposed in this letter, such as making sure that IRDC would not start working on an assignment before LANT had issued a written

⁶⁴² Holmberg, interview; Norén, interview.

⁶⁴³ The table is constructed on the basis of data from Mothander and Sedin, "Översyn av samarbetet," 8. Adjustment for inflation through Rodney Edvinsson's historical currency converter (http://www.historia.se/Jamforelsepris.htm). The rapid increase in payments after 1982 also corresponds to the transfer of power back to the Social Democratic party after a six-year period of center-right rule, but I have not been able to find evidence of a causal relation.

⁶⁴⁴ Mothander and Sedin, "Översyn av samarbetet," 14.

⁶⁴⁵ Inge Gerremo to Pellbäck, 20 September 1985, SIDA, series F1 AD, vol. 5205.

decision and provided a budget, are so basic that the mere fact that he had to bring them up gives an idea of the informal way in which the rural development pair was working.

The growth of IRDC also revived the idea of service export. The premise was somewhat different from 1980. Since the original idea of organizing a company representing the entire agricultural public sector was no longer viable, SLU instead asked the ministry's permission to form a subsidiary company of its own. A first proposal to this effect was made in February 1985 but the Social Democratic cabinet rejected it. Following an intervention by Anders Forsse, then director-general of SIDA, the matter was taken up again and continuously discussed in 1985 and 1986, before it was finally rejected by the Ministry of Agriculture in 1987.⁶⁴⁶

By then, SLU found itself in a conundrum. Although the original idea of the institutional consultant was that it should provide accessible expertise to SIDA for clearly defined tasks but not administrate entire aid projects, in the mid-1980s plans were nonetheless made for SLU to take active part in managing rural development aid projects in Guinea-Bissau and Bangladesh on behalf of SIDA. This hinged, however, on finding a way for SLU to employ staff abroad under attractive terms and conditions for a period of a year or more. It was impossible under the normal regulations for SLU employees but could be done in the company form. 647 SLU's management of the Guinea-Bissau and Bangladesh projects eventually fell through when the processing of the request to form a company dragged on, but by 1987, SLU had gone on to plan an even greater involvement in another project that was to support Ethiopian forestry education. This involvement, which will be the topic of my final chapter, would, according to IRDC's estimates in 1987, require up to twenty full-time employees in Ethiopia within two years. 648 To achieve this, there were no realistic alternatives to forming a company. Given the ministry's rejection, SLU instead decided to create a company nominally independent of the university, owned by interested employees as private individuals. Founded in 1987, the company was named Agriuniverse. 649

Many of the practical reasons for which Agriuniverse was founded were thus also reasons that motivated the earlier proposal to form a subsidiary company.

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⁶⁴⁶ I will not discuss these drawn-out negotiations further, as they add little to the analysis. They can be followed in SLU's archives, notably in IRDC, series A4, vol. 1–2.

⁶⁴⁷ Sveriges lantbruksuniversitet, "SLUs u-landsengagemang, tjänsteexport och bolagsbildning," IV, 26 May 1987, IRDC, series A4, vol. 2.

⁶⁴⁸ This project did not expect to draw directly on the expertise represented at IRDC but rather on staff from various parts of the Faculty of Forest Sciences. See further my analysis in chapter 6.

⁶⁴⁹ Sveriges lantbruksuniversitet, "SLUs u-landsengagemang, tjänsteexport och bolagsbildning," appendix.

Both SIDA and SLU found that SLU's administrative routines and employment conditions were constraints on the use of SLU's expertise and staff for development aid. 650 But SLU's original company proposal had another objective, which Agriuniverse did not fulfill: it saw the formation of a company as a way to reconfigure the relationship with SIDA. In an interview with SLU's staff magazine in 1983, Pellbäck spoke candidly on the matter: "I think it is necessary at present with this dual command [SLU and SIDA's joint responsibility for the division]. We are still working mostly with SIDA's activities. But as our assignments grow beyond SIDA, we should find a more independent form with only one principal. We could then spend more time on service, recruitment, inquiries, education . . . also for other organizations than SIDA."651 It is clear that the dependency on SIDA was seen as a problem, at least in a longer perspective.

In more general terms, what SLU sought to do to tackle this problem was to refine its development aid roles. The way IRDC was organized, set up as a crossover between a university division, a consulting firm, and a SIDA branch, constrained SLU's ability to make strategic decisions about its own development-related work. One way forward was to attempt to separate potentially commercial consulting activities from those integral to the institutional consultant relationship, such as the recruitment, education, and documentation services IRDC performed for SIDA. Concurrently, SLU also wanted to add a third area of activity, which, at least in some ways, would fit more naturally in the university setting: rural development research. A vision of the future IRDC organized in this way was presented by the center in 1984:

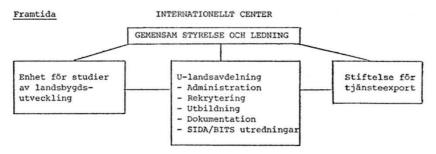


Figure 17. An organizational outline from 1984 of a possible future IRDC. This organization would consist of three separate divisions under one management: a unit for rural development studies (the left box), a division for recruitment, education, documentation, and investigations on

⁶⁵⁰ See also Gösta Edgren to Mårten Carlsson, 23 August 1984, IRDC, series A4, vol. 1.

 $^{^{651}}$ May-Inger Frischenfeldt, "SLU bit för bit: U-landsavdelningen, Ultuna," $SLU\text{-}ringen\ 6,\ no.\ 4\ (1983):\ 10\ -11.$

behalf of the aid authorities (the institutional consultant role; central box), and a service export foundation (the right box).⁶⁵²

SLU brought up the idea of a new research institute for rural development at the same time as it reintroduced the discussion about a service export company, and, in my view, these developments need to be understood in conjunction. ⁶⁵³ Both were part of a strategy designed to create a stabler context for development-related work at SLU. As I will show next, the prospect of creating room for what was intended to be social-science-oriented development research at SLU was one of the main reasons why the university management had agreed to create and support IRDC in the first place. Below, I examine the attempts to achieve this and the consequences of them.

Rural Development Research at IRDC?

In 1966, when sketching the future of the Agricultural College, Lennart Hjelm had argued that it ought to host development-related research. As I discussed in chapter 3, this was part of an attempt to broaden the college and take it beyond the boundaries of its traditional role. But while a number of individuals at the college and later SLU became involved in development-oriented research related to personal interests and competencies, no permanently funded research on rural development or developing-country agriculture was established at the university before 1996, when IRDC was closed down and replaced by the new Department of Rural Development Studies (presently part of the Department of Urban and Rural Development). This was despite the fact that IRDC and SLU continuously pushed for a research program to be established. Earlier I outlined the reorganization of IRDC in 1978 as being driven by SIDA's need to secure the long-term availability of external rural development expertise. I will now argue that alongside this, Hielm and others at SLU also considered the reorganization an opportunity to introduce a new type of interdisciplinary rural development research at the university.

Development Research and the Sectoral Principle

Since 1973, the Agricultural College had had a declared goal of considering ("in relevant respects") both Swedish and developing-country problems.⁶⁵⁴ Swedish problems nevertheless wholly dominated the college's research

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⁶⁵² From U-landsavdelningen, "SLUs u-landsengagemang," attachment I.

⁶⁵³ See Johan Holmberg, "Forskningscentrum på SLU för landsbygdsutveckling," 4 February 1985, SIDA, series F1 AD, vol. 5205.

⁶⁵⁴ Långtidsplan för Lantbrukshögskolan, 67.

agenda and the tension between goal and practice became increasingly apparent in the mid-1970s. One manifestation was a debate carried on by and within the student union. In April 1975, the union had arranged its first "developing-country week," intended to stimulate discussions about Swedish development aid (among other things, the union arranged a debate on CADU and collected money that would buy agricultural literature for North Vietnam). 655 Subsequently, the focus turned to the matter of how research at the Agricultural College could benefit the developing world. At the request of the editorial team of the student union magazine, *Ultunesaren*, economics professor Frank Petrini wrote an article highlighting how the college's own long-term planning implied the importance of discussing the issue. 656 The students themselves took up the debate in the next issue of the magazine, which had a special theme: the question of whether there was "meaningless research" at the Agricultural College. It included an interview with Vice-Chancellor Hjelm in which the magazine's principal editor asked him about research priorities and whether the college's resources would do more good if they were increasingly geared to research problems of relevance to developing countries; it also included a more analytical piece asking whether Ultuna was an "isolated island" with respect to global issues as well as several other articles dealing in different ways with the developing world. 657 The magazine's editors were careful to present both sides of the story, but it is clear that they were critical of the discrepancy between plan and reality.

The students were not the only ones noticing this state of affairs. In his SIDA-commissioned report on integrated rural development (see note 607 above), published the following year, Johan Holmberg specifically noted the problem of a limited Swedish resource base for rural development. One reason for this problem, he suggested, was that SLU spent so little of its research resources on problems relating to this field. And though Hjelm had defended the focus on Swedish problems and argued that research priorities were ultimately matters of government policy when he was interviewed by the student union magazine, he was in fact actively working

⁶⁵⁵ Kolbjörn Waern, "Ulandsveckan," *Ultunesaren* 37, no. 2 (1975); "Kommande program," *Ultunesaren* 37, no. 2 (1975).

⁶⁵⁶ Frank Petrini, "Kan vi göra jordbruksforskningen mer u-landsorienterad?," *Ultunesaren* 37, no. 6 (1975).

⁶⁵⁷ Agneta Liljestam, "Anslagen minskar – dra åt svångremmen," *Ultunesaren* 38, no. 1 (1976); Olga Sztarkier, "Ultuna – en isolerad ö?," *Ultunesaren* 38, no. 1 (1976); Agneta Liljestam, "Teknik för U-länder," *Ultunesaren* 38, no. 1 (1976); Per Hasund, Margda Johnson, and Carin Martiin, "Lantbruk ger svält?," *Ultunesaren* 38, no. 1 (1976). Four decades later, Carin Martiin functioned as co-supervisor of the present dissertation project.

⁶⁵⁸ Holmberg, "Integrated Rural Development," 37.

to create room for development-related research at Ultuna. In his version of the proposal for the reorganization of the rural development division, he drew on Holmberg's report in pointing out that it was problematic that only an "extremely small" part of the university's resources were devoted to matters of relevance to developing countries. Highlighten admitted that there were good reasons why conditions in Sweden were the focus of SLU's scientific work and acknowledged that its research funding was supposed to be used for problems of relevance to Sweden. But he then pointed out, just as Olga Sztarkier had done in *Ultunesaren* the year before, that this was incompatible with the long-term planning of the Agricultural College and SLU. He also noted that it was likewise incompatible with the attention paid to developing-country research in "general proclamations, government inquiries, etc."

Thereafter Hjelm turned to the question of what sort of aid-relevant research could be suitable for SLU, assuming that money could be found. On the one hand, there was the natural science approach, in line with the general focus of the university's research, and on the other hand, the field of rural development, which was strongly emphasized in the international aid debate at the time. Focusing on rural development meant contributing to a highly prioritized area, and Hjelm also suggested that SLU could make a special contribution to the field:

Today research with links to rural development is chiefly carried out by social scientists covering mostly social aspects. [SLU] ought, with respect to both its staff and its general orientation, to have good opportunities to work in this area with a broader focus than many other organizations. ⁶⁶⁰

The application of social science to development had been advocated since the 1960s by important institutions like the UN Institute for Social Development and the Institute of Development Studies at Sussex University in the United Kingdom. These institutions tended to be committed to politically radical viewpoints, "denouncing," in the words of political scientist Christine Sylvester, "the naivety . . . of those who equated development with economic growth." Judging by his stance in the CADU debate, Hjelm was far more conventional in his conceptual understanding. When he saw "good

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⁶⁵⁹ Hjelm, "Lantbruksuniversitetets engagemang i internationellt biståndsarbete," 2. Holmberg had gone through the Agricultural College's research catalogue and found that only 3 out of 1267 listed research projects had a clear developing country connection. Holmberg, "Integrated Rural Development," note 122.

⁶⁶⁰ Hielm, "Lantbruksuniversitetets engagemang i internationellt biståndsarbete," 6.

⁶⁶¹ Christine Sylvester, "Development Studies and Postcolonial Studies: Disparate Tales of the Third World," *Third World Quarterly* 20, no. 4 (1999); 707.

opportunities" to introduce the field of rural development at SLU, he presumably did not envision antigrowth studies. Rather, he wanted to link social studies of development to the university's core competencies in the fields of agricultural economics and agricultural science in order to create an interdisciplinary endeavor that could provide input to Swedish rural development aid projects and policies.

These arguments were connected to something the Developing Country Research Inquiry (U-landsforskningsutredningen) had discussed five years earlier. Hielm had been one of the experts attached to this inquiry, which had proposed the creation of SAREC. But it had also made other proposals: in its final report, the inquiry suggested that the existing Swedish research organization ought to be complemented in a number of fields, among them rural development, and it put forward that this should be done in the form of what they called interdisciplinary base groups: teams of researchers who, while organizationally remaining at "the research departments where their [respective] subjects are located," were to work together on development research. 662 The list of subjects proposed as relevant to rural development largely reads like an excerpt from the Agricultural College's course catalog: crop production, soil science, animal and dairy science, and agricultural economics, complemented with the social science subjects of anthropology and human geography. The inquiry's archives confirm that Hjelm had been a chief proponent of the importance of rural development, and its published report's arguments on this topic were cited at length in the Agricultural College's longterm plan from 1973.663 All this points to a larger project of establishing developing-country research at Ultuna, something Hjelm had been interested in since the mid-1960s as a part of his attempt to broaden and transform the Agricultural College. Fully in line with this, he also argued in 1980 that increased emphasis on international development should be a part of a more general effort aimed at counteracting the threat of "scientific isolation" of SLU. which, Hjelm suggested, was a university of its own kind and could risk becoming a world unto itself.664

By the late 1970s, Hjelm's project also needs to be understood in the larger context of Swedish research policy. From the late 1960s to the late 1980s, this

⁶⁶² SOU 1973:41, 138.

⁶⁶³ Meeting minutes, Developing Country Research Inquiry, 6 March 1973, 13–14, Developing Country Research Committee (YK 6082) archives, vol. 1, Swedish National Archives; Lennart Hjelm, "Synpunkter på forskning om landsbygdsutveckling," 28 March 1973, Developing Country Research Committee (YK 6082) archives, vol. 5, Swedish National Archives; Långtidsplan för Lantbrukshögskolan, 47–48.

 $^{^{664}}$ Meeting minutes, Board of Directors of SLU, 12–13 March 1980, \S 97, SLU-CF I, series A1, vol. 3.

policy was characterized by a strong focus on the role of various public authorities in setting research agendas. Historian and philosopher of science Aant Elzinga describes how, under this sectoral principle for public research,

[u]niversity research was to bear upon problems perceived to be important in the various "sectors" of social endeavor assigned to particular ministries or associated public agencies: housing, energy, environment, research support to developing countries, etc. Universities, as part of the State system, were the main repositories of all public research, including mission-oriented programmes and projects, and in fact mandated research dominated Swedish science policy during the 1970s.⁶⁶⁵

Because it came under the Ministry of Agriculture, SLU was in a special position with regard to the sectoral principle, and its sectoral responsibilities predated the general implementation of sectoral research policies. Hjelm, however, seems to have sought to move beyond SLU's responsibilities to the agrarian sectors and link SLU to sectoral research of relevance to development aid. As a contemporary observer noted, the creation of SAREC fell into the sectoral "research policy pattern" to the extent that it funded research in Sweden that sought to improve Swedish development aid (SAREC also, and primarily, supported international research and research in developing countries). It was here Hjelm argued that SLU had a special contribution to make: it could be a forum for the synthesis of social and natural sciences in the context of rural development research which ultimately aimed to improve SIDA's aid programs. SAREC, which partially was intended to function as a sectoral purchaser of research, could perhaps fund such research.

On paper, a research unit was established at the reorganized IRDC. In SIDA's staff magazine, Maria Larsson and Gunilla Åkerlund from SLU presented the new organization in 1978. Apart from a central administrative unit, it had units for education, documentation and information, recruiting, field studies (i.e., consulting), and research. Larsson and Åkerlund explained that the new research unit consisted "of one (!) person, but the intention is to link researchers from the different departments within the Swedish University of Agricultural Sciences to the unit in connection with certain projects." This idea was very reminiscent of the proposal for base groups that the Developing Country Research Inquiry had presented five years earlier.

⁶⁶⁵ Aant Elzinga, "Universities, Research and the Transformation of the State in Sweden," in *The European and American University since 1800: Historical and Sociological Essays*, ed. Sheldon Rothblatt and Björn Wittrock (Cambridge: Cambridge University Press, 1993), 195.

⁶⁶⁶ Gun-Britt Andersson, "U-landsforskning," in Wohlgemuth, Bistånd på mottagarens villkor, 104.

⁶⁶⁷ Larsson and Åkerlund, "En SIDA-filial i Ultuna," 23.

The researcher recruited when the rural development division was reorganized was Lars-Erik Birgegård. He had field experience from Africa and Asia and held a PhD in economics, awarded by the Stockholm School of Economics in 1976 for a dissertation titled *The Project Selection Process in Developing Countries*. Birgegård was headhunted for the position. As soon as SLU and SIDA had come to an agreement on the new organization and its financing, Isaksson and Pellbäck sent a joint telegram to Birgegård, then working in Nepal, informing him of the developments and hoping for his "positive response." Birgegård sent a telegram back accepting the "post at Ultuna." 668

Considering Birgegård's economics PhD, it is a reasonable assumption that his hiring was planned as the first step in constructing an interdisciplinary research program at IRDC. The center itself also evidently considered a research unit to have been established after the reorganization in 1978. But the archival material contains little evidence that any research activities actually took place. The quarterly reports the center sent to SIDA during the late 1970s made no mention of any research, and in 1980, in an analysis of IRDC's first few years of operation, Isaksson conceded that its research activities had been of a "limited scope," and that few attempts had been made to coordinate with other departments at SLU.⁶⁶⁹

That the attempt to establish a research program failed can largely be explained by institutional configurations and responsibilities. The way in which SLU, and primarily Hjelm, formulated its interest in rural development research was seemingly geared toward SAREC and its role as sectoral purchaser of aid-related research. But less than 10% of SAREC's budget was allocated to funding Swedish research, and it preferred to use these scarce resources to finance individual research projects in regular university departments rather than fund special organizations like IRDC.⁶⁷⁰ SIDA, for its part, had no interest in financing research at SLU. While having authorized the establishment of a research unit, SIDA assumed—and had also communicated this to SLU—that research funding was SAREC's responsibility.⁶⁷¹ SIDA's

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⁶⁶⁸ Nils-Ivar Isaksson and Pellbäck to Lars-Erik Birgegård (telegram), 27 October 1977 [sic – Birgegård replied on the 20th, so the correct date is perhaps October 17]; Birgegård to Pellbäck (telegram), 20 October 1977, both in SIDA, series F1 AD, vol. 1718.

⁶⁶⁹ Nils-Ivar Isaksson, "Framtida inriktning och omfattning på u-landsavdelningens verksamhet," 4, attachment to meeting minutes, Advisory Board to IRDC, 15 January 1980, IRDC, series A4, vol. 1. The quarterly reports are archived in SIDA's SLU dossier. The period 1977-1979 can be found in SIDA, series F 1 AD, vol. 1718–1721.

⁶⁷⁰ Brodén Gyberg, Aiding Science, 130; 152.

⁶⁷¹ Pellbäck & Knutsson to Hjelm, 12 October 1977. See also the meeting minutes, division meeting of the rural development division, 15 June 1977, 2.

economic responsibilities to IRDC only encompassed activities of direct relevance to its own work, which in this context meant the consulting, the recruitment, the education, and the library at the division. Birgegård, formally employed as a consultant, was consequently mainly assigned consultancy tasks and had little time to plan research. Most importantly, he became involved with drawing up SIDA's new strategy for rural development aid, which emphasized both growth and social equity and called for public participation and increased productivity among small farmers. ⁶⁷² He then left Ultuna in 1981, and with that the plan of making IRDC into a platform for interdisciplinary development research was temporarily dropped.

A Science-Practice Hybrid: IRDC's Analysis Unit

The idea resurfaced two years later, when Ingemar Croon proposed that SLU ought to engage in interdisciplinary rural development research, parts of which IRDC could host.⁶⁷³ A study visit to the World Food Program and the International Fund for Agricultural Development in Rome, led by SLU's new vice-chancellor Mårten Carlsson, had "strengthened the opinion within the university about the need for capacity development for studies on rural development matters." SIDA's new rural development strategy, in part designed by Lars-Erik Birgegård, also helped revive the issue. It was considered very ambitious and had raised new questions about SIDA's capacity to analyze rural development to meet the strategy's demands. The end result was a proposal by Croon to establish a research unit at IRDC—an "Institute for Rural Development Studies." SLU envisioned this as an academic institute with a professorship for a Swedish researcher, along with a guest professorship for a researcher from a developing country. The costs would be split between SIDA, SLU and SAREC.

In the summer of 1984, Mårten Carlsson called a meeting with a number of SIDA and political officials to discuss the future of SLU's development aid work. The group included, among others, Johan Holmberg and Anders Forsse from SIDA, Bo Bengtsson as the representative of SAREC, and the state

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⁶⁷² Lars-Erik Birgegård, interview by author, 28 January 2014. According to Birgegård, the strategy, though accepted by SIDA's management, proved difficult to implement in practice. For a summary of its contents, see Johan Holmberg, "Sammanfattning av strategi för landsbygdsutveckling," 28 November 1980, SIDA, series B2 A, vol. 53.

⁶⁷³ Ingemar Croon, "PM om lantbruksuniversitetets engagemang rörande forskning och forskningssamarbete för lantbruks- och landsbygdsutveckling i u-länder," p. 4; p. 8, 28 March 1983, IRDC, series A4, vol. 1.

⁶⁷⁴ Ingemar Croon, "Förslag angående inrättandet av enhet för studier av landsbygdens utvecklingsfrågor (Institute for Rural Development Studies – IRDS)," p. 1, 17 April 1984, IRDC, series A4, vol. 1.

⁶⁷⁵ Croon, "Förslag angående inrättandet av enhet."

secretaries from the Ministry of Agriculture and the Ministry for Foreign Affairs.⁶⁷⁶ In a memorandum serving as a basis for the discussion, SLU proposed that a new unit for "qualified, interdisciplinary studies of rural development" ought to be established at the university.⁶⁷⁷ Both Forsse and Holmberg were cautiously positive to the idea, on the condition that SLU and SAREC contributed financially. SAREC was, however, hesitant, again probably because of its limited resources. Furthermore, the candidate SLU had had in mind for the professorial chair—political scientist and Africanist Göran Hydén—declined the position.⁶⁷⁸

As SIDA was not prepared to fund research at SLU without the financial participation of SAREC, nothing came of the proposal to establish an academic research institute focused on rural development. But unwilling to give up the idea altogether, SLU instead entered into new negotiations with SIDA over the possibility of creating a unit for qualified but more practice-oriented studies. Such a unit would have a natural home at IRDC, where there already was a relevant library and an administrative apparatus in place, and where there also were established links to SIDA, the intended primary benefactor of the work.

SIDA was receptive to the idea but insisted that the unit should only perform studies aimed at producing results directly relevant to its desk officers. At a meeting about the scope of the new unit's activities, Johan Holmberg acknowledged that this would imply "a limitation of conventional academic freedom." Partly because of this, the far more academically-oriented SAREC advised against establishing the unit even though it was no longer asked to contribute funding. In its consultation response, written by Bo Bengtsson, SAREC noted that while it was positive that SIDA planned to place development aid funds at the disposal of researchers, this ought "to be done in line with the criteria used by the research community." SIDA was largely unconcerned about this side of things, however. Later, when discussing whether or not it should be described as an "analysis" or a "research" unit, Johan Holmberg expressed the view that "SIDA is less interested in nomenclature than in seeing that the [unit] addresses itself to problem areas

⁶⁷⁶ Görel Oscarsson, "Information och diskussion om u-landsverksamhet vid Sveriges lantbruksuniversitet (SLU)," 30 August 1984, IRDC, series A4, vol. 1.

⁶⁷⁷ U-landsavdelningen, "SLUs u-landsengagemang," 9.

⁶⁷⁸ See Johan Holmberg's internal SIDA memorandum on the matter: Holmberg, "Forskningscentrum på SLU."

⁶⁷⁹ Notes from meeting with SIDA regarding the research unit, p. 3, 11 February 1986, IRDC, series F10, vol. 1

⁶⁸⁰ Bo Bengtsson, "Uppbyggnad av en forskningsenhet vid Sveriges lantbruksuniversitet för frågor kring landsbygdsutveckling i tredje världen," p. 3, 10 March 1986, IRDC, serie F10, vol. 1.

which are relevant for SIDAs needs in such a manner that SIDA policy makers and others can easily make use of the results."⁶⁸¹ At the same time, SIDA emphasized that the work had to be conducted at an analytical level which was clearly distinct from the regular consulting work IRDC did.⁶⁸²

SIDA also saw the unit as a way of bringing Lars-Erik Birgegård, now widely considered an important development thinker, back into the agency's sphere of influence.⁶⁸³ He was interested in the prospect of trying to distill aspects of practical relevance from the voluminous body of development-related social science research being produced and agreed to lead the unit. Established in 1986 as a subdivision of IRDC, it was eventually named the Rural Development Analysis Unit, or the analysis unit for short. It was fully funded by SIDA.⁶⁸⁴

The unit's goal was to analyze "rural development problems in the Third World." This did not include performing empirical research. In an article in IRDC's journal, Birgegård described the work of the unit, noting that it would be geared toward pertinent problems for aid administrators:

The work has a practical and operative focus. The problems under study shall be regarded as relevant by those tasked with designing and carrying out rural development aid. Around such problems, the unit attempts to gather, analyze, summarize, and communicate the considerable range of research results and earlier experiences. 686

It thus focused on analyses and syntheses of previously published research, and even if the work was grounded in a scientific approach, the resulting publications were written with SIDA's aid administrators in mind and did not target an academic audience. Footnotes were avoided, and conclusions and recommendations were as far as possible formulated without ambiguities. In this way, the unit suggested in a presentation brochure, "[a]n overworked desk officer [at SIDA] can . . . become acquainted with the gist of up to 150 references in roughly 15 pages devoid of disciplinary jargon." The unit was thus essentially an attempt at establishing a new kind of interface between

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⁶⁸¹ Meeting minutes, Rural Development Analysis Section Steering Committee, 21 May 1986, 1.
SIDA, series F1 AD, vol. 5207.

⁶⁸² Notes from meeting with SIDA regarding the research unit, 1.

⁶⁸³ Interconsult Sweden AB, "Utvärdering av analysverksamheten vid IRDC/SLU," p. 10, September 1992, SIDA, series F1 AD, vol. 5217.

⁶⁸⁴ Meeting minutes, Advisory Board to IRDC, 23 September 1985; 17 December 1985, both in IRDC, series A4, vol. 1.

⁶⁸⁵ Lars-Erik Birgegård, "Ny enhet för analys av landsbygdens utveckling," *U-lantbruk*, no. 1 (1987): 17.

⁶⁸⁶ Birgegård, "Ny enhet för analys av landsbygdens utveckling," 17.

⁶⁸⁷ "Rural Development Analysis Section," 1989, IRDC, series F10, vol. 1.

SIDA and SLU, more scientifically grounded than the consulting activities, but still geared strongly toward practical applicability. Besides Birgegård as director, the unit included a junior researcher, agricultural economist Melinda Fones-Sundell, and, for a few years, an African senior researcher, sociologist Benson Nindi from the University of Dar es Salaam.

Initially, the unit collected research results and disseminated them in what it called issue papers. These dealt with a range of issues related to rural development: during the first year, there were papers on the role of agricultural research, price policy as a production stimulant, experiences with integrated rural development, and farming systems research. Between 1987 and 1991, a total of thirteen issue papers were produced and disseminated, primarily at LANT, but they were also sent to other agencies and organizations with an interest in rural development. In addition, the unit organized seminars at SIDA, SLU, and other institutions to discuss the findings.⁶⁸⁸ Beginning in 1989, its work shifted to the design of sector strategies, an activity in which the unit collaborated directly with representatives from Zambia and Mozambique.⁶⁸⁹

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 $^{^{688}}$ A list of all issue papers published and all seminars organized can be found in Interconsult Sweden AB, "Utvärdering av analysverksamheten," attachment 3.

⁶⁸⁹ Interconsult Sweden AB, "Utvärdering av analysverksamheten," 13.

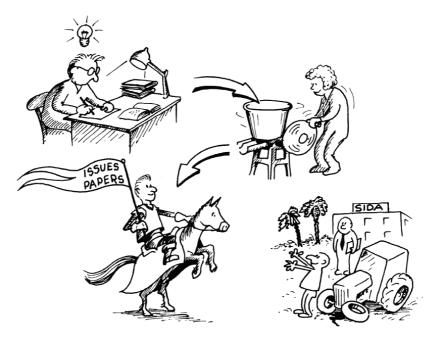


Figure 18. Taken from a self-produced brochure presenting the analysis unit, these images illustrate how it was intended to work. Distilling researchers' ideas into issue papers, the analysis unit would be a knight in shining armor, coming to the rescue of SIDA's desk and field officers struggling with broken-down tractors, or worse. But with the benefit of hindsight, the cartoon takes on an ironic quality. The inability to adjust its output to the intended audience was the analysis unit's major problem, and this is easily construed from the drawing: what good is a theoretical paper when needing a mechanic?⁶⁹⁰

The latter tasks, more operative than what had previously been considered appropriate for the unit, reflected the growing insight that the analysis unit had failed to function as a bridge between science and practice. In a self-evaluation from 1991, Birgegård emphasized that the unit had had problems with "reaching out to and influencing" SIDA's desk officers. An external evaluation presented the year after reached similar conclusions. It noted that the unit had done high-quality work but stated that its impact nevertheless had been limited. It had not "been given the academic weight and critical mass needed to create a research environment," but on the other hand, the work had not been "close enough to SIDA's and SLU's operative work to be considered immediately useful." In the end, "researchers have sometimes considered [the

⁶⁹⁰ From "Rural Development Analysis Section."

⁶⁹¹ Lars-Erik Birgegård, "Analysenhetens framtida verksamhet," p. 2, 3 February 1991, IRDC, series A4, vol. 1.

analysis unit's] reports to be mission research or consulting, whereas the purchasers at SIDA often found the reports too academic and demanding." ⁶⁹²

Looking ahead, the evaluation proposed that SIDA should increase its internal capacity for performing the kind of analyses the unit had been producing, while SLU should be given the opportunity to concentrate on academic research. It suggested that SLU's "social science and interdisciplinary research competence in developing-country matters ought to be strengthened, and SIDA ought to have a positive attitude to financing such an effort." The basic conclusion was thus that the science-practice hybrid work the analysis unit had attempted had not been successful. The roles ought to be separated instead: such analysis as was necessary for the administration of Swedish aid was a task for SIDA to handle itself, while SLU should be given the resources it needed to build up a proper research program in this area.

This was, as we have seen, very much in line with SLU's own objectives. Commenting on the evaluation of the analysis unit, IRDC remarked that "SLU considers it . . . important to obtain fixed resources for an enlarged and longterm research and education activity . . . within the field of Third World rural development."694 But SIDA remained reluctant to finance research, and for SLU, work on problems relating to rural development abroad remained beyond what could reasonably be argued to fall within its sectoral responsibilities. Its comments on the evaluation explicitly stated that "SLU's mandate and mandateship do not allow . . . the internal redistribution of resources. We need additional resources from somewhere else than from the Ministry of Agriculture, under which SLU belongs."695 The situation amounted to a deadlock: SLU could not use its core funding from the ministry for the rural development research it desired to initiate; SIDA was ready to fund what it saw as useful work at SLU, but this did not include academic research, and SAREC could fund individual research projects but was reluctant to support the establishment of a new research field at a Swedish university. 696

The impossibility of uniting SLU's interest in a new field of academic research with SIDA's demand for practical utility makes the case of the analysis unit a good example of the more general tensions that tend to characterize organizations with the goal of facilitating cooperation and flows of

⁶⁹² Birgegård, "Analysenhetens framtida verksamhet," 4.

⁶⁹³ Interconsult Sweden AB, "Utvärdering av analysverksamheten," 5.

⁶⁹⁴ Sveriges lantbruksuniversitet, "Kommentar till utvärderingsrapporten för analysverksamheten vid IRDC/SLU," p. 4, 30 September 1992, IRDC, series A4, vol. 3.

⁶⁹⁵ Sveriges lantbruksuniversitet, "Kommentar till utvärderingsrapporten," 4.

⁶⁹⁶ Towards the end of the 1980s, SAREC had begun to support research groups and not just individual researchers, but by then the analysis unit was already established and did not have the academic aspirations to be of interest to them. See Brodén Gyberg, *Aiding Science*, 152.

information between the academy and external stakeholders; what American political scientist David Guston has described as boundary organizations.⁶⁹⁷ Earlier research shows that tensions between scientific and practical demands and interests are typical for university-based boundary organizations. To be able to handle these tensions the organization needs to have a good ability to manage boundaries by adjusting its activities and by balancing different stakeholder needs.⁶⁹⁸

The analysis unit, and IRDC as a whole (which can be understood as a boundary organization in itself), lacked this boundary management ability. This was due to the way in which the rural development pair functioned. There was an uneven distribution of power between the main principals, SLU and SIDA. Though its advisory board was dominated by SLU representatives, its financial dependence on SIDA meant that IRDC was not in a position to make its own strategic decisions. The situation of the analysis unit thus became impossible because SIDA made incommensurable demands: the aid administrators would not make use of its reports, but the nature of the reports could not be changed. Giving them a more academic focus was impossible because it conflicted with SIDA's condition of direct relevance, but making the reports more practical would undermine the unit's raison d'être. The "solution" of beginning to work more operatively in a different way was appreciated by SIDA, but was not a foundation on which the unit's continued existence could be built.

In conclusion, I interpret SLU's attempt at creating a research environment as a kind of counterpart to its endeavors to set up a service export company. While there were likely scientific motives in play as well, on a strategic level it was part of the same overarching effort to reconfigure the rural development pair in order to stabilize the conditions for development-related work at SLU. Both attempts essentially failed due to diverging stakeholder interests, and SLU remained fully dependent on SIDA to provide direct funding for most of its development work. Throughout the 1980s, this funding had continuously increased, but by 1992, when the analysis unit was officially closed down, conditions were rapidly changing. New circumstances meant that a serious challenge was then being posed to IRDC and to the entire institutional collaboration between SLU and SIDA.

⁶⁹⁷ See Guston, Between Politics and Science.

⁶⁹⁸ Parker and Crona, "Being All Things."

The Department of Rural Development Studies

Nils-Ivar Isaksson returned from Kenya in 1986 and resumed his position as director of IRDC from January 1987.⁶⁹⁹ He came back to an organization that, if judged by its growing number of staff and turnover, seemed to be thriving. But its organization embodied SLU's failure to refine and clarify its development aid roles. IRDC remained an independent unit within the university, neither academized nor commercialized. It approached the end of the 1980s fundamentally in the same state as it had entered it: wholly dependent on SIDA's demand for its services. That demand, sustained throughout the 1980s by a significant interest in rural development, would however weaken significantly at the end of the decade as SIDA's priorities shifted.

"The End of the First Generation"

When Isaksson returned to IRDC, the center looked rather different from when he left in 1982. As SIDA's demands on SLU had increased, IRDC had expanded and somewhat changed its role and functions. Recruitment, education, and documentation went on much like before, but the analysis unit and the method development work had been added, and the consulting activities had expanded and transformed. During the first half of 1987, IRDC's consultants only performed a third of the commissions from SIDA in-house, with the rest being contracted either to other parts of SLU or to external partners, giving the center more of a supervisory role. 700

A first sign that this state of affairs would change came in the fall of 1988, when SIDA's management decided to reappraise the agency's relation to SLU, motivated, among other things, by the fact that "the financial extent of SLU's tasks has grown so substantially." The somewhat sinister implications of this wording were confirmed when, in early 1990, SIDA's evaluators published their report. The two independent consultants assigned to the task, Björn Mothander and Bo Sedin, considered the SIDA-SLU cooperation "in many ways unique," not only in terms of its size and structure but also its history. But they found it unfortunate that it had developed into a relationship characterized by mutual dependency, in which LANT was reliant on SLU's

⁶⁹⁹ Johan Holmberg to Hjelm, 21 July 1986, SIDA, series F1 AD, vol. 5207.

⁷⁰⁰ U-landsavdelningen, "Halvårsrapport för u-landsavdelningen vid Sveriges lantbruksuniversitet 1987-01-01-06-30," II, SIDA, series F1 AD, vol. 5209. Note that there also were contacts between SIDA and other parts of SLU, independent of the agency's commissions to IRDC.

⁷⁰¹ Mothander and Sedin, "Översyn av samarbetet," 1. See also table 4 above. Nils-Ivar Isaksson (interview) also recalled that a contributing factor was that there were an increasing number of competing private consulting forms working in the area, and these were critical of the privileged position SLU had vis-à-vis SIDA.

⁷⁰² Mothander and Sedin, "Översyn av samarbetet," 15.

expertise, and SLU was dependent on SIDA financing its developing-country-related work. Ultimately, this made Mothander and Sedin critical of the SIDA-SLU collaboration's form, particularly of the informal contacts between IRDC and SIDA and the mixing up of roles that these contacts led to. "SLU had become," they noted, "a general resource base from which, for example, staff were recruited or 'borrowed' to posts at LANT or as field personnel at various SIDA offices, while being continuously employed by SLU."⁷⁰³ They further noted that it was difficult to get an "overview of a cooperation which is largely unspecified and concerns a large number of often small, nonformalized assignments," and considered it a serious problem that it "is often impossible to discern SLU's position and role in different types of commissions."⁷⁰⁴ They especially disapproved of what they understood as instances in which SLU designed and planned projects that it then secured a commission to manage, and used the forestry education project in Ethiopia which had started in 1986 (see next chapter) as a principal example.

SLU disagreed with Mothander and Sedin. In a set of written comments on the first draft of their report, the university argued that they had misunderstood the collaboration's origins and purpose and had thus drawn misleading conclusions. Close teamwork was necessary in the complicated realities of rural development, the university argued, and the insinuations that SLU gave advice designed to secure commissions for itself were "unjustified and completely unfounded." The comments also contained a paragraph discussing the origins of, and SLU's interest in, the collaboration:

Finally, we want to point out that it is not SLU that has approached SIDA to obtain assignments or to initiate developing-country work or IRDC. It is an initiative that was taken by SIDA already a quarter of a century ago – and which SIDA has found reason to expand at the rate that Swedish development aid and SLU's competence have expanded in the relevant areas. SLU has no primary interest in maintaining or running this activity. ⁷⁰⁶

This statement, denying the Agricultural College's very active role in establishing CADU and the subsequent institutional collaboration as well as SLU's active maneuvering to get IRDC started, was at least as misleading as anything Mothander and Sedin had written. Indeed, the strong and annoyed reaction to Mothander and Sedin's criticisms in fact betrayed the very interest in the collaboration that the comments attempted to deny.

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⁷⁰³ Mothander and Sedin, "Översyn av samarbetet," 15.

⁷⁰⁴ Mothander and Sedin, "Översyn av samarbetet," summary (not paginated).

⁷⁰⁵ Sveriges lantbruksuniversitet, "SLUs principiella synpunkter på SIDA-SLU samarbetet," p. 3, 26 June 1989, IRDC, series A4, vol. 2.

⁷⁰⁶ Sveriges lantbruksuniversitet, "SLUs principiella synpunkter på SIDA-SLU samarbetet," 4.

Mothander and Sedin slightly revised their report in response to the comments. SLU considered the changes insignificant, even if Isaksson acknowledged that some of the more formal criticism was "principally correct," if difficult to apply to the practical reality in which the collaboration took place. At any rate, the damage was done. SLU's comments notwithstanding, many at SIDA recognized their daily work situation in Mothander and Sedin's conclusions. IRDC had even begun to be talked of as a "monster at the agency's bosom."

The mutual trust was further eroded through changes of key personnel at both SIDA and SLU. In 1989, Gösta Ericsson and Lars Augustinsson retired from SIDA. As I noted earlier, both Ericsson, then head of department at the agency, and Augustinsson, then director of LANT, were Ultuna-trained agronomists who always had been keen to maintain good relations with SLU. Augustinsson's replacement as director of LANT, Klas Markensten, had a wholly different background and did not share his predecessors' rural connection. An economist by training, he had been at SIDA since 1970, but having mostly worked with economic planning, he had had no previous contacts with SLU and little experience of rural development.⁷⁰⁹

Ericsson's and Augustinsson's retirements coincided with Lennart Hjelm's stepping down as chairman of the advisory board to IRDC, which he had headed since it was first established as the CADU committee at the Agricultural College in 1967 (Hjelm was 74 years old in 1989, having stayed on as chairman of the advisory board long after his professional retirement in 1982). Far from it being an honorific position, his chairmanship involved active work, mostly high-level coordination with SIDA and other agencies and organizations.⁷¹⁰ His importance in this position, and the influence he exercised at SIDA, should not be underestimated: in internal SIDA correspondence in 1985, Johan Holmberg noted that Hjelm was "responsible for much of the management" of IRDC.⁷¹¹

In reference to these three retirements, Isaksson described June 30, 1989, as "the end of the first generation of Swedish rural development cooperation – and particularly of the SIDA-SUAS cooperation."⁷¹² Isaksson's identification

⁷⁰⁷ Nils-Ivar Isaksson, "Kommentarer till 'Översyn av samarbetet mellan SIDA och Sveriges lantbruksuniversitet' – Slutrapport 1990-01-16," 2 February 1990, IRDC, series A4, vol. 2.

⁷⁰⁸ This phrase was used by several of my informants independently of one another, suggesting that it was in common use at LANT and perhaps other parts of SIDA.

⁷⁰⁹ Klas Markensten, interview by author, 19 September 2014.

⁷¹⁰ See Oscarsson to Forsse, 16 August 1982.

⁷¹¹ Holmberg to Jan Engström, 12 September 1985, SIDA, series F1 AD, vol. 2983.

 $^{^{712}}$ Nils-Ivar Isaksson, "The First Generation of Rural Development Cooperation," $\emph{U-Lantbruk},$ no. 2 (1989): 3.

of this as a significant event confirms the importance afforded to personal relationships in sustaining the rural development pair. That he called it "the end of the first generation" suggests that the pair now transcended those individuals who had constructed it and thus would live on past their retirement. Isaksson was right in the sense that there was a formal relationship between the two organizations that was independent of particular individuals. But this was true only in theory, as the collaboration had always depended on personal relationships and mutual trust. This would be lost with the retirement of the first generation, for there would be no similar second generation to replace it. The new decision-makers, particularly at SIDA, would approach the collaboration in a wholly different way.

A Clash of Cultures

Despite SIDA's attempts in the mid-1980s to formalize its relations with IRDC, much of the work had still been handled in accordance with the established informal praxis that Mothander and Sedin had severely criticized. When Markensten became the new director of LANT, these informalities came to a definite end. From the budget year 1989/90, all activities had to be formally specified and budgeted.⁷¹³

The changes Markensten implemented were in line with the trend toward New Public Management (NPM) at the time. To expand on the transformations of Swedish public administration that came with NPM's increasing influence is beyond the scope of this study: suffice it to say that it was a governance and management philosophy, inspired by private sector methods, which left little room for state agencies to informally reach out to one another. 714 Management by objectives replaced management by rules, and formalized transactions replaced informal cooperation. In the late 1980s, the Social Democratic government began to push for such changes, which, according to Inge Gerremo, were promoted at SIDA by Social Democrat Carl Tham who had replaced Anders Forsse as Director-General in 1985. 715 The changes in how the rural development pair was administrated were thus primarily linked to these more general developments in Swedish public administration. While the retirement of the "first generation" clearly facilitated the introduction of the new routines, it was not the cause of them as such. But the personnel changes at both SIDA and SLU exacerbated their negative effects on the relationship.

⁷¹³ Se Klas Markensten, "Rapport från översyn angående samarbetet SIDA-SLU," 31 May 1990, SIDA, series F1 AD, vol. 5213B.

⁷¹⁴ This idea of informal cooperation between the agencies of the state had a long history in Swedish public administration. It was explicitly specified in the older Instruments of Government that they should "reach out to one another," a wording only removed in 1974.

⁷¹⁵ Gerremo, "Några reflexioner," 2.

Alongside the new administrative forms, the operative side of the SIDA-SLU relationship was reconfigured through changes in aid priorities. If the 1970s had seen rural poverty replace the population-resource dilemma as the overarching challenge agrarian development aid was to meet, the late 1980s then saw a shift away from rural development toward environmental goals. In 1983 the United Nations had appointed the former Prime Minister of Norway. Gro Harlem Brundtland, to lead a commission tasked with the question of how to reconcile development with environment. When published four years later, the Brundtland Commission's report made environmental challenges an important part of the international development debate. It popularized the notion of sustainable development, which soon became integrated into the aid discourse. Subsequently, in 1988, the parliament introduced an environmental objective for Swedish development aid. 716 As a consequence, environmental issues came to eclipse agrarian questions on SIDA's agenda, and LANT gradually changed its orientation and eventually also its name, becoming the Natural Resources Management Division (Naturbruksbyrån or NATUR).717 Operatively, this shift meant that Swedish rurally-oriented aid began to leave its earlier productivist inclination behind. Support to food production had, in the 1960s, become established as a method to counter the population-resource dilemma, and increasing the yields of food as well as other crops remained important to the poverty-focused rural development programs of the 1970s and 1980s.⁷¹⁸ Much of this latter aid had, in fact, included environmental issues (including forestry efforts, an example of which will be analyzed in the next chapter, which often were very geared to environmental aspects) either directly or indirectly. But in these contexts, environmental issues were generally conceptualized in the first instance as production problems and were thus approached in a way that still afforded a prominent role to SLU's more practical expertise.⁷¹⁹ With the shift toward explicitly environmental goals from the end of the 1980s, the problems SIDA wanted to solve became increasingly distant from agricultural production. This thus posed a direct challenge to the relevance of the consultants at IRDC as well as to SIDA's general interest in the rural development pair.

⁷¹⁶ For a (critical) overview of the Brundtland Commission and its notion of sustainable development, see Rist, *History of Development*, 178–87; on the introduction of the environmental goal, see Odén, *Biståndets idéhistoria*, 106.

⁷¹⁷ Markensten, interview.

⁷¹⁸ This was for example explicated in the new rural development strategy designed by Lars-Erik Birgegård and others in 1979–1980.

⁷¹⁹ Inge Gerremo mentions the example of soil conservation work in East Africa, which LANT understood as a productivity-enhancing project but which also contributed to a positive environmental development. Gerremo, "Några reflexioner," 1.

This new orientation also meant that the profile of the staff at NATUR changed. Many of the younger SIDA officials were skeptical of the modernist understanding of agriculture that they saw SLU as representing. Even if they often had studied at SLU, they held rather different views compared with the older staff, who mostly had appropriated the productivist views prevalent within the organizations and public authorities of the agrarian sectors (for example, the "first generation" men Ericsson and Augustinsson had both begun their professional careers in the service science domain of agricultural extension, with its focus on hands-on support to agricultural production). They also lacked both direct and indirect experience of CADU and of the formative stage during which the close collaborative relationship with SLU had been forged. Thus they could see the rural development pair from the outside, and they were often unimpressed. The resulting clash of cultures is well illustrated by a memorandum by Amalia Garcia-Thärn, who worked at NATUR and in 1991 became the desk officer responsible for the cooperation with SLU. In the memorandum, written in 1993, Garcia-Thärn presented some reflections on the relationship with SLU and its historical baggage. She noted many of the same problems pointed out by Mothander and Sedin and explicitly referred to the changes at SIDA: "The new [SIDA officers] do not have the same historical links to SLU, even if most have been trained there, and have not been in the same kind of dependent relationship to SLU as older [officers] at the division."⁷²⁰

A good example of how the new generation of SIDA staff were unmoved by SLU's older goals and priorities can be found in Garcia-Thärn's treatment of the veterinary courses in reproduction and pathology, which, at the time of her writing, were about to be canceled. At IRDC and at SLU's veterinary faculty, these courses were venerated as long-standing and tremendously successful examples of agrarian development aid and were strongly defended against SIDA's threats of cancellation.⁷²¹ But Garcia-Thärn, unmoved by the Lagerlöfian heritage, was brief and dismissive, describing the courses as "an old activity which SIDA has wanted to cancel although strong political pressure has as of yet made that impossible."⁷²² That these views were gaining ground at SIDA by the early 1990s implies that SLU's expertise was losing its ability to shape the direction of Swedish agrarian aid.

⁷²⁰ Amalia Garcia-Thärn, "Reflexioner om SIDAs samarbete med Sveriges lantbruksuniversitet," p. 1, 24 November 1993, SIDA, series F1 AD, vol. 5219A.

⁷²¹ See e.g. Ingemar Settergren's celebratory account; published in 1993, it was certainly part of an attempt to defend the status quo (cf. also figure 5 above): Settergren, "Kurser i husdjursreproduktion 1; Settergren, "Kurser i husdjursreproduktion 2; Settergren, "Kurser i husdjursreproduktion 3."

⁷²² Garcia-Thärn, "Reflexioner om SIDAs samarbete med Sveriges lantbruksuniversitet," 3.

Attempts to Find New Funding

Three years after Isaksson's return, IRDC thus found itself in precisely the type of situation it had tried to prevent by attempting to reduce its dependency on SIDA. It clearly recognized that the changes it was facing threatened its future existence. At an in-house training day for the center's staff in January 1990, the topic was "our own structural adjustment." It was based on two future scenarios, "apathetic erosion" and "specialized expansion," with the former being the expected fate unless changes were made.⁷²³

As a consequence of this analysis, both the center and SLU began to take a new, more active stance in the matter of establishing permanent academic development-related activities at the university. In a strategic plan published in 1990, the university's central administration opened up for a discussion about the need for basic resources for developing-country research. That discussion was also part of the preparation for SLU's proposals for the upcoming government bill on research during the spring of the same year.⁷²⁴

At the same time, a major government review of SLU was under way, conducted by what was known as the SLU Inquiry (SLU-utredningen). It included IRDC, and Isaksson wrote a proposal for a consultation response to the inquiry's final report, in which he very explicitly stated the need to include developing-country research in the basic responsibilities of the university:

The developing-country related activities must become a part of SLU's regular activities. . . . In the same way as SLU today collaborates with the USA, the EC, the Nordic countries, and other developed countries, the developing-country collaboration should be **prescribed** as part of the university's mission. This means . . . that SLU must be granted **permanent resources** for its fundamental activities in this field.⁷²⁵

The assertion that the developing-country related activities must be incorporated into SLU's regular tasks and be formalized as part of the university's mission reflected the recognition that the rural development pair was breaking down and that, from a longer-term perspective, IRDC's situation thus was untenable. SLU would need its own resources and a formal government instruction to carry out normal academic activities in the area. Otherwise there would be few possibilities for continued work, except on the

⁷²⁴ Sveriges lantbruksuniversitet, "Framtidsplan för SLU 1990/91 – 92/93 samt budgetförslag för 1990/91," (Uppsala: Swedish University of Agricultural Sciences, 1989); Nils-Ivar Isaksson, "Ulandsanknuten forskning vid SLU," 1 June 1989, IRDC, series A4, vol. 2.

⁷²³ See "IRDC – framtida scenarior," January 1990; Johan Toborn to Klas Markensten, 7 January 1990, both in SIDA, series F 1 AD, vol. 5213A.

Nils-Ivar Isaksson, "Ang. förslag till yttrande over SOU 1991:101 – Landskap Näring Kunskap," p. 3, 4 March 1992, IRDC, series A4, vol. 3, bold parts in the original.

basis of individual initiatives. By situating the question in the context of internationalization more generally, the argument was also in line with Mothander and Sedin's review of the SIDA-SLU institutional collaboration, which had suggested that "the internationalization of the universities... has developed so as to make it natural that [the course program at IRDC] is financed directly by SLU's funding from the Ministry of Agriculture." Furthermore, Mothander and Sedin had considered it "natural that the government supports the developing-country research at SLU by the establishment of special researcher positions."

The government also seems to have signaled that changes were coming. A new center-right coalition government had come into power following the September 1991 election, and as early as October 1991, Inge Gerremo at NATUR wrote a letter to the National Board of Universities and Colleges, discussing "SIDA, SLU and the future." The National Board of Universities and Colleges was an agency under the Ministry of Education, which suggests that plans were being made to change SLU's ministerial allegiance. Quite in line with what the university then argued with increasing passion, Gerremo contended that, from SIDA's point of view, it would be beneficial if SLU could obtain fixed resources for developing-country work so that it could develop its own profile in the field without being wholly dependent on SIDA. If changes were being planned for SLU's mandate and position, perhaps possibilities would open up in this regard as well.

In the end, SLU remained under the Ministry of Agriculture, but the government nonetheless changed the university's mission with the bill on research presented in 1993. The bill not only entailed a significant reduction in SLU's funding, it also signaled a partially new direction for the university. It transferred responsibility for funding the closely production-related experimentation from the state to the agricultural sector, and redefined the goal of SLU's scientific activities in terms of sustainable utilization of natural resources. These changes amounted to a redefinition of SLU's sectoral responsibilities, something that opened up fresh avenues of research. At this time, the Ministry of Agriculture also showed an increased interest in developing countries, with the new state secretary, Mats Denninger, having personal experience of foreign aid. This was reflected in the bill, in which the government stated that the "aid activities at SLU are essential" and that

⁷²⁶ Mothander & Sedin, "Översyn av samarbetet," 30.

⁷²⁷ Mothander & Sedin, "Översyn av samarbetet," 30.

⁷²⁸ Gerremo to Ulla Åhgren-Lange, 30 October 1991, SIDA, series F1 AD, vol. 5215.

⁷²⁹ Government Bill 1992/93:170, Forskning för kunskap och framsteg, 363–65.

⁷³⁰ Isaksson, interview.

SLU would later be "guaranteed funding for several years to establish certain fundamental activities." This was later clarified to be a multi-year guarantee of SEK 3 million annually.⁷³¹

In an earlier appropriations request, SLU had identified four subject areas that, after a dialog with SIDA and SAREC, it considered suitable for interdisciplinary work: farming systems, ecology—environment—resources, animals and veterinary medicine, and socioeconomics with a particular focus on the interaction people—society—natural resources.⁷³² The idea was to build up developing-country research and education in these fields. Isaksson later reformulated them into more well-defined subjects, and IRDC's advisory committee decided to prioritize three socioeconomic subjects: rural development, small farming systems, and human ecology.⁷³³ The new government funds would be used to establish professorships in these subjects in order to initiate research and education.

The End of the Rural Development Pair

While SLU negotiated with SIDA and the government about these new professorships, the older IRDC-SIDA collaboration was eroding and the niche that IRDC occupied disappearing fast. Writing to Isaksson in August 1992, Markensten confirmed that SIDA's demands for SLU's practical and largely experience-based expertise was rapidly decreasing. He stated that

the number of bilateral recruiting assignments [from SIDA] to SLU [has] been substantially reduced as the number of aid efforts carried out by SIDA directly has decreased. Project execution is increasingly the responsibility of the recipient country, and Swedish participation is increasingly delegated to consulting firms. The requirements for proper procurement along with demands and opinions from the recipient countries on individual experts and competence profiles further complicates the possibilities of continuously using a number of IRDC's general consultants and recruiters for short-term consulting assignments.⁷³⁴

The practical consequence for IRDC was a forced significant staff cutback and a considerable reduction in its activities as SIDA no longer had continuous

⁷³¹ Government Bill 1992/93:170, 375; Meeting minutes, Advisory Board to IRDC, 1 November 1993, § 4, IRDC, series A4, vol. 3.

⁷³² Nils-Ivar Isaksson, "Bakgrundsinformation till användning av medel till SLU för finansiering av viss basverksamhet inom biståndsverksamheten: Regeringens proposition 1992/93:170," 16 April 1993, IRDC, series A4, vol. 3.

⁷³³ Meeting minutes, Advisory Board to IRDC, 1 November 1993, § 3.

⁷³⁴ Markensten to Isaksson, 18 August 1992, SIDA, series F1 AD, vol. 5217.

need for its services and, by this time, no interest in attempting to find a solution that could salvage the collaboration.⁷³⁵

While IRDC struggled to cope with the phasing out of most of its tasks and the laying-off of most of its staff, planning for the use of the new government funds continued. In February 1994, SLU's board of directors formally decided to create the three new professorships. Selecting candidates took some time, however, and finding them a place in SLU's organization was a complex problem. Four alternatives were considered. The first was to maintain IRDC as an independent center and employ the new professors there. The second was to appoint them to the existing Department of Economics. The third was to create a new social science department together with the Department of Economics. The fourth and final option considered was to create a new department solely for the new professors. What problematized things, from IRDC's perspective, was the idea of interdisciplinarity. Informing a working group tasked with presenting recommendations on the university's future organization and priorities, Isaksson wrote:

The departmental structure is today considered necessary in order for the work to be conducted according to prevalent academic forms, and for the necessary intrascientific rigor to be upheld. Or is this a myth that ought to be dismantled? The [departmental] form is not satisfactory to ensure the desired problem-based applied interdisciplinary approach that the developing-country work needs.⁷³⁷

Isaksson advocated a research center based on the existing IRDC, possibly with something like a departmental structure within it. If this was not considered suitable, he proposed a new department for rural development and a new international office at the central university administration. This suggestion implied that IRDC's functions would be divided between two separate organizational entities within SLU.

The major advantage a center had over a traditional department was, from Isaksson's point of view, that it would be more sheltered. A new interdisciplinary department was, he argued, atypical for SLU, and there would be differences in "organizational culture" and "norms and paradigms." It would not be easy to fit this new research orientation into an SLU that, while

⁷³⁵ See Nils-Ivar Isaksson, "Till alla IRDCare i förskingringen," 5 January 1993, IRDC, series E1 B, vol. 60.

Nils-Ivar Isaksson, "Utvecklingsfrågor i u-land – Program, teman, 3 mkr 1993/94, organisation, roller," 4 March 1994, IRDC, series A4, vol. 3.

⁷³⁷ Nils-Ivar Isaksson, "SLUs medverkan i internationellt forsknings- och utbildningssamarbete: Promemoria till framtidsgruppen," p. 5, 11 November 1994, IRDC, series A4, vol. 3.

⁷³⁸ Nils-Ivar Isaksson, "IRDC:s kommentarer på Rapport till Framtidsgruppen," 31 May 1995, IRDC, series A4, vol. 3.

noticeably broader than before, still had a self-image largely characterized by natural science, production-oriented perspectives, and goals still primarily seen in relation to the Swedish agricultural and forestry sectors. Nonetheless, at a meeting in November 1994, the center's advisory board decided to recommend the second option, the creation of a new department. No motivation can be found in the meeting minutes, but the decision was probably a result of the fact that by this time no one was interested in maintaining either the rural development pair or remnants of the structures on which it had rested. IRDC was increasingly seen as irrelevant not just to SIDA but also to SLU. A new vice-chancellor, Thomas Rosswall, had been appointed in 1994, and he did not have the same relationship with IRDC as Lennart Hjelm and Mårten Carlsson had had before him. According to his own recollection, he saw it as "an organization that had run its course."

After the usual process, three new professors were eventually appointed—Janice Jiggins in human ecology, David Gibbon in small farming systems, and Kjell Havnevik in rural development—and in September 1996, the new Department of Rural Development Studies was created. After more than three decades, SLU had thus finally achieved what the Agricultural College had set out to obtain in the mid-1960s: a permanent organizational framework for developing-country research and education. It still exists today; rural development in the global South is presently an active research and teaching discipline within SLU's Department of Urban and Rural Development. But the establishment of a research department meant that IRDC had reached the end of its road. The center was closed down, and its remaining staff and tasks were divided between the new department and the central administration's new international office. With this, the close SIDA-SLU relationship that I have called the rural development pair also ceased to exist.

The Rise and Fall of the Rural Development Pair

My use of the term rural development pair is intended to indicate both the constitutive role the SIDA-SLU relationship played in Swedish agrarian and rural development aid and to highlight its relatively long existence and the important role played by interpersonal relationships in upholding it. Largely forged in the crucible of CADU, the relationship over time developed into a large-scale permanent collaboration. The recruiting, documentation, consulting, education, and other functions of IRDC were, for some time, quite

⁷³⁹ Meeting minutes, Advisory Board to IRDC, 29 November 1994, § 3, IRDC, series A4, vol. 3.

⁷⁴⁰ Thomas Rosswall, interview by Per Lundin, 1 April 2014 (transcript in possession of the author).

important to the realization of Swedish agrarian development aid. It is fair to say that significant parts of this aid were co-produced by SLU and SIDA, from the CADU project and through the 1980s, after which the relationship was reconfigured and then came to an end.

The rise and subsequent fall of the rural development pair illustrates general changes in Swedish development aid and in the organizational landscape of the Swedish agricultural sector. The pair came about in a context where Swedish development aid was new and mostly administered by SIDA directly, where an older ethos of mutual support still existed among government agencies, and where the number of commercial firms offering expertise relevant to agrarian development aid was limited. By the early 1990s, this context no longer existed. Having gained more experience of aid, and as a response to changing trends in the international aid debate, SIDA began to focus less on agrarian questions and also largely withdrew from the direct administration of field projects. At the same time, the increasing emphasis on procurement routines and formalized relations that came with the growing influence of NPM left no room for arrangements such as the permanent connection between SIDA and IRDC, which built on long-term financial commitments that were difficult to change in response to shifting needs. IRDC, which had largely failed at selling its services to other clients than SIDA, then saw its financial base disappear. But as the relationship with SIDA fell apart, SLU was instead able to secure money and instructions from the government to realize a long-standing goal, namely, the creation of a department of rural development and the appointment of three professors responsible for research and education in the field.

These developments can be described in terms of academic drift. Contextual changes led to developing-country work at SLU losing its close ties to the practice of rural development aid. Instead it became associated with academic practices and value systems, so that in the 1990s, SLU became more concerned with teaching and studying rural development rather than participating in it. The aid projects it still played a more direct role in also focused on academic activities (see next chapter). This implies that SLU lost the practice-based agrarian expertise that had been gathered at IRDC, but which by the mid-1990s was in much less demand in the context of Swedish development aid. In this respect, the closure of IRDC marks a breaking point: Nils Lagerlöf's courses, the Agricultural College's support to CADU, and most of IRDC's consulting activities had all been expressions of a service science ideology in the sense that they were closely bound up with practical expertise

and emphasized direct connections with agricultural production.⁷⁴¹ This lost institutional ground when academic activities became more important.

There is no evidence to suggest that SLU's own attempts to institute academic rural development research in the 1980s reflected a desire to replace service science norms with academic ones. Direct participation in development aid was assumed to go on alongside education and research of relevance to such participation. The academic activities were thus intended to complement and support the practical ones as well as create a more stable situation for SLU in Swedish development aid. But by the mid-1990s, the original context of this project was gone, and its implementation had definitely proven impossible. In this respect, the developments at and around IRDC mirror those at the university as a whole, which was—and, to a degree, still is in the twenty-first century—likewise struggling with the tension between the ideal of service science on the one hand, and its academic identity on the other.⁷⁴² An important turning point came in 1993, when the government bill on research gave SLU new goals and divested it of responsibility for the important service of closely production-oriented experimentation. science task contemporaneous decline and fall of IRDC was, at least in part, a reflection of the same broader process of reconfiguring agrarian expertise in Sweden. 743 In a sense, SIDA's 1988 environmental goal is mirrored in SLU's 1993 goal of contributing to the sustainable use of natural resources.

At SLU, the interest in rural development cooperation and the global South survived this reconfiguration. Though it was not realized as originally envisioned, by 1996 development-related research and education had in fact been permanently established at SLU. It is fair to say that the rural development pair, though it was by then collapsing, provided the necessary credibility and legitimacy to the arguments SLU made for funding development-related research. Without a long tradition of aid work and engagement in the developing countries, SLU would hardly have been able to secure funding for three new professorships, and if so, rural development in the

 $^{^{741}}$ Note that there were still important differences between Nils Lagerlöf and his successors on the one hand, and the consultants at IRDC on the other. The former had solid academic credentials and academic careers outside of their engagement in development aid.

⁷⁴² See the discussion of the productivity contra the science-oriented cultures of SLU in Reidar Almås et al., "Det Gröna Universitetet i en skiftande omvärld: Hur Sveriges lantbruksuniversitet kan utforma en proaktiv sektorsroll in i en allt mer global framtid," (Stockholm: Swedish Ministry of Agriculture, 2006).

⁷⁴³ This was not limited to Sweden but was part of a wider trend in Western countries in which older agrarian problems were eclipsed by new ones that called for new forms of expertise. See, e.g, Alessandro Bonanno, "The Locus of Polity Action in a Global Setting," in Bonanno et al., *From Columbus to ConAgra*, 252.

global South would probably not have been an active research and education discipline at SLU today.

My final comment on the rural development pair relates to Fridlund's discussion of development pairs as a characteristically Swedish phenomenon. In the introduction, I raised the possibility that something in the way the Swedish public administration has been organized has tended to facilitate the creation of long-term couplings between government agencies and outside organizations for the realization of joint projects. My study can hardly be said to either support or weaken such a hypothesis. However, I would like to suggest as an avenue for further research comparative studies of government agencies that, like SIDA, were established in the 1960s and their need for technical expertise. Historian of science Jenny Beckman's analysis of the Swedish Environmental Protection Agency and its relationship with other organizations in the context of its species protection work suggests some similarities with how SIDA worked with some of its outside partners.⁷⁴⁴ It would be interesting to introduce more examples to see whether this was a more general phenomenon and, if so, what its characteristics were and how it developed over time. Did other government agencies, like SIDA, begin to demand new forms of expertise, or new forms of access to expertise? And was the dismantling that the rural development pair went through in the 1990s a typical outcome, or could such relationships generally be reconfigured and continue to function even as circumstances changed?

In the wider context of the dissertation, this chapter has demonstrated the continuity from the Agricultural College's engagement in the CADU project through SLU's IRDC and its prominent role in Swedish agrarian aid. It has then looked at the discontinuity and the changing role of SLU in development aid that came with the establishment of the Department of Rural Development Studies, today part of the larger Department of Urban and Rural Development. The latter, as I have argued, amounted to a process of academization of agrarian expertise in development aid. A turn toward academic activities, though still with a distinctly practical flavor, also characterized SLU's major field engagement in development aid in the 1980s, 1990s, and 2000s. Again set in Ethiopia, this was a project of transferring knowledge and skills in support of forestry education, driven primarily by SLU's Faculty of Forest Sciences. Like IRDC, Swedish support to Ethiopian forestry could trace its roots to CADU, but SLU's direct involvement began in earnest in another project that started in 1986, a project to which we now turn.

Jenny Beckman, "Gröna trianglar och röda listor: ArtDatabanken i naturvårdens organisatoriska landskap" (unpublished manuscript, April 2015).

CHAPTER SIX

Silvi-Cultural Encounters

SLU and Swedish Forestry Aid to Ethiopia, 1986–2009

EVEN TWENTY YEARS on, SLU's expertise would return to CADU and draw on the Chilalean experiences, which had been so important in the early days of Swedish agrarian development aid. The continuity was explicitly expressed in the opening paragraph of the preface to a 1988 report on a potential collaboration between SLU and Ethiopia in the field of forestry education:

In the past few years the Swedish University of Agricultural Sciences (SUAS) has again gradually become involved in implementation of development work, including in education, in Ethiopia. Last time this came about was in the CADU project in the mid 1960s.⁷⁴⁵

But CADU, the report's authors argued, was a rural development project to which the Agricultural College provided mostly practical support. What their report proposed was rather an effort focused on the core areas of SLU as a university:

[T]here has been a move away from the previous predilection for integrated rural development projects to efforts more geared to higher education, trials and research. This is the core competence of SUAS and the field where the responsibility to implement a project can successfully be bestowed on one or several institutions of SUAS.⁷⁴⁶

The responsibility for administrating SIDA's support to academic forestry education in Ethiopia was indeed eventually "bestowed" on the Faculty of Forest Sciences at SLU. This endeavor would ultimately include support to all academic levels of education, including doctoral training. SIDA contracted the different education-support activities to SLU, which implemented them and employed a number of staff in Ethiopia, both on a short-term and long-term basis. When the project concluded in 2009, SLU had been active in Ethiopian

⁷⁴⁵ Per-Ove Bäckström, Johan Toborn, and Marianne Wibom, "SUAS Forestry Mission to Ethiopia: B.Sc. Forestry Training at Wondo Genet; Forestry Training at the Agricultural University of Alemaya (AUA); Prospects for Cooperation between AUA and SUAS; Final Report," (Uppsala: Swedish University of Agricultural Sciences, 1988), i.

⁷⁴⁶ Bäckström, Toborn, and Wibom, "Forestry Mission," i.

forestry for twenty-three years, making this a highly significant part of both SLU's aid history and the history of SLU and its forestry faculty in general. My study of it is primarily linked to my first and second research problems: How and why did SLU's forestry faculty in the 1980s begin a more purposive work of framing its expertise in relation to foreign development? What strategies did the Swedish foresters advocate? How did the faculty's involvement develop? What effects did it have? A recurring theme will be the tensions that arose out of the project of bringing a Swedish forestry education model to a country where social and natural conditions differed markedly from Sweden. These tensions also went beyond the practice of forestry education to encompass general epistemology and academic and social cultures. To illustrate that they included both forestry matters and wider sociocultural issues, I use the term *silvi-cultural* to describe them. Silviculture is a term for the practice of forest cultivation, and the dash is intended to create an association with socio(-)cultural aspects as well.

There is little earlier research on this project, and nothing that qualifies as historical scholarship. Most of what is written has been authored by people who themselves were involved, and is of a summative and sometimes evaluative nature. 747 As in the earlier chapters the analysis is otherwise based on a mix of sources mainly originating from SLU and the Swedish aid authorities as well as on a few interviews. SLU sources drawn on include IRDC's archives as well as the central administration archives, which includes material from the Faculty of Forest Sciences and SLU's administrative unit in Umeå. I have also made use of the SIDA dossier on the Ethiopian forestry program, as well as the dossier on the cooperation with SLU. For the last part of the chronology, this material comes not from the Swedish National Archives but from the reorganized Sida's (the lowercase acronym was adopted in 1995 following the merger with SAREC and several other aid organizations) headquarters in Stockholm. I also draw on material from a new source, namely SIDA's Development Cooperation Office in Addis Ababa. The development cooperation offices, or DCOs, were part of SIDA's field organization (whereas the dossier files originate from the workings of the head office in Stockholm) and were based at the Swedish embassies in most of the main recipient countries of Swedish development aid. The DCO

⁷⁴⁷ Sven-Olov Bylund, "Lämnar Wondo Genet efter 30 år," *Resurs*, no. 3 (2009); Gessesse Dessie and Menfese Tadesse, "Rethinking Forestry and Natural Resources Higher Education in Ethiopia: An Education for Sustainable Development Perspective," *Southern African Journal of Environmental Education* 29 (2012/2013); Björn Lundgren, Reidar Persson, and Sten Norén, "Swedish-African Forest Relations," *Kungl. Skogs- och Lantbruksakademiens tidskrift* 150, no. 2 (2011); Mats Sandewall, "Swedish Support for Forestry Education in Ethiopia – What Was the Outcome?," *Forest Facts: Results from the Swedish University of Agricultural Sciences*, no. 9 (2014); Toborn, "SLU och etiopisk skogsutbildning; Toborn, "Etiopien."

institution was created in 1969 and its importance grew throughout the 1970s. It carried out initial preparation for new aid efforts and oversaw the administration of ongoing ones.⁷⁴⁸

A notable visibility problem in regards to this source material has to do with the impact of the engagement on the Swedish expertise itself. The sources clearly show that many Swedish foresters considered this project both interesting and important. It is much less evident what effect it had on their own expertise, for example, in terms of introducing new topics into research and education. This could perhaps have been mitigated by bringing in more material from the individual departments of the forestry faculty. Such material would possibly also have enabled a closer study of the reception of Ethiopian students in Sweden, in particular the large number of doctoral students who arrived in the 1990s and 2000s. As it stands, their education in Sweden has not been included in the present study. Like before, the problem of symmetry caused by a lack of Ethiopian source material also remains.

Early Forestry Paradoxes

As noted by the report quoted at the start of this chapter, Swedish forestry support to Ethiopia had originated with CADU's forestry activities. There had been some subsequent activity during the last days of empire, but conditions changed radically in the aftermath of the revolution as all forests were nationalized. Ethiopia then slid into violence as a civil war was brewing and as the new regime, led from 1977 by Colonel Mengistu Haile Mariam, initiated a series of bloody purges of opponents known as the Red Terror.⁷⁴⁹

Nevertheless, in the late 1970s SIDA and the Ethiopian government reached agreement on resuming development cooperation in support of Ethiopia's forestry sector. The agreement included support to state forests, community forests, research, training and information, and the state forestry administration. As pointed out by Björn Lundgren, Reidar Persson, and Sten Norén in their review of Swedish-African forest relations, it was a very ambitious initiative, in particular in light of the manpower situation: Ethiopia could only muster some ten foresters and twenty forest technicians in 1975 (none of which were trained in the country). Political problems also obstructed many of the initiated projects, and the turnover of aid personnel was high.⁷⁵⁰

⁷⁴⁸ For a summary of the field presence of the Swedish aid authorities up to 1990, see SOU 1990:17, *Organisation och arbetsformer inom bilateralt utvecklingsbistånd*, chapter 6.

⁷⁴⁹ See Bahru Zewde, *History of Modern Ethiopia*, 236–256.

⁷⁵⁰ Lundgren, Persson, and Norén, "Swedish-African Forest Relations," 23.

As a first step towards the creation of a corps of Ethiopian forest professionals, forest technician training was initiated with Swedish support in 1978. This was a nonacademic education with a strongly practical orientation, given at the new Wondo Genet Forestry Resources Institute established at a former Norwegian mission station outside the town of Shashemene, two hundred kilometers south of Addis Ababa. At the time, this area had a comparatively large and untouched Afromontane forest climbing the slopes toward the highlands. Along with the other forestry development projects that SIDA supported, the institute at Wondo Genet came under the Ethiopian Ministry of Agriculture rather than the Ministry of Education, which otherwise was responsible for similar training institutes in other fields. Swedish support to the institute was contracted by SIDA to a consortium of two Swedish consultancy companies, ORGUT and SwedForest. This arrangement lasted until 1986, after which SIDA took over direct responsibility.

Table 5. Timeline of important events in Ethiopian history between 1974 and 2009 (of relevance for the dissertation).

1974–1991	1991–2009
1975: Land reform effected	1987: New constitution adopted, Mengistu assumes the office of civilian president; People's Democratic Republic of Ethiopia proclaimed
1977: Colonel Mengistu Haile Mariam emerges as the leader of the military government	1987: The forestry faculty at Alemaya University of Agriculture opens
1977–1979: Red Terror, purges of political opponents	1989: Political and security situation worsens; most Swedish development aid suspended
1977: Post-revolutionary tensions escalates into open civil war	1991: Government defeated in the civil war; power passes to the Ethiopian People's Revolutionary Democratic Front; development aid eventually resumes
1978: Wondo Genet Forestry Resources Institute opens with Swedish support	1994: New constitution adopted, regional autonomy increases
1984–85: Catastrophic famine	1996: Forestry faculty is transferred to Wondo Genet College of Forestry; eventually (2000) becomes part of Debub (now Hawassa) University

SLU and Ethiopian Forestry Development

The underlying technical motivation for supporting Ethiopian forestry was the consensus belief among forest experts that Ethiopia suffered from far-reaching and ongoing deforestation with associated environmental problems. Though they believed that this process could be halted and reversed, they also recognized that

political, social, and institutional conditions in Ethiopia made what they considered proper solutions almost impossible to implement. In light of this, the experts saw education as a way to strengthen institutions in order to make rational forest management possible in Ethiopia. However, the diploma training provided at Wondo Genet was increasingly seen as too limited to achieve this objective. The course prepared students for work in practical forestry but did not open the way to higher-level administrative or management posts. Furthermore, as the institute lacked accreditation from the Ministry of Education, its students were unable to continue with an academic education within the Ethiopian university system. As an attempt to remedy this situation, the program for the Swedish-Ethiopian forestry sector cooperation for the five-year period from 1984/85 to 1988/89 had as a main theme the "up-grading of staff and training activities at various levels." The principal initiative was the idea of complementing the diploma-level forest technician training at Wondo Genet with an academic instruction in forestry aimed at present diploma holders.

SLU was proposed as the implementing organization for this training program. The most important reason for this was that a key person in SIDA's forestry assistance to Ethiopia, Sven-Gunnar Larsson, was otherwise the dean of SLU's School of Forest Engineers in Skinnskatteberg in central Sweden. In the mid-1980s, Larsson was on leave from the school and was instead employed by SIDA as manpower coordinator at the Natural Resources Conservation Development, Main Department (NRCD-MD), the subdivision of the Ethiopian Ministry of Agriculture that oversaw forestry development. Larsson, characterized by an internal SIDA memo as having strong "personal authority along with a marked ability to cooperate," was a very influential figure. The same memo suggested that he acted as de facto coordinator of the entire forestry development program and that he had the full confidence of the vice-minister in charge of the NRCD-MD, Aklu Girgre. His person thus linked the NRCD-MD to SLU, and he strongly contributed to the Ethiopian enthusiasm for the latter.

⁷⁵¹ For an example from somewhat later, see Mårten Bendz, "Forests and Forestry in Ethiopia," (Växjö: Rural Development Consultants, 1988).

⁷⁵² Sven Sjunnesson, interview by author, 29 January 2015. This was a major concern for Wondo Genet's management, Ethiopian and Swedish. Accreditation was eventually secured, though the process by which this happened is beyond the scope of the present study as it did not directly involve SLU.

⁷⁵³ Sven-Gunnar Larsson, "SIDA Sponsored Training and Manpower Development Activities 1986/87: Natural Resources Conservation Development Main Department," p. 2, May 1986, SIDA-ETI, series F72, vol. 16.

⁷⁵⁴ Lars Sandahl, "PM om Sven-Gunnar Larsson, Manpower Development Coordinator, Natural Resources Conservation Development Main Department (NRCDMD), Ministry of Agriculture, Etiopien," 6 December 1985, SIDA, series F1 AD, vol. 2983.

This enthusiasm became evident when Aklu Girgre visited Sweden in the summer of 1985. He participated in meetings at Ultuna in order to discuss Larsson's idea of a new Bachelor of Science (BSc) program in forestry for Ethiopian students. Among others, Aklu met SLU's university director (the head of the university administration), Görel Oscarsson, who was a close associate of former vice-chancellor Hjelm. As I discussed above, Hjelm retained an active interest and involvement in SLU's aid-related affairs even though he had retired as vice-chancellor in 1982. He and Oscarsson, who had gotten along well with Aklu, were eventually nominated by SIDA to take part in a review of the Ethiopian forestry program. In conjunction with this, they wrote a concrete proposal for a training program for a BSc degree in Forestry Management for Ethiopian students, to be given by SLU's forestry faculty. 755 In March 1986, Aklu Girgre then contacted the DCO at the Swedish Embassy to formally request the implementation of this new degree program as part of the ongoing forestry cooperation. Aklu further stated that, as had been proposed in the earlier report, the new BSc program should be "planned, organized, implemented and monitored by the Swedish University of Agricultural Sciences, SLU."756

As SLU was willing to participate, and SIDA readily made funds available, it proved straightforward to gain approval for the project. In June 1986, SLU's board of directors formally authorized the BSc program.⁷⁵⁷ Following further negotiations, agreements between SLU, SIDA, and the Ethiopian Ministry of Agriculture were also finalized. The program they had designed was to build on the diploma training at Wondo Genet and completion of that course would be a prerequisite for enrollment. It would take place over five semesters, with the third semester taking place at the School of Forest Engineers in Skinnskatteberg (which was to be the implementing department at SLU). The other four semesters would take place at Wondo Genet. SLU would award the degree of Bachelor of Science in Forestry Management to those successfully completing their studies.⁷⁵⁸ A board of study was formed to supervise the course and exercise ultimate responsibility for its implementation. This was a wholly Swedish group with no Ethiopian representatives. It was chaired by Per-Ove Bäckström, the dean of the forestry faculty, and consisted of several SLU forestry professors as well as Sven-Gunnar Larsson, the designated course

⁷⁵⁵ Holmberg to Engström, 12 September 1985. I have not been able to locate Hjelm's and Oscarsson's proposal, but it is referred to in a number of communications: see e.g. Sven-Gunnar Larsson to Oscarsson, 23 April 1986, SIDA, series F1 AD, vol. 2984.

⁷⁵⁶ Aklu Girgre to DCO Addis Ababa, 21 March 1986, SLU-CF I, series F1, vol. 624.

⁷⁵⁷ Meeting minutes, Board of Directors of SLU, 16 June 1986, § 106, SLU-CF I, series A1, vol. 4.

⁷⁵⁸ See the contract on consulting services between SIDA and SLU, Project: Bachelor of Science, Forestry Management, Appendix B, 26 September 1986, SIDA, series F1 AD, vol. 2984.

manager, Sven Sjunnesson, the head of academic affairs at the Wondo Genet institute, and Sten Norén from IRDC at Ultuna. The Ethiopian Ministry of Agriculture retained responsibility for selecting the participants among Wondo Genet graduates, but the selection remained subject to final approval by the board of study.

Integrating Theory with Practice

As planned, the BSc program was based on an integration of theory and practice. The terms of reference appended to the contract between SIDA and SLU defined the course's primary objective as providing the student with the "scientific background and practical experience" needed to serve as a forestry management, research, or education professional. It was also to give the students "a solid motivation to conserve, develop and manage the natural resources of the country." The terms of reference further stated that the course was tailor-made for Ethiopian conditions to meet the "urgent need" for forestry expertise. 760 Its contents were made up of an integration of formal lectures, field visits and exercises, laboratory work, and a final thesis. So while it was an academic stepup from the diploma course and included scientific training, it was to remain firmly grounded in practical forestry work. The course was thus intended to create a group of professionals who could staff administrative positions without their having lost touch with the practice of forestry. It was also for this reason that the course was directly based on the diploma training and was geared toward students with some earlier forestry experience.

The first batch of sixteen students started their training at Wondo Genet in the fall of 1986, with introductory courses, in among other things, the English language, "Ethiopian studies," and mathematics and statistics. The main forestry subject taught at the start of the course was forestry mensuration, i.e., quantitative measurements of forest stands. During the second semester, this was complemented by teaching in silviculture, forest and wood technology, integrated forestry management planning, and a few other subjects. Host teachers were expatriate Swedes from SLU. The third semester in Skinnskatteberg was then devoted to subjects and kinds of training deemed impossible or impractical in Ethiopia, including some minor subjects for which it was judged unreasonable to send Swedish teachers to Wondo Genet. More importantly, however, the semester gave the students a taste of forestry under

⁷⁵⁹ Meeting minutes, Board of Study of BSc Forestry Management (Ethiopians), 18 August 1986, SIDA, series F1 AD, vol. 5207.

⁷⁶⁰ All quotes from the contract on consulting services, BSc Forestry Management, Appendix B, 1.

⁷⁶¹ The Ethiopian studies subject was most likely an euphemism for political indoctrination demanded by the regime. For the course structure, see the contract on consulting services, BSc Forestry Management, Annex I.

completely different conditions from what they were used to in Ethiopia. The stated main purpose of the semester in Sweden was to "let the students take part of and live in a society and an envirionment [sic] where forestry plays such an important role, and to have an easy and natural access to educational and learning resources."⁷⁶² The schedule was dominated by a continuation of the courses in silviculture, forest and wood technology, and integrated forestry management planning.

However, as taught in Sweden these subjects took on a different flavor, for access to educational resources meant, in no small part, access to large forests tracts for practical training. Such training, integrating different subjects, was emphasized during the Skinnskatteberg semester: 38% of the teaching hours were spent on applied exercises in forest locations, and the students also made a number of practice-oriented study tours in south and central Sweden. A good example of the integrated approach is the course in stand treatment, of which a major part "consisted of an integrated exercise in silviculture, operational planning and ergonomics. In this practical thinning-exercise all operations were fulfilled by the students themselves: Planning, selection of trees, felling operations, time studies, ergonomic studies and a final follow-up of the results." Similar practical and applied exercises were important in most subjects, and, in general, strong emphasis was put on complementing theoretical instruction with practical training.

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⁷⁶² Sven-Gunnar Larsson, "BSc Forestry Management Training Project: Progress report no. 3," 2, SIDA, series F1 AD, vol. 5209.

⁷⁶³ Per Rudebjer, Lars Höök, and Gustav Fredriksson, "An Evaluation of the Third Semester in Sweden," p. 3, 30 November 1987, SIDA-ETI, series F72, vol. 21.

⁷⁶⁴ Rudebjer, Höök, and Fredriksson, "An Evaluation of the Third Semester," 5.



Figure 19. Ethiopian BSc students in the library of the Adelsnäs estate, Åtvidaberg, Sweden, in the summer of 1987. Adelsnäs is the center of Baroniet Adelswärd AB, a major forestry enterprise, and the visit exemplifies the sort of study trips undertaken during the semester in Sweden. The students appear engrossed in a map, probably of some part of the productive forest areas around the estate. In the background is Torgny Söderman from SLU's School of Forest Engineers. Photo Sven Sjunnesson.

Out of the forest, the course was, however, marred by tragedy and political dissent. One of the students passed away during the semester. Three others left Skinnskatteberg unexpectedly and later applied for political asylum in Sweden. Such defections were not unusual among Ethiopian students abroad, and the Ethiopian Ministry of Agriculture was not particularly concerned, citing much higher rates in other countries. He ministry was presumably keen to maintain the flow of Swedish aid money. It was a much more serious issue for SIDA, who could only justify the project as long as it produced graduates for the Ethiopian administration and education system.

The following year, a second batch of students arrived in Skinnskatteberg for their Swedish semester, and as it concluded, another four students applied for political asylum. By then, another Ethiopian forestry student on a scholarship at Umeå University had also defected, and the issue became

⁷⁶⁵ Larsson, "BSc Forestry Management Training Project: Progress report no. 3," 7.

⁷⁶⁶ When discussing with SIDA officials, the Ethiopian authorities mentioned defection rates of fifty percent or more in other Western countries. I cannot judge the veracity of this figure. See Lisbet Bostrand, "Reserapport," p. 4, 22 November 1988, SIDA-ETI, series F72, vol. 20.

critical.⁷⁶⁷ Lars Leander (who earlier featured in this dissertation as a young agronomist at CADU), the deputy head of the development cooperation office in Addis Ababa, wrote to the NRCD-MD that this was a "drain of trained people" that "the [Ministry of Agriculture] can ill afford." He further noted that it also had "certain implications in Sweden." These implications led the DCO to consider proposing to keep all training for the third and final batch of bachelor students in Ethiopia.

The prospect of relocating the third semester to Ethiopia alarmed those responsible at SLU, who were quick to point out that such a decision would have "a lot of practical as well as pedagogical consequences" for the training program.⁷⁶⁹ A memo by Per Rudebjer at SLU, the course director in Sweden, outlined some of them.⁷⁷⁰ A problematic practical consequence was that more Swedish teachers would be needed in Ethiopia, but the third semester was scheduled from May to September, a period when many Swedes hesitated to work abroad. But worse, moving the semester to Ethiopia undermined the pedagogical idea of using the period in Sweden to integrate studies of different subjects within the general framework of a country with a strong industrial forestry sector. It also meant that the opportunities for applied field exercises would be limited. The latter point had been put more forcefully in the final evaluation of the Swedish semester for the first batch of BSc students, in which Rudebjer and teachers Lars Höök and Gustav Fredriksson had stated that if the third semester moved to Ethiopia, "[t]he practical touch of the training will be considerably weaker, due to the lack of research trials, suitable and varying forests for exercises, various types of forest enterprises and organizations as hosts for excursions and field trials etc."771 They argued that this, together with other practical and pedagogical consequences, meant that it would not be "possible to maintain the present quality of the training if the third semester would be transferred to Ethiopia."772 After some vacillation, the semester in the end remained in Sweden for the third and final batch of BSc students. The Ministry of Agriculture was, as Leander summarized it, "not too worried" about the defection rates, and SLU's concerns were probably also taken into

⁷⁶⁷ Larsson to DCO Addis Ababa, 24 October 1988; Isaksson to the Embassy of Socialist Republic of Ethiopia, 2 December 1987, both in SIDA-ETI, series F72, vol. 21.

⁷⁶⁸ Lars Leander to Kebede Tato, 1 November 1988, SIDA-ETI, series F72, vol. 21.

⁷⁶⁹ Larsson to Leander, 8 November 1988; Per Rudebjer, "What Does it Mean to Locate Semester 3 to Ethiopia?," p. 1, 18 October 1988, both in SIDA-ETI, series F72, vol. 21.

⁷⁷⁰ Rudebjer, "What Does it Mean to Locate Semester 3 to Ethiopia?"

⁷⁷¹ Rudebjer, Höök, and Fredriksson, "An Evaluation of the Third Semester."

⁷⁷² Rudebjer, Höök, and Fredriksson, "An Evaluation of the Third Semester."

account.⁷⁷³ The final batch of students graduated in 1990, and with them, the Wondo Genet/Skinnskatteberg BSc project concluded.



Figure 20. BSc degrees in Forestry Management being awarded at Wondo Genet in 1988. On the left are the project's founding father, Sven-Gunnar Larsson, and the dean of SLU's Faculty of Forest Sciences, Per-Ove Bäckström. The ceremony takes place under the portrait of Mengistu Haile Mariam, the leader of the Derg, who in 1987 had been proclaimed president of the newly established People's Democratic Republic of Ethiopia. Photo Sven Sjunnesson.

A Paradoxical Approach

The BSc course was the first formal collaboration in forestry education between SLU and Ethiopia. It was always intended as a temporary program and was relatively small-scale compared to the major institutional collaboration between SLU and the Ethiopian Ministry of Education being simultaneously planned and which is the topic of the next section of this chapter. But the importance the Swedish foresters attached to practical training foreshadows issues that would later arise and that arguably were intrinsic to the entire effort of teaching Swedish forestry in Ethiopia. More specifically, the BSc course is a first illustration of how a practically oriented Swedish forestry education model struggled in the face of silvi-cultural conditions in Ethiopia. It was only, SLU

⁷⁷³ Leander to Lisbet Bostrand, 2 December 1988, SIDA-ETI, series F72, vol. 21. I have been unable to find any indications of how the final decision was made, but it was probably a complicated process, seeing as the matter was definitely settled only a month before the semester was to begin. See meeting minutes, Board of Study for the BSc course on Forestry Management for Ethiopians, 12 May 1989, SIDA, series F1 AD, vol. 2988.

felt, by providing part of the training in Sweden that the quality in terms of conditions for practical exercises could be maintained.

There is, however, an apparent paradox here. The course was supposedly tailored to Ethiopian needs, but if the practical training was so place-bound as to require a semester in Sweden, was it then really applicable to Ethiopia? There is a more general dimension to this silvi-cultural problem: to what extent was the encounter with Swedish forestry practice relevant to an Ethiopian forester who would work in Ethiopia? During the planning stages, this had in fact been pointed out as a problem. A major planning meeting at SLU had discussed the potential benefits and drawbacks of a semester in Sweden, and noted that "there was a certain risk that [the students] would learn techniques less well adapted to Ethiopian conditions."774 The meeting nevertheless identified a number of arguments for a Swedish semester, of which the most important one was that Sweden had a holistic and systems approach to forestry that was unusual in other places, and that it would benefit the Ethiopian students to come into contact with it. This notion of the special status of the Swedish (or perhaps Nordic) forestry system and forestry expertise became a major ideological motivation for the curriculum design, with its extensive study tours and integrated practical exercises.



Figure 21. SLU's deputy vice-chancellor, Hilmar Holmen, observes a field exercise while visiting Wondo Genet for a graduation ceremony. In the background, partially obscured by the student

⁷⁷⁴ Sten Norén, "Möte om skogsutbildning i Etiopien," p. 2, 18 June 1986, SIDA, series F1 AD, vol. 2984.

closest to the camera, is forester Gunnar Rutegård, one of the teachers of the BSc course. The connection to SLU's School of Forest Engineers is apparent from the students' tracksuits, which prominently feature the school's name and logo on the back. Photo Sven Sjunnesson.

There is only ambivalent evidence as to what impact this had on the Ethiopian students. An account of the trip to Sweden by course participant Taye Bekele, written for the graduation magazine produced in May 1990 for the third group of students, notes that "practical experiences" were a highlight of the trip but provides no details about the forestry education in Sweden. Rather, it focuses on more touristy experiences of the country. 775 While hardly incontrovertible proof, it is perhaps an indication that the students found it hard to grasp what the practical applications of the time in Sweden were. An evaluation was also made of the first course, in which the students noted that they appreciated the integration of theory and practice. They also directly addressed the applicability of the Swedish semester. Summarized by the course management, it reads: "[t]he training is possible to apply to ethiopian [sic] conditions."⁷⁷⁶ While it is impossible to know what the students actually thought or to what extent they felt free to give their true opinion on the matter, this might suggest that while they enjoyed the practical training, they perhaps had a rather lukewarm attitude toward its practical relevance for Ethiopian conditions. A tentative conclusion is that the Swedish semester of the BSc courses prioritized demonstrating Swedish forestry over direct aid effects. In the terms I have used, the Swedish experts thus aimed at inculcating the Ethiopian students not just with forestry knowledge but also with a Swedish silvi-culture. They were convinced that demonstrating modern Swedish forestry, as an example and perhaps also as inspiration and a future goal, would be beneficial in the long term even if it had few immediate effects and little direct relevance for Ethiopian conditions. Moreover, it is clear that the Swedish experts were convinced of the necessity and long-term utility of a practically oriented forestry education in Ethiopia itself, as I will expand on in the following sections.

Forestry Education without Forests?

SLU's engagement in the temporary BSc program rested on the influence that Sven-Gunnar Larsson could exercise both on SIDA's forestry program and on the NRCD-MD, as well as on the mobilization of old SLU interests in Ethiopia

⁷⁷⁵ Taye Bekele, "A Journey to the Land of the Midnight Sun, Sweden," in "Graduation Day Magazine: Batch III, Bachelor of Science, Forestry Management," May 1990, SIDA, series F1 AD, vol. 2989.

⁷⁷⁶ Larsson, "BSc Forestry Management Training Project: Progress report no. 3," 5.

through the retired vice-chancellor Hjelm and his close colleague Görel Oscarsson. The project slotted nicely into the larger context of SIDA's forestry cooperation with the Ethiopian Ministry of Agriculture. But at the same time, the Faculty of Forest Sciences at SLU had begun to cultivate contacts with the Ministry of Education in Ethiopia. These contacts soon found SLU's forestry experts clashing with SIDA over the contents of Swedish forestry aid, while simultaneously having to deal with intra-Ethiopian political conflicts over the control of academic forestry education. In the midst of this, the Swedish foresters attempted to plan and push for a new forestry curriculum for Ethiopian students, building on and developing experiences from the temporary BSc program at Wondo Genet.

Alemaya on the Agenda

The main official motive behind the temporary BSc program was to solve problems related to the Ethiopian forestry administration's lack of trained staff. At the root of this problem was the fact that, unlike agriculture, forestry had never been an academic subject in Ethiopia. The Ethiopian Ministry of Agriculture had provided a number of scholarships for forestry studies abroad, mostly in East Germany and Britain, but these courses were judged costly and struggled with grantees not returning home after their studies. He by the mid-1980s, the government of Ethiopia had decided to create a permanent faculty of forestry at the Alemaya University of Agriculture (AUA). Alemaya was situated between the cities of Dire Dawa and Harar in rural eastern Ethiopia, more than six hundred kilometers by road from the forestry institute in Wondo Genet.

The university in Alemaya was, as mentioned in chapter 4, founded in 1952 as an American aid project. It was initially linked to and modeled on the Oklahoma Agricultural and Mechanical College. It later became a faculty of Addis Ababa University, and was given the status of an independent university in 1984. As such, it came administratively under the Ethiopian Commission for Higher Education (CHE), the subdivision of the Ministry of Education that oversaw the country's universities. With Alemaya's independence, the commission wanted to concentrate all higher education related to the agriculture and forestry sectors there. The existing faculty of veterinary medicine was to be relocated from Debre Zeit (Bishoftu) to Alemaya, and a new faculty of forestry was to be established. The creation of this new center for agrarian expertise rested on a credit application submitted in 1986 by the commission to the International Development Association (IDA), a World

⁷⁷⁷ Lundgren, Persson, and Norén, "Swedish-African Forest Relations," 24.

⁷⁷⁸ Toborn, "SLU och etiopisk skogsutbildning," 60.

Bank-affiliated organization that provided credit to the world's most impoverished countries. It had accepted most of the proposal and had, among other things, agreed to support the establishment of a forestry faculty with a yearly intake of twenty-five students to an undergraduate study program.⁷⁷⁹

At the outset, the application to the International Development Association was not connected with the Swedish aid program. The institute at Wondo Genet and the BSc course in forestry management were part of the wider forestry collaboration between SIDA and the Ethiopian Ministry of Agriculture and did not involve Alemaya or the Commission for Higher Education. However, SLU had concurrent contacts of its own with the Ethiopian Commissioner for Higher Education, Taye Gulilat, who was eager to enlist SLU and SIDA to support the new forestry faculty. According to Per-Ove Bäckström, the first contacts between SLU's forestry faculty and the commission were taken on the initiative of Mårten Bendz, a former vice-chancellor of the College of Forestry who was working in Ethiopia at the time.⁷⁸⁰

These contacts bypassed SIDA, which caused some bad blood at the agency. It had in fact come to SIDA's attention already in February 1986 that the CHE was interested in obtaining Swedish support for its new faculty. Deciding, however, that its loyalty in Ethiopian forestry issues lay with the Ministry of Agriculture, the agency had not taken up the matter. SLU had then gone ahead on its own, with Per-Ove Bäckström having contacted Taye to communicate SLU's interest in collaborating with Alemaya. When Johan Holmberg, the head of LANT, accidentally found out about this through a chance encounter with Mårten Bendz while traveling in Africa, he annoyingly telexed Stockholm asking them to communicate to Bäckström and SLU that "we cannot work in this manner and that this project is not presently an issue [for SIDA]." 782

This message was relayed to SLU, and it says something about its enthusiasm that the rebuff did not deter it, despite the general dependence on SIDA for all its aid activities. Vice-Chancellor Mårten Carlsson instead proceeded to invite Taye to visit Sweden and SLU in the summer of 1986. The latter cordially accepted, stating that the visit would provide knowledge that would "form the bases [sic] for gainful further cooperation between the

⁷⁷⁹ See the discussion in Bäckström, Toborn, and Wibom, "Forestry Mission," part B.

⁷⁸⁰ Per-Ove Bäckström, interview by author, 25 February 2015.

⁷⁸¹ Engström to LANT, 26 February 1986, 2, SIDA, series F1 AD, vol. 2984.

⁷⁸² Holmberg to Lars Sandahl (telegram), 9 April 1986, SIDA, series F1 AD, vol. 2984.

⁷⁸³ Leander to Engström (telegram), 14 April 1986, SIDA, series F1 AD, vol. 2984. SLU might, with some reason, have been confident that SIDA also needed them and thus would not escalate the conflict.

Commission and the Swedish University of Agricultural Sciences."⁷⁸⁴ SIDA was presented with the invitation as a fait accompli, which did not go over well with it. Holmberg wrote a stern letter to Sven Pellbäck at IRDC, in which he censured SLU's attempt at manipulating SIDA by inviting Taye and demanded that SIDA be given a say in any similar future invites.⁷⁸⁵

On one level, the evident conflict between SLU and SIDA was about influence over the content of the aid program, a matter that SIDA justifiably considered its prerogative. But the situation was further complicated by a potential conflict between the involved Ethiopian ministries. As far as the forestry aid went, SIDA had been dealing with the Ministry of Agriculture and had developed a good working relationship with Aklu Girgre, the head of NRCD-MD. In a letter from Jan Engström at the DCO in Addis Ababa to Stockholm, the former noted that Aklu was "unwilling to even discuss the faculty matter." SLU's courting of Taye and eagerness to become involved in Alemaya thus posed a problem for the forestry aid program as a whole.

SLU was less concerned about SIDA's other interests in Ethiopia and was very eager to go ahead with the project. As noted in chapter 5, at this time IRDC pushed for a more active role for SLU in managing aid projects. A development initiative in Ethiopia also appealed to many prominent actors at the Faculty of Forest Sciences. The faculty was developing a general interest in the developing countries at this time, something which coincided with the naming of Per-Ove Bäckström as dean in 1985. In September of that year, the faculty had appointed professor Per Wramner to investigate "the faculty's future engagement in developing countries." Wramner was to study possible forms for such an engagement, including education and research but also informal and formal collaborations between the faculty and institutions in developing countries.

It remains unclear why the Faculty of Forest Sciences' interest grew at this particular time. As Per-Ove Bäckström recalled it, his interest was triggered by discussions with Mårten Bendz. The disastrous Ethiopian famine of the mid-1980s also increased social (with Irish rock musician Bob Geldof's Live Aid concert perhaps the most salient expression of this) and political awareness of

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⁷⁸⁴ Taye Gulilat to Carlsson, 29 April 1986, SLU-CF I, series F1, vol. 624.

⁷⁸⁵ Holmberg to Pellbäck, 5 June 1986, SIDA, series F1 AD, vol. 2984.

⁷⁸⁶ Engström to LANT, 26 February 1986, 2.

⁷⁸⁷ Meeting minutes, Faculty board of SLU's Faculty of Forest Sciences, 19 September 1985, § 13, SLU-CF I, series A20 B, vol. 2; Draft inquiry directives, 16 September 1985, SLU-CF I, series F1, vol. 619.

⁷⁸⁸ His report was published as Per Wramner, "Skogsvetenskapliga fakultetens ulandsverksamhet: Utredning med förslag till riktlinjer för ett utökat ulandsengagemang," (Uppsala: Faculty of Forest Sciences, Swedish University of Agricultural Sciences, 1986).

⁷⁸⁹ Bäckström, interview.

the situation in the country, and at SLU the old Ethiopian engagements were still held in high regard. Both IRDC and SLU's central management favored the initiative, which might have stimulated the faculty's interest as well. At any rate, from 1986 onward the forestry faculty strongly supported a collaboration with Ethiopia. Almost immediately after the matter of Alemaya had first been raised, a rapid investigation had been commissioned to study if "the Faculty of Forest Sciences can and ought to become engaged in the development of a forestry faculty at the agricultural university in Alemaya, Ethiopia." This feasibility study reached generally positive conclusions, though it pointed out that several issues needed to be considered in greater detail.

Forestry without Trees?

Nothing had been decided about SLU's eventual involvement in Alemaya when the Wondo Genet/Skinnskatteberg BSc course started in the fall of 1986. But the matter was brought up in the lead-up to the annual review of the Ethio-Swedish forestry sector cooperation, in which SLU—on account of its role in the BSc program—had been invited to participate. The annual reviews, where SIDA representatives met with their counterparts in the recipient countries, were tools intended to make sure that project orientations and goals were coordinated between donors and recipients. In preparation for the 1987 review. Vice-Minister Aklu Girgre wrote to the Swedish Embassy restating the Ministry of Agriculture's view that manpower was the main constraining factor for the development of Ethiopian forestry and that the ministry would like SIDA to keep financing collaborative efforts with SLU to improve the situation. Aklu clearly expressed that he wanted SLU to assist with all levels of training as well as research: "The envisaged role for the Swedish University of Agricultural Sciences is in short to provide professional advice and expertise in the whole spectrum of forest training. Training on higher levels is closely linked to research but also for the foreseen major expansion of forest activities research is a sine qua non."⁷⁹¹

Though seemingly a reconciliatory statement, it did not in fact indicate agreement with the Commission for Higher Education about the way forward. The latter had also further complicated matters by proposing a transfer of the temporary BSc program from Wondo Genet to Alemaya University of Agriculture, where the new forestry faculty was due to open in August 1987. The commission argued that relocating the SLU-supported program to

⁷⁹⁰ Alf Arvidsson, Lars Höök, Göran Peterson, and Folke Bohlin, "Förslag till insatser vid uppbyggandet av en skoglig fakultet vid det etiopiska lantbruksuniversitetet i Alemaya," p. 1, 26 March 1986, SIDA-ETI, series F72, vol. 16.

⁷⁹¹ Aklu Girgre to Swedish Embassy, 27 April 1987, 5, SIDA-ETI, series F72, vol. 20.

Alemaya would strengthen the new faculty, but its initiative was undoubtedly intended more as an attack on the Ministry of Agriculture and the NRCD-MD than motivated by educational concerns. This manifestation of a power game within the Ethiopian government brought CHE into SIDA's negotiations over the forestry aid and, conveniently for both CHE and SLU, forced SIDA to take a stand on SLU's relationship with Alemaya.

When the stakeholders gathered at the annual review meeting, the commission's representatives accordingly proposed to move the BSc program to Alemaya as soon as possible. The other parties resisted, arguing that it was unclear whether the facilities at Alemaya were sufficient, what a move would imply in terms of costs, and when it would be most suitable to carry out. The meeting eventually agreed to a solution that SIDA and SLU had earlier proposed to CHE.⁷⁹² A special mission involving representatives from all interested parties would be carried out to investigate the implications of the move. Its terms of reference suggests that the commission had insisted strongly on the move, but that there was general concern among the other parties about the state of affairs at Alemaya, which was just about to open its forestry faculty: "Questions were raised if Alemava presently has dormitories, classrooms, laboratories, apartments for teachers, teaching capacity etc." Not only were university resources lacking, but natural resources were a problem as well: "Another question also raised was if forests for the students' exercises existed at acceptable distance from Alemaya, both natural and man-made forests."⁷⁹³

This was subtle language for what the Swedish experts had now begun to see as a major obstacle, not just to the transfer of the temporary program but to the forestry faculty at Alemaya as a whole. Unlike the Wondo Genet institute, which had both natural and plantation forests on and in proximity to its premises, the Alemaya campus was in an area with little woodland. The lack of forests within easy reach of Alemaya would hinder the development of a curriculum with exercises in practical forestry, which SLU, as we have seen, considered limited even at Wondo Genet. CHE was unmoved by this objection. It had already designed its own curriculum, which built entirely on theoretical instruction and required no previous experience with forestry for admission. Its first two years were co-read with agronomy students, after which two years of forestry courses, but no practical education, followed.⁷⁹⁴ Thus there were two diverging views of what a forestry education entailed. For the SLU representatives, a BSc program in forestry was something similar to the Swedish three-year forest engineer

⁷⁹² See Per-Ove Bäckström and Isaksson to Taye Gulilat, 30 April 1987, IRDC, series A4, vol. 2.

⁷⁹³ "Draft Agreed Minutes of the 1987 Annual Review on Forestry," appendix 2, 30 April 1987, SIDA-ETI, series F72, vol. 16.

⁷⁹⁴ See Arvidsson et al., "Förslag till insatser," attachment 5, 2.

course, which, like the program SLU ran with the Ministry of Agriculture, had practical forestry experience as an admissions' requirement and included a number of practical courses. Hence, there were now two intertwined conflicts over the future collaboration: one had to do with the balance between theoretical and practical training, and the other with potential conflicts over the home of forestry education, and forestry education aid funds, within the Ethiopian government. ⁷⁹⁵

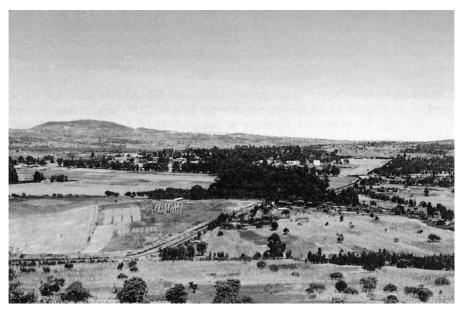


Figure 22. Alemaya University of Agriculture, surrounded by farmland. The arboretum in the center of the image allowed limited practical forestry exercises on-site, but SLU deemed this insufficient. This picture can be contrasted with the image of the comparatively lush and forested area around Wondo Genet in figure 24 below. Photo Mats Sandewall. ⁷⁹⁶

A New Curriculum

In October 1987, the mission to examine the possibilities of relocating the temporary BSc program to Alemaya began, in conjunction with a separate

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⁷⁹⁵ According to Per-Ove Bäckström (interview), similar tensions between the Ministry of Agriculture and the Ministry of Education also characterized the planning of the temporary BSc program. I have found no documentary evidence of this or of any protracted negotiations over the first agreement over the temporary BSc, which as noted was implemented as part of SIDA's broader forestry program. However, these negotiations took place at the same time as the early discussions over Alemaya, and to those involved the two matters were presumably more conflated than they appear from the source material.

⁷⁹⁶ From Mats Sandewall, "Tree Mensuration and Yield Sciences: Report from a Lecturing Assignment at Alemaya University of Agriculture, Ethiopia," (Umeå: Department of Forest Survey, Swedish University of Agricultural Sciences, 1994).

mission that examined the conditions under which SLU could contribute to the long-term development of forestry education there.⁷⁹⁷ Johan Toborn from IRDC at Ultuna, who had worked at CADU and EPID and had extensive experience from Ethiopia, and Marianne Wibom, an education planner from the Faculty of Forest Sciences, were SLU's representatives. When circulated for comments, the mission's preliminary report was criticized by CHE, which apparently believed that SLU was giving itself too large a role. Many of its comments had to do with safeguarding the autonomy of Alemaya and its Ethiopian management.⁷⁹⁸ A second visit to Ethiopia then followed, during which Toborn and Wibom were joined by Per-Ove Bäckström, and a final report was completed and published in early 1988.

The report's answer to the main impetus for the mission, namely, CHE's proposal to move the temporary BSc program to Alemaya, was short enough: Toborn, Wibom, and Bäckström believed that "the question should never have been posed." In characteristic expert fashion, they dealt with the fundamentally political question by providing technical answers: the lack of facilities at Alemaya and the practical orientation of the temporary BSc program made the transfer impossible. Student motivation, perceived to be much higher at Wondo Genet than at Alemaya, with its "overcrowded dormitories" and "lack of forestry facilities," was another factor.⁷⁹⁹

With this issue out of the way, at least as far as the report's authors were concerned, the rest of the report was devoted to an analysis of SLU's possible engagement in an institutional collaboration with AUA. The concern over the possibility of providing practical training was central. One section of the report presented the Swedish forestry education system, and made sure to point out the importance of forestry practice. Practical training was described as "vital" to the Swedish nine-semester professional degree in forestry (jägmästarutbildning), which was now suggested as the closest equivalent to the new BSc course at Alemaya. The Swedish study program started with "4.5 months forestry vocational training," both at a forest school and a forest company, after which two years of basic courses followed, "including a lot of out-door training and excursions."

Having described the Swedish system as a baseline, Bäckström, Toborn, and Wibom proceeded to compare the SLU-run BSc program at Wondo

⁷⁹⁷ See Toborn to Bo Göransson, 17 August 1987, SIDA-ETI, series F72, vol. 20.

⁷⁹⁸ Commission of Higher Education, "Comments on a Proposed Swedish University of Agricultural Sciences (SUAS) Role in Establishing the Faculty of Forestry at Alemaya University of Agriculture (AUA)," SIDA-ETI, series F72, vol. 20.

⁷⁹⁹ Bäckström, Toborn, and Wibom, "Forestry Mission," 20–21.

⁸⁰⁰ Bäckström, Toborn, and Wibom, "Forestry Mission," 18.

Genet/Skinnskatteberg with the new permanent program at Alemaya. They opened with the general viewpoint that "[a] major difference between the two B.Scs is the emphasis on practical training in the SUAS program." Those enrolled in the Wondo Genet course were already forest technicians. They thus started from a solid practical forestry background and were then given extended training towards the BSc degree. It was not "immediately evident" that the significance of this had been recognized in AUA's curriculum. Another difference lay in the SLU course's emphasis on integrating different forestry disciplines, something particularly important during the semester in Sweden. Such integration, the authors noted, was "hard to attain in a fully satisfactory manner in Ethiopia." But, they argued, both integration and practical training were still necessary to ensure the quality of the education and to meet the needs of the students' future main employer, the Ministry of Agriculture, where "the great majority of posts" demanded "practical, allround forresters [sic]." ⁸⁰¹

Another distinct dissimilarity, which had its roots in different approaches to higher education in general, was the design of the program curriculum according to a philosophy of blocked courses contra a philosophy of credit hours. The former, practiced at SLU, meant that students took one or two courses at a time. The credit hour system, imported from the United States and favored by AUA, meant that the students took a larger number of courses in parallel. SLU argued that the block system was necessary as the courses had to follow one another in a logical order. It also tied in to the more practical approach advocated: "A strict application of the credit hour system with all the courses running simultaneously all through the semester cannot satisfy the requirements of a logical sequencing. Nor is it possible to have extended practical training, if a strict credit hour approach is applied."802 Besides the pedagogical reasons, SLU also deemed a blocked curriculum necessary for staffing purposes as the credit hour system would require guest lecturers to be at Alemaya one or several times per week over extended periods, instead of doing all their teaching during a few intensive weeks.

Based on these considerations, the three SLU experts proposed a revised, blocked, curriculum for the AUA BSc course. It included more practical training, primarily by extending the fourth semester with a two-month integrated exercise in practical forestry. They also advocated new admissions regulations to further increase the student's practical knowledge: they suggested that diploma holders from Wondo Genet should be made eligible for the course after some work experience and a preparatory course in the natural

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⁸⁰¹ Bäckström, Toborn, and Wibom, "Forestry Mission," 29-30.

⁸⁰² Bäckström, Toborn, and Wibom, "Forestry Mission," 29.

sciences. To make the two sets of students more equal in this respect, they also proposed that those entering the course after high school would receive intensive practical training at Wondo Genet before starting the forestry-specific courses in year 3.803

Finalizing the Planning

For reasons not fully clear to me, SIDA's resistance to the SLU-AUA collaboration decreased following the annual review of the forestry program in the spring of 1988, and the agency decided to allocate funding for further planning so as to allow SLU and AUA to jointly work out a detailed plan of operations. The schedule agreed to by SIDA, SLU, and the Ethiopian authorities was that the plans would be finalized in August 1988, and SLU would have staff present at AUA from September 1989, when the collaboration would start in earnest. During 1988, SLU and AUA then developed a joint plan of operations, building on the earlier report by Bäckström, Toborn, and Wibom, which outlined the proposed collaboration in detail. But the schedule soon proved untenable. SIDA had the plan reviewed by Norwegian professor Gustav Klem, who had experience from a similar Norwegian aid project in Tanzania.804 Klem criticized the plan, not least because he deemed it unclear about what the Ethiopian input would be and generally biased toward the SLU contribution. This left him with the impression "that the activities will be SUAS projects in Ethiopia, not Ethiopian projects with financial and technical support from Sweden."805 The comment evoked CHE's criticism of the earlier report by Toborn and Wibom, and the same sentiment was also discernible in a set of comments CHE produced on the plan of operations.⁸⁰⁶ The new administrator of the Ethiopian forestry program at SIDA in Stockholm, Lisbet Bostrand, went to Ethiopia in late 1988 to try to work out the remaining difficulties, and a final version of the plan was then completed in December. 807

 $^{^{803}}$ Bäckström, Toborn, and Wibom, "Forestry Mission," 30–32.

⁸⁰⁴ The Norwegian aid agency Norad had, in collaboration with the Agricultural College of Norway, supported forestry education at the agricultural faculty in Morogoro. See Jarle Simensen, *Norsk utviklingshjelps historie 1, 1952-1975: Norge møter den tredje verden* (Bergen: Fagbokforlaget, 2003), 149–50.

⁸⁰⁵ Gustav Klem, "Review of Plan of Operations for the collaboration between Ethiopian authorities and the Swedish University of Agricultural Sciences on higher education and research in forestry in Ethiopia," p. 4, 6 October 1988, SIDA-ETI, series F72, vol. 21.

⁸⁰⁶ See e.g. the discussion about which university should confer the planned MSc degree, in "Comments and Suggestions on Plans of Operations of 1) The Forestry Faculty of the Alemaya University of Agriculture 2) The initial M.Sc. programme and Ph.D. programme in Forestry," August 1988, SIDA-ETI, series F72, vol. 21. The document is unsigned, but on the basis of the design, phrasings and general context I conclude that it originated with the CHE.

⁸⁰⁷ Bostrand, "Reserapport".

What SIDA was presented with in December 1988 was in fact not a single plan of operations but rather three separate ones, though understood at SLU as being part of the same wider project. The first plan discussed the forestry faculty at AUA and the second Master of Science and PhD training programs that were intended to increase the level of forestry competence among AUA's teaching staff. These two plans had been prepared jointly by SLU and the dean of AUA's forestry faculty, the East German–trained plant scientist and forester Badege Bishaw. The final plan detailed a proposed collaboration with the Forestry Research Centre (FRC) in Addis Ababa, and this had been put together by SLU alone. RRC, earlier known as the Silviculture Research Centre, was a long-standing concern within the aid program: SIDA had considered it to have been functioning poorly for some time on account of it being underfunded and inadequately staffed. The new plan proposed to remedy some of the issues through SLU-administered support but did not commit the center in terms of a research program or research priorities.

The other two plans were closely related. They proposed that SLU would initially support the permanent BSc program in forestry already being taught at Alemaya and also set up a temporary postgraduate course in the same vein as the earlier temporary BSc. The postgraduate course would also take place at Wondo Genet and in Sweden and lead to a Master of Science (MSc) degree. Its purpose was to continue the work of strengthening the capacity of various Ethiopian forestry authorities but also to bolster AUA's forestry faculty by giving its staff postgraduate training. In consideration of the Ethiopian concerns about autonomy, the degree would officially be conferred by AUA, but with SLU as an external examination body. As envisioned in the plan, AUA would gradually take over responsibility for the MSc course and implement it as a regular degree program, though the plan did not elaborate on this, instead stating that any such planning had to await "inter alia the experiences from the initial M.Sc. programme."810 A third component of the collaboration was a four-year PhD program in Sweden for selected candidates from Ethiopia. These would be enrolled as regular PhD students at SLU but were expected to choose a dissertation topic related to Ethiopia as well as to do fieldwork in-country.811 The plan also proposed that Alemaya would

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⁸⁰⁸ Mårten Carlsson and Görel Oscarsson, "Forestry education and research in Ethiopia," 31 August 1988, SIDA, series F1 AD, vol. 2987.

⁸⁰⁹ See Leander to Michael Ståhl, 18 December 1986, SIDA, series F1 AD, vol. 2984.

⁸¹⁰ "Plans of Operations: The Forestry Faculty of the Alemaya University of Agriculture (B.Sc. Training, Research, Extension, and Regular M.Sc. and Ph.D programmes); The Initial M.Sc. Programme and Ph.D. Programme in Forestry," p. 18, 22 December 1988, SIDA, series F1 AD, vol. 2987.

^{811 &}quot;Plans of Operations," 20-21.

eventually have its own doctoral program in forestry, though this was scheduled to happen only after the year 2000.

The basic outline of the plan was thus that SLU would, to strengthen Alemaya's faculty as well as Ethiopian forestry in general, support Alemaya's forestry BSc course and simultaneously run MSc and PhD programs on a temporary basis. As time passed, this would enable AUA to shoulder more and more of the responsibilities, with SLU's support eventually being phased out. But until then, SLU would be carrying out a large-scale, complex project in Ethiopia (see figure 23 below) that was expected to go on for more than ten years and would require a significant number of teachers and project managers to be employed, both in Ethiopia and in Sweden.

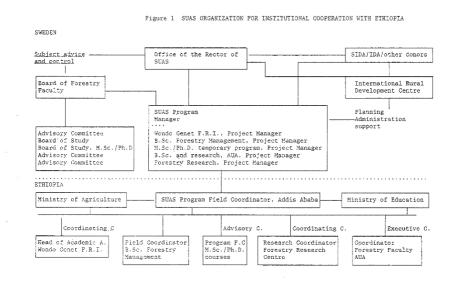


Figure 23. An outline of the proposed organization for SLU's support to Ethiopian forestry education, giving a good idea of the complexity and size of the intended project.⁸¹²

The general design of the proposed support to Alemaya drew considerably on what was judged to be positive experiences from the temporary BSc program. The new plans for postgraduate training were based on an extension of the same principle of combining training in Ethiopia and in Sweden. Moreover, practical training was central to SLU's proposed curriculum as it was in the

⁸¹² From "Draft Collaboration Agreement Between Ethiopian Forestry Organizations and SUAS," p. 5, April 1988, the Umeå Administrative Office archives, series F3a, vol. 1, Swedish University of Agricultural Sciences archives.

temporary program. The plan explicitly discussed the virtue of such training in the Ethiopian context:

In recent years it has become generally accepted that Ethiopian university studies in natural sciences are deficient in terms of practical training. For agricultural students this is verified by the practical training now given to the students during one of the otherwise summer holidays. The SUAS B.Sc. forestry management training [the temporary program] constitutes an interesting alternative to the AUA B.Sc. training as once suggested. According to the SUAS model, students are to have passed the diploma training at Wondo Genet where much practice is included, work for a couple of years, and only then take up B.Sc. studies where again much practical training is comprised. In view of the experiences, the original AUA curriculum was therefore made to accommodate the request for more practicals.⁸¹³

SLU's position that more practical training in forest locations was needed was, to its experts, founded on earlier experiences from Ethiopia and implied an adaptation to Ethiopian needs for certain forms of expertise. The importance of practice was the central factor by which SLU's proposed curriculum differed from the original plans created by AUA and CHE. But as had been discussed both with regard to the temporary BSc program and the course at Alemaya, there were natural constraints on the possibilities for practical training, in Ethiopia in general, but in particular in Harrarghe province, where Alemava was located. In light of this, it becomes clear how SLU's proposed curriculum was firmly rooted in the Swedish conception of forestry education and in the Swedish foresters' sense of professional identity. For other perspectives with other premises were also available, as is demonstrated by an interview with AUA's dean of forestry Badege Bishaw in U-landsskogisen, a Swedish newsletter for development-interested foresters.⁸¹⁴ Badege admitted that it was impossible to teach the practicals of large-scale forestry in Harrarghe, but still defended the location of forestry education to Alemaya. He argued that large tracts of forest were unlikely to reappear in most parts of Ethiopia given the pressures on available land, and so Ethiopian foresters needed to be able to work in close conjunction with farmers and the agricultural extension services. This meant that it was an advantage to train foresters in the same place as agricultural experts, and that the need for practical exercises in large forests was less pronounced.

Even so, the plan of operations, written jointly by SLU's experts and Badege, concluded that

^{813 &}quot;Plans of Operations," 7.

⁸¹⁴ Karin Fahlström, "Etiopiens förste skogsdekanus," U-landsskogisen 17 (1989): 8.

B.Sc. training in forestry cannot be confined to Harrarghe only. The limited representativeness of ecological conditions and the poor access to forests of different characters make impossible [sic] to retain all practical training in the region. As a first approximation the practical and theoretical parts of the courses in the curriculum . . . are located to suitable areas. 815

This had also been discussed in the earlier report, which had noted that while several areas in Harrarghe could be interesting with respect to conservation and afforestation work, "[n]atural forests and plantations in the region are no substitutes for the mature plantations of Munessa and the natural forests of the same area."816 During the simultaneous discussion of the Swedish semester of the temporary BSc program (see preceding section), SLU's representatives argued that even at Wondo Genet and Munessa, conditions were far from optimal for practical forestry training. In that case, they argued for keeping the semester in Sweden; here the argument was for the implementation of a more practice-based curriculum in Ethiopia, and then Wondo Genet and Munessa (which had been the location of CADU's forestry activities) had to do. SLU thus presented a list of proposed locations for all the courses in their suggested new BSc program. Most were to be located to Alemaya, some in Wondo Genet, a couple in Munessa, and a few others in various places in Ethiopia. While logistically problematic to implement this curriculum, it was, from SLU's point of view, the least bad option.

Political Complications

After the lengthy process of putting the plan together, revising it, and preparing a final version, it was dispatched to Ethiopia in January 1989. By then, SLU was becoming concerned about the slow rate of progress in securing SIDA's final approval for the project. In a letter dated early February, Mårten Carlsson and Görel Oscarsson expressed their worries about SLU's ability to begin the collaboration by the start of the fall semester in August unless the remaining formalities were speedily resolved.⁸¹⁷ However, by then events beyond the control of SLU had begun to rapidly change the conditions of any collaboration with Alemaya. At the Ministry of Agriculture, Aklu Girgre had been replaced as director of the NRCD-MD by Berhanu Debele, whom SIDA's staff found it much harder to work with. During the first half of 1989, the forestry program

^{815 &}quot;Plans of Operations," 13.

⁸¹⁶ Bäckström, Toborn, and Wibom, "Forestry Mission," 12.

⁸¹⁷ Carlsson and Oscarsson to LANT, 9 February 1989, SIDA, series F1 AD, vol. 2988.

was largely brought to a standstill on account of personal as well as policy differences between the ministry and SIDA.⁸¹⁸

While this complicated things in the larger context of Swedish forestry aid to Ethiopia, it might not have been enough to stop the collaboration with CHE over Alemaya on its own. The worsening political and security situation in the country saw to that, however. Ethiopia had been in the grips of a civil war since the overthrow of Haile Selassie. A number of rebel groups were fighting the government, of which the two most important were guerrilla groups in Eritrea and in Tigray province. 819 By early 1989, the government's military position in the conflict was deteriorating, and the war was an increasing drain on the national economy. A SIDA memo, drafted in April 1989, noted that defense spending then amounted to over half of the national budget and that the civil society increasingly suffered from the effects of the war. Morale was also low in the administration. 820 Things were further aggravated after a foiled coup d'état against Mengistu in May 1989, and by summer, the situation had deteriorated to such an extent that the Swedish government decided to no longer support the regime through development aid. It instructed SIDA to steer available aid resources away from development and to concentrate on emergency relief and disaster prevention. Ongoing development projects were allowed to continue on a year-by-year basis, but no new projects were to be initiated. This effectively put a sudden stop to SLU's planning. Nils-Ivar Isaksson communicated this news to the Ministry of Education in Addis Ababa and restated SLU's willingness to take part in a collaboration in the future, if Alemaya and the Ministry of Education were still interested.⁸²¹ For the time being, however, the implementation of the comprehensive plans that had been put together was off the table.

The Centrality of the Forest as Place

SLU's proposals on the new undergraduate curriculum for the forestry faculty at the Alemaya University of Agriculture demonstrate clearly how its conception of forestry education was tied to practical forest work and so was inextricably bound up with the forest as place rather than as theoretical abstraction. Harrarghe province had little woodland, however, and this created

⁸¹⁸ See e.g. Bo Stensson, "Tankar efter tre års tjänstgöring i Etiopien," pp. 4–5, 4 April 1990, SIDA-ETI, series F20, vol. 16; Bo Stensson to SIDA, 12 February 1990, both in SIDA-ETI, series F72, vol. 26. The deterioration of the relationship between SIDA and the MoA can be traced through volumes 25 and 26 of SIDA-ETI, series F72.

⁸¹⁹ Bahru Zewde, History of Modern Ethiopia, 257-62.

⁸²⁰ SIDA, "Stöd till undervisnings- och skogssektorerna i Etiopien," 25 April 1989, SIDA, series F1 AD, vol. 2988.

⁸²¹ Isaksson to Mulugeta Semru (draft), 9 June 1989, SIDA, series F1 AD, vol. 5212.

a problem: how to design a forestry curriculum suitable for an area with no forests? Badege Bishaw, AUA's dean of forestry, put forward one potential solution: focus primarily on forestry's relationship to agricultural practice and expertise. To Badege, Alemaya was a good location for such a training program, which, in his view, would also be better adapted to Ethiopian needs. To instead maintain the amount of practical training in real forest conditions that SLU's experts advocated, it would be necessary to move the students around the country, something that posed logistical and pedagogical challenges even under the best of conditions. Put in other words, the silvi-cultural conditions in much of Ethiopia were different enough from Sweden to pose fundamental obstacles to the project of implementing a Swedish forestry education model. These problems were further exacerbated by the divergent views on theory and practice within Swedish and Ethiopian academia. Matters were also complicated by the tensions between the Ethiopian ministries of agriculture and education. These tensions and the Commission for Higher Education's strong commitment to AUA prevented any alternative localizations of the new undergraduate program. There is no evidence that SLU or SIDA attempted to challenge AUA as a location (except when it came to the proposed relocation of the ongoing temporary BSc program at Wondo Genet), but any such attempt would likely have failed. This evidently did not make the Swedish foresters question the value of their model for the educational program at Alemaya; they instead tried to create workarounds that would enable its use. On one level, it is perhaps praiseworthy to stand by what one sees as the only viable solution to a development problem. There is no reason to doubt that they believed furthering the virtues of practical forestry was relevant to Ethiopian forestry and in fact necessary if Ethiopia's forestry problems were to be solved. But the attempts at implementing their educational model in a new silvi-cultural environment led to paradoxes and complications.

That a strong belief in the value of Swedish forestry experience for Ethiopia permeated the effort was nothing unusual. There was a general belief in the value of Swedish forestry experience to the developing countries within Swedish forestry aid at the time, based on the Swedish forestry sector's self-image of a successful development from a deforestation and forest depletion crisis at the end of the nineteenth century to a rational, efficient, and sustainable forest production by the mid-twentieth.⁸²² To be sure, some, like Erland von Hofsten in his 1968 appeal for forestry aid, acknowledged the need for "radical adaptation" of Swedish knowledge and prescribed "a modicum of humility" with respect to the

⁸²² For an example of this narrative in an development cooperation context, see Reidar Persson, *Assistance to Forestry: Experiences and Potential for Improvement* (Jakarta: Center for International Forestry Research, 2003), 30–32.

difficulties involved.⁸²³ But others were less interested in problematizing the issue of adaptation. When interviewed by the forestry journal Skogen in 1983, the state secretary responsible for development aid at the Swedish Ministry for Foreign Affairs, Gösta Edgren, was asked about the applicability of Swedish knowledge to developing country problems. Edgren provided the brush-off answer that the Swedish experts "mostly managed to quickly adapt their knowledge to the country in question."824 His downplaying of the difficulties of adaptation suggests a centrist view of forestry development, which unavoidably was problematized when it encountered the developing world. Trying to fit one's prior understanding into a new natural and social environment could, as my study of SLU's planned collaboration with Alemaya demonstrates, in fact be both a complex and contradictory process. Moreover, the desire to adapt sometimes only went so far. The parallel with Nils Lagerlöf's totalizing vision of veterinary obstetrics-gynecology is striking: like Lagerlöf, the Swedish forestry experts were open to the need of taking local conditions into account and of adjusting curricula so that the education provided would be relevant to its recipients. But this openness did not extend to the option of making fundamental changes to the general framework on which it was ultimately based.

The centrality of the Swedish model of forestry education as a frame of reference impacted both on the curriculum design and on the general pedagogical approach, with its strong focus on extensive practical training in different kinds of forest locations. In this respect too, there is a striking similarity to Lagerlöf's aid project at the Veterinary College thirty years earlier. Just like Lagerlöf, SLU's Faculty of Forest Sciences advocated a Swedish rather than Americanstyle curriculum based heavily on practical training that would provide both the skills needed to effectively serve primary production and a suitable practicebased professional identity.

There is also a crucial difference: while the main defining characteristic of SLU's proposal for Ethiopian forestry education was its emphasis on practical training, the project was always intended as an academic endeavor. Unlike Lagerlöf's courses, which solely aimed at skills development and only awarded the sometimes-useful but academically vacuous FRVCS title to its participants, the collaboration with Alemaya had as its direct objective the production of academically trained Ethiopian foresters and forestry researchers. This was at least in part a result of an explicit strategy by SLU's management, which wanted to engage in an aid project more directly tied to the university's core tasks. There is no evidence that either SIDA or SLU engaged in discussions

⁸²³ von Hofsten, "Skall SIDA satsa," 411.

⁸²⁴ Leif Öster, "Skogen på Utrikesdepartementet: "Svenskt skogskunnande unik tillgång i biståndsarbetet"," Skogen, no. 5-6 (1983): 77.

about possible negative effects of steering considerable aid funds to academic forestry education at any time during the 1980s. The positive effects of academic education were apparently taken for granted. Even so, there was an obvious tension between academy and practical utility behind the planning process. This was most saliently expressed in the conflict between the Ethiopian ministries of agriculture and education, in which the former was very hesitant to discuss any project that might reduce the aid funding to the activities under its own auspices.

SLU, for its part, very clearly pushed for cooperation with Alemaya and the Ministry of Education and often had to drag SIDA along in a manner somewhat similar to how the Agricultural College interacted with the aid authorities in the 1960s. But for all of SLU's efforts, the collaboration with Alemaya could not start as intended in 1989. Much of the planning, along with its inherent tensions between theory and practice; academy and utility, would, however, be recycled as relations between Sweden and Ethiopia thawed in the 1990s. SLU remained eager to engage in Ethiopian forestry and would get a new opportunity to do so.

A Post-Civil War Interlude

In September 1994, the Wondo Genet College of Forestry (WGCF) received an unusual number of prominent guests from Sweden. The visitors included Per-Ove Bäckström, Görel Oscarsson, and Ann-Cathrine Haglund, governor of Malmöhus County and chairman of SLU's board of directors. Per The occasion was the inauguration of a new educational program leading to the degree of Master of Science in Forestry for a select number of Ethiopian students. The celebratory mood abruptly ceased, however. SLU's dignitaries had hardly left Ethiopia before the newly enrolled students revolted. They sent a strongly worded protest letter to Genet Zewdie, the Ethiopian minister of education, stating that they "were embarrassed by the living conditions, the course syllabus and the experience of the course coordinator and instructors." As the letter suggests, the new MSc program was full of silvi-cultural challenges similar to those we have already encountered. But what was the context and cause of this conflict, and what had happened to Swedish forestry aid to Ethiopia?

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⁸²⁵ Sven-Gunnar Larsson, "Öppnande av Lantbruksuniversitetets utbildningsprogram – Master of Science in Forestry," 18 August 1994, SIDA-ETI, series F72, vol. 28.

⁸²⁶ Aseged Belay et al. to Minister of Education Genet Zewdie, 26 September 1994, SIDA-ETI, series F72, vol. 28.

A New Aid Program

The new MSc program was part of Swedish attempts at revitalizing the Ethiopian forestry development program. The civil war had ended three years earlier: after a series of successive defeats for the government forces, the regime fell in May 1991, with President Mengistu disappearing into Zimbabwean exile. Power passed to the Ethiopian People's Revolutionary Democratic Front, an alliance of various ethnic insurgent groups.⁸²⁷ By the end of the war, Swedish forestry aid to the country had been in limbo for some time on account of the uncertain political situation and the dysfunctional relationship between SIDA and the Ministry of Agriculture. In a biannual report to Stockholm, SIDA's development cooperation office noted that Swedish forestry aid had been cut by more than 50% in 1991 compared with the previous year, and what remained was mostly used for equipment purchases and construction work. Most actual development work had been halted, with the exception of the diploma training. The diploma courses at Wondo Genet, which had been upgraded from a forestry institute to a college in 1988,828 had continued until late March, when the entire college was shut down, along with most other higher education establishments, "following intensive recruitment to the army."829 At the Alemaya University of Agriculture, academic staff from a group of American universities, funded by the IDA loan, supported the undergraduate forestry education. There was also a small Swedish presence as SIDA sponsored some short-term teaching engagements by SLU staff and provided minor funding for equipment purchases.⁸³⁰

With the fall of the Mengistu regime, new possibilities for development cooperation opened up, and in a memo from early 1992, SIDA's agricultural division outlined some principles for a renewed forestry effort. These reflected the changes at SIDA and in the international aid debate that I discussed in conjunction with the decline of IRDC in chapter 5 but probably also a changing approach to forestry in Sweden, where from 1993 the national

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⁸²⁷ Bahru Zewde, History of Modern Ethiopia, 264–68.

⁸²⁸ This process gave the former institute official status as a college accredited by the Ministry of Education. It was a very significant step in the academization of Wondo Genet, but did not directly involve SLU.

⁸²⁹ "Biståndskontoret i Addis Abeba, halvårsrapport per 1991-03-31," 1 April 1991, SIDA-ETI, series F20, vol. 16.

⁸³⁰ Toborn, "SLU och etiopisk skogsutbildning," 61.

⁸³¹ Daniel Asplund, "Fortsatt stöd till naturresurshushållning i Etiopien, 1992/93-1993/94," 25 March 1992, SIDA-ETI, series F72, vol. 27.

forestry policy compromised between production and environmental goals. 832 These new attitudes to forestry and to the goals of rurally-oriented aid manifested as a change of focus for the forestry aid to Ethiopia, from forestry development (with its implied emphasis on industry and production) to natural resource management. The decreased interest in the institutional collaboration with IRDC did not directly affect SIDA's inclination to cooperate with the university on this project: the memo emphasized research and education and explicitly mentioned SLU in the context of possible further support to Alemaya. SLU's position at the time was summarized by Johan Toborn at IRDC, who argued that while SLU had been able to place a few guest lecturers at Alemaya, "there are reasons to believe that the quality of the [BSc] course has been very low. SLU's efforts have only been able to affect the quality marginally."833 No postgraduate studies had taken place, with the exception of some master's-level ad hoc studies abroad. On a more positive note, three teachers from Alemaya had started their PhD studies outside Ethiopia, two of them at SLU. But as a whole, the education at Alemava was substandard and SLU's position vis-à-vis the forestry faculty there problematic. Toborn also briefly outlined SLU's view of the future, noting that a "broad cooperation" was still the goal.⁸³⁴ This encompassed cooperation on all the levels proposed in the 1988 plan, which remained SLU's baseline.

SIDA's planning for a new forestry program continued throughout 1992 and resulted in a draft plan with five components. Its main emphasis was on education and research, which was proposed to be contracted to SLU. Education-related efforts amounted to support to Wondo Genet and the forestry faculty at Alemaya, and also included a temporary MSc program in accordance with the earlier plans. The last two would be carried out in cooperation with the Ministry of Education, whereas the support to Wondo Genet and all other program activities would be the responsibility of the newly created Ministry of Natural Resources Development and Environmental Protection (MNDREP).⁸³⁵ This plan became the basis of a

⁸³² See Jan-Erik Nylund, "Swedish Forest Policy since 1900 – Reforms and Consequences" (Department of Forest Products, Swedish University of Agricultural Sciences, 2010).

⁸³³ Johan Toborn, "SLUs samarbete med lantbruksuniversitetet i Alemaya, Etiopien. Bredare utblick på samarbete med Etiopien," p. 3, 17 March 1992, IRDC, series A4, vol. 3.

⁸³⁴ Toborn, "SLUs samarbete med lantbruksuniversitetet i Alemaya," 4.

⁸³⁵ Note that the memo outlining this plan was authored by Sten Norén from IRDC, who temporarily worked at SIDA. It is thus a good example of how the relations between IRDC and SIDA shaped Swedish aid, as discussed in the preceding chapter. Sten Norén, "Fortsatt stöd till naturresurshushållning i Etiopien 1992/93-1993/94," 23 December 1992, SIDA-ETI, series F72, vol. 27.

new agreement between Sweden and Ethiopia, signed in 1993. SLU was contracted to support most of the included projects.⁸³⁶

Progress and Problems

Developing SLU's activities in Ethiopia came to be slow and fraught with problems. These had to do both with SIDA and the Ethiopian authorities and were largely of a bureaucratic nature, and I will not elaborate on them here.⁸³⁷ Suffice it to say that the support to the forestry faculty at Alemaya remained ad hoc. While SLU provided teaching support, it was administered without recourse to a long-term strategy for institutional development and under generally unfavorable teaching as well as living conditions. SLU was also contracted to support the Forestry Research Center, but little progress was made as the center was bogged down in the top-heavy Ministry of Natural Resources. 838 At Wondo Genet things were a little more positive. The College of Forestry worked with SLU's School of Forest Engineers on institutional development, and SLU considered it to be functioning reasonably well. Finally, a temporary MSc program, designed in accordance with the earlier outlines, could be initiated in September 1994. While the program was a collaborative effort between SLU and AUA and was to take place both in Ethiopia and Sweden, its Ethiopian semesters took place at Wondo Genet, just as the temporary BSc program had.⁸³⁹ It was the first batch of students admitted to this program that initiated the protest I described at the start of this section.

The MSc program was planned with three specializations: farm forestry, plantation forestry, and management of natural forests.⁸⁴⁰ These reflected both the current conception of the forestry situation in Ethiopia and changing priorities within a larger forestry aid discourse. Particularly the first specialization is significant: farm forestry, or agroforestry, was the discipline that AUA's dean, Badege Bishaw, had viewed as particularly suitable for Ethiopian foresters. Agroforestry attempts to combine agriculture and forestry, and in this case, the farm forestry specialization implied a focus on the

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⁸³⁶ SIDA/NATUR, "Interremistic Decision on SUAS' Support to the Natural Resources Management Programme in Ethiopia 1992/93-1993/94," 24 June 1993, SIDA-ETI, series F72, vol. 27.

⁸³⁷ The developments can be followed in SIDA-ETI, series F72, vol. 27–28.

⁸³⁸ "Agreed Minutes from the Annual Consultations Regarding the Cooperation Within the Natural Resources Management Sector January 25 – February 2, 1994," SIDA-ETI, series F72, vol. 28. See also Toborn, "SLU och etiopisk skogsutbildning," 62.

⁸³⁹ This combination of training in Sweden and in Ethiopia, originally performed by SLU for the earlier BSc course, was now described using the nowadays common notion of "sandwich training." See Anders Persson and Sven-Gunnar Larsson, "Sandwich Training Programmes: A Model for Higher Forestry Education; Examples from Ethiopia," *IRD Currents* 10 (1995).

⁸⁴⁰ Toborn, "SLU och etiopisk skogsutbildning," 61.

participation of local peasants and an emphasis not just on scientific forestry but also on training in, for example, sociology and communication.⁸⁴¹ SIDA had been interested in such community-oriented approaches to forestry since the mid-1970s,⁸⁴² but only with the MSc program did this really begin to influence SLU's education efforts in Ethiopia.⁸⁴³ As such, the farm forestry specialization was a step away from the earlier focus on productivity-oriented and commercial forestry and also represented an attempt to move beyond the older Swedish forestry paradigm that had hitherto been the basis of all of SLU's efforts in Ethiopia. It was an attempt to shift from a forest focus to a focus on rural people, and their priorities, in forestry development cooperation.

SLU considered the initiation of the MSc course to be the first real progress made in Ethiopia since the restart of forestry aid in 1992 and had, as noted, even brought the chairman of its board of directors to Ethiopia for the course's inauguration. It was thus embarrassing for SLU that the students were displeased enough to go directly to the minister of education with their concerns. Their main issue was financial: they were dissatisfied with the allowance they were to be paid. But through veiled references to the course syllabus and the instructors' CVs they also hinted that the quality of the education was substandard. Not stating their actual concern in these matters, they asked the minister to look into them.

The course management, eager to defuse the situation, decided to negotiate with the students, and a few months into the course most matters had been settled. Retrospectively, SLU's staff in Ethiopia explained the conflict as resulting from time constraints on the planning and start-up process, which had led to misunderstandings by the prospective students. But there were clearly other tensions involved as well. While the exact nature of the students' concerns cannot be identified in the material studied here, the DCO director, Michael Ståhl, gave his version of events to the minister of education, and this letter gives a clue. Ståhl pointed out that because "the course is designed to give the students practical experience in addition to the theoretical lectures, instructors with long international field experience have also been engaged for shorter periods." This suggests that part of the criticism originated in the students considering the instructors' theoretical qualifications as more important than their practical experience, a view SLU did not share.

⁸⁴¹ Sten Norén to Larsson (telefax), 27 April 1993, SIDA, series F1 AD, vol. 2992.

⁸⁴² Lundgren, Persson, and Norén, "Swedish-African Forest Relations," 10.

⁸⁴³ Note however that from 1987, IRDC and other parts of SLU had been involved in a multinational community forestry effort known as the Forest, Trees and People Programme. This engagement is not analysed further in the present work.

⁸⁴⁴ Ståhl to the Minister of Education, 2 October 1994, SIDA-ETI, series F72, vol. 28.

Similar tensions also arose around a preparatory course given in conjunction with the second student batch of the MSc program. The preparatory course was intended to give students with an undergraduate degree in biology or plant science a basic forestry background to enable them to join the MSc course. As these students were not foresters, they found it hard to understand the rationale behind the practical forestry courses. In his biannual report, Bengt Frykman, SLU's MSc coordinator and liaison officer in Ethiopia, noted that some of the preparatory course students were "complaining about some of the practical exercises given and seem to consider theory being more important."845 Even after close to ten years of giving forestry instruction in Ethiopia, SLU thus remained caught up in silvi-cultural tensions. Its insistence on the union of practice and theory as necessary for proper forestry education met with continuing resistance not just from Ethiopian education planners but from students as well. The tensions also went beyond forestry issues to encompass general epistemology, as is clear from the following quote from an annual report discussing the MSc semester in Sweden:

Discussions between students and teachers on the issues of science and research took place during some of the modules and outside the regular lecture context. These discussions were triggered by the general attitude at SLU, and maybe especially of the teachers involved in this specialisation, of a healthy reluctance to claim to possess "the one and only truth." Some of the students were not used to this modest and pluralistic approach which they understood as a lack of solid academic foundation.

During the courses, however, most of the students revised their views on their roles as academicians and researchers. These formal and informal discussions brought about a more humble and realistic view of what research is, and also improved the capacity to critically scrutinise results from research. 846

Despite the initial problems, the evident cultural-epistemological differences, and a new round of student defections, SLU's MSc coordinator and liaison officer in Ethiopia still considered the MSc courses mostly successful and improving with time.⁸⁴⁷ The other forestry research and education activities had made far less progress. No improvement at all had been recorded at the Forestry Research Center. SLU's annual report for the 1993/94 period noted that the "tepid performance" of the research center was common to projects

⁸⁴⁵ "Report from MSc Coordinator/Liaison Officer for the Period 1995-01-01 to 1995-06-30," 17 June 1995, SIDA-ETI, series F72, vol. 29.

⁸⁴⁶ "Annual Report 1995/96, July 1995 – June, 1996: Management of Natural Resources in Ethiopia; Sida Support through the Swedish University of Agricultural Sciences (SLU)," 9, SIDA-ETI, series F72, vol. 30.

⁸⁴⁷ "Report from MSc Coordinator/Liaison Officer for the Period 1996-07-01 to 1997-02-20," 9–10, SIDA-ETI, series F72, vol. 35.

involving interdisciplinary approaches and which necessitated central ministry decisions. He focus on farm forestry, natural forests, and socio-economic aspects of forestry problematized the more narrowly technical orientation of the FRC. Given the institutional position of the center, SLU questioned the utility of its own involvement, and SIDA accordingly decided to cut its support from 1995/96. At the same time, SIDA also resolved to phase out virtually all of its support to the central ministry, reducing its forestry and natural resource activities in Ethiopia almost exclusively to support to education and educational institution-building. He

But that support also had its issues. The situation at Alemaya remained problematic. SLU's task there was to help increase the quality of Alemaya's undergraduate forestry program as well as support the institutional development of the forestry faculty. The primary contribution was a series of guest lecturers as well as a permanent lecturer at Alemaya. Besides the on-site teaching, the project also included PhD studies at SLU for AUA staff, general support to make necessary equipment purchases, and advice on curriculum and institutional development. While SLU considered the PhD program in Sweden relatively successful, the other activities were hindered by a combination of factors relating to divergences of opinion between SLU and AUA staff as well as by the remote location of Alemaya and various transport, infrastructure and safety problems. Frykman summed up the sentiment in the final report of his assignment in 1997:

There were a lot of struggle [sic] to arrange for reasonable living standards for the long-term lecturer and the guest lecturers in AUA. The lecturers also met a lot of practical problems in carrying out their duties. The security problem in the area also made it difficult to fully engage yourself in a long-term planning process for the development of the Faculty of Forestry in Alemaya. 850

Furthermore, at a seminar on institutional method development held in 1993, SLU noted that "[c]urriculum development is one area where Swedish and Ethiopian perceptions of what is entailed differ."851 This suggests that there

⁸⁴⁸ "Annual Report 1993/94: Management of Natural Resources in Ethiopia; SIDA Support through the Swedish University of Agricultural Sciences (SUAS)," 16, SIDA, series F1 AD, vol. 2992.

⁸⁴⁹ Michael Ståhl, "Summary of Discussions Held during the Annual Consultation on Swedish Support to the Natural Resources Management Sector," 29 March 1995, SIDA-ETI, series F72, vol. 29.

^{850 &}quot;Report from MSc Coordinator/Liaison Officer for the Period 1996-07-01 to 1997-02-20," 9. By 1996, the security situation was bad enough for SLU to implement special security measures limiting the movement of guest lecturers. See "Special Security Measures Regarding SLU Guest Lecturers to Faculty of Forestry, AUA, During 1997," SIDA-ETI, series F72, vol. 35.

^{851 &}quot;Annual report 1993/94," 7.

were pedagogical differences undergirding the difficulties SLU experienced at Alemaya, in addition to the purely technical issues and the problems of achieving a satisfactory working relationship with some of the AUA staff.852 Most likely, the pedagogical differences were at least partly related to the recurring problem of providing what SLU saw as the necessary practical training in the Alemaya area. Students were given the opportunity to visit Wondo Genet and Munessa, but SLU judged the trips to have taken on the character of sightseeing rather than useful education. They could not make up for "the limited possibilities to carry out practical training around Alemava." 853 These problems with the SLU-AUA cooperation also spilled over into the MSc program, which originally was a joint effort between the two universities. It had been planned with the intention that Alemaya would gradually assume responsibility for the course. This did not happen, and SLU retained its control over the MSc program. In 1996, the failure of SLU's cooperation with AUA was affirmed when the coordination committee, intended as the main forum for coordination between the two universities, was dissolved by the SLUdominated Board of Study on account of it having not "fulfilled its function."854 From then on, SLU took full responsibility for the MSc courses.

From Alemaya to Wondo Genet

The difficulties at Alemaya were exacerbated by the fact that the faculty's future was uncertain. As part of the new Ethiopian government's strategy of increasing regional autonomy, a discussion started in 1994 about possibly establishing a "Southern University" consisting of the Wondo Genet College of Forestry, the Awassa College of Agriculture, and the Arba Minch Water Technology Institute. S55 A first step in this direction had already been taken when the government transferred the Wondo Genet college to the Ministry of Education in late 1993. These plans put the future prospects of forestry education at Alemaya in question as it would hardly be feasible to have two separate institutions of higher forestry education in Ethiopia. The discussions went back and forth during 1995, but in the spring of 1996, the Ethiopian

⁸⁵² As suggested by Frykman: "Report from MSc Coordinator/Liaison Officer for the Period 1996-07-01 to 1997-02-20," 9.

^{853 &}quot;Draft Plan of Operations, 1996/97, Forestry Faculty, Alemaya University of Agriculture," March 1996, SIDA-ETI, series F72, vol. 35.

⁸⁵⁴ "Annual Report 1996/97, July 1996 – June, 1997: Forestry Education and Research in Ethiopia; Sida Support through the Swedish University of Agricultural Sciences (SLU)," 12, SIDA-ETI, series F72, vol. 30. See also "Report from MSc Coordinator/Liaison Officer for the Period 1996-07-01 to 1997-02-20," 10.

⁸⁵⁵ See Zeleke Ewetnu to Daag Skoog, 26 September 1994, SIDA-ETI, series F72, vol. 28.

⁸⁵⁶ See Agedew Redie to SIDA, 16 November 1993, SIDA-ETI, series F72, vol. 32.

government settled for the Wondo Genet option and decided that the forestry faculty would be transferred there. In light of the troubles experienced at Alemaya, the Swedes involved in the project unanimously welcomed the news: Daag Skoog at the development cooperation office called it "excellent," and SLU's liaison officer, Bengt Frykman, described it as a "relief" and further noted that "in the long run" it would be "the best solution for the forestry education in the country."857 NATUR at Sida in Stockholm also welcomed the development and since this seemed to improve the prospect of success, it recommended a continuation of Sida's support until at least 1998.858 As Swedish support to the Forestry Research Center had been judged a failure, Sida also wanted to support the development of a research program at Wondo Genet, declaring in a 1997 consultation with the Ministry of Education that it was a "high priority," and that it needed to incorporate a "social forestry/farming systems" perspective. The idea of participatory research, involving local farmers, was also discussed at the meeting and was seen as a "priority" to initiate as a pilot activity. 859 All in all, the move to Wondo Genet seemed to Sida and SLU as an opportunity to give the project new traction.

Seen in retrospect, the period 1992–1998 appears as something of an interlude in SLU's support to Ethiopian forestry education. The plans put together in the late 1980s had been foiled by the war, and when they eventually formed the basis of the implementation in the mid-1990s it proved impossible to achieve a coordinated effort. Many of the problems were due to general difficulties in cooperating with the Ethiopian forestry administration as well as with the administration of Alemaya. But these problems were exacerbated by divergent ideologies of education, with the central tension point remaining the question of theoretical versus practical expertise. At times, this tension could grow into open conflict, as with the first batch of MSc students. The only component of the aid program that SLU felt worked reasonably smoothly was the Wondo Genet College of Forestry (including, after a while, the MSc program that was taught there). It had been receiving Swedish assistance since it was started in 1977, and SLU's staff tended to attribute the relative success to the fact that WGCF was used to working with Swedish experts and in a development aid framework. This perception of Wondo Genet as a functional forestry training environment, as opposed to Alemaya where SLU's staff found

⁸⁵⁷ Skoog to Lars Peter Herthelius (telefax), "Relocating the Forestry Faculty from Alemaya to Wondo Genet," 5 November 1995, SIDA-ETI, series F72, vol. 35; "Report from MSc Coordinator/Liaison Officer for the Period 1996-07-01 to 1997-02-20," 10.

⁸⁵⁸ Naturbruksbyrån, "Bedömningspromemoria."

⁸⁵⁹ Agreed Minutes from the Annual Consultation Between the Swedish International Development Cooperation Agency (Sida) and the Ministry of Education (MoE) regarding cooperation in the field of Forestry Education Sector Support, 3, SIDA-ETI, series F72, vol. 31.

both the natural and the social conditions unconducive to their idea of forestry education, meant that the Ethiopian decision to transfer the forestry faculty there was received positively. They would, however, find out that transferring the faculty was not enough to make the fundamental tensions of teaching Swedish forestry in Ethiopia disappear.

Academization Completed

From SLU's point of view, a key advantage of Wondo Genet over Alemaya was that the former location featured better training environments in the shape of both natural and plantation forests. But when WGCF's former dean of academic affairs, Swedish forester Sven Sjunnesson, visited the area two years after the faculty's relocation, he was distraught by scenes of extensive deforestation. His account described how the natural forest along the valley slopes was being devastated by local peasants and how the college's own plantation forests had been left unmanaged in a state of decay:

As I continue my walk through the forest plantations, my despair grows. The forest has grown tremendously, even the domestic species. But it seems to be forgotten that plantations exist to be used! Thinning-out and clearcutting, everything is needed, but I can see little evidence of forest utilization. Certain stands are about to expire!⁸⁶⁰

Sjunnesson's observations signaled a serious problem with the support to Wondo Genet achieving its goals, for by the late 1990s, these goals explicitly included deforestation prevention. As it was becoming increasingly difficult to find development funding for a project formulated only in terms of support to academia, the proposal for renewed support to Wondo Genet had been phrased in terms of higher education as a means to combat deforestation, which would benefit not only larger forest owners but also poor small-holders with some sort of forest access.⁸⁶¹

Beneath this surface, the project that SLU and Wondo Genet planned to implement was still distinctly about academic institution-building. The college was to offer diploma training and BSc and MSc programs, and SLU would offer an extensive PhD program in Sweden for Wondo Genet staff. 862 In line with

⁸⁶⁰ Sven Sjunnesson, "Återbesök med blandade känslor," *Tenaestelin: Medlemsblad för svensketiopiska föreningen* 41, no. 2 (2000): 12.

Annika Otterstedt, "Bedömningspromemoria: Institutionsutveckling vid skogsfakulteten i Wondo Genet, Etiopien, 1999-2003," pp. 5–6, 10 May 1999, folder NATUR 1999-2236, Swedish International Development Cooperation Agency archives (hereafter cited as Sida).

^{862 &}quot;Institutional Development of Wondo Genet College of Forestry, 1998/99-2002/03," 15 April 1998, Sida, folder NATUR 1995-0226, vol. 1. The MSc program still included a shorter period in

Sida's desires, the plan also proposed a research program that took up the idea of interdisciplinary, participatory research in order to bring the college closer to the local farming community. This was, however, not enough to satisfy the agency. In 1999, a Sida assessment memo evaluating the latest version of the program document pointed out that a focus on higher forestry education could not be the only solution to Ethiopia's forestry problems.⁸⁶³ These matters were further discussed at a meeting at Sida in May 1999, at which participants noted that the project was "weak" from a poverty reduction perspective and that it was hard to see the link between support to Wondo Genet and combating deforestation.⁸⁶⁴ Though claiming to be about deforestation, the meeting noted that the project was actually about academic development, with any positive effects on deforestation being at most side effects.⁸⁶⁵ For the first time, Sida's administrators—perhaps partly because the rural development pair was no longer a constraining factor in any way—did not simply accept SLU's expert views on academic forestry education as a development factor. Instead, they engaged in an explicit discussion about who actually was to benefit from academic aid as well as about what sort of forestry-related aid Ethiopia needed. And as Sjunnesson's observations suggest, the path chosen at Wondo Genet did not produce unambiguously positive results.

Sweden, but this was eventually taken out after defection problems grew worse, with up to 9 students from a single batch leaving the course. Pia Barklund, interview by author, 9 February 2015.

⁸⁶³ Otterstedt, "Bedömningspromemoria," 7–8.

⁸⁶⁴ Minutes of meeting concerning 1) Forestry education in Ethiopia 2) Support to IPPF, pp. 2–3, 21 May 1999, Sida, folder NATUR 1999-2236.

⁸⁶⁵ Minutes of meeting concerning 1) Forestry education in Ethiopia 2) Support to IPPF, 3.



Figure 24. Vista from a viewing point in the mountain ridges at Wondo Genet in the 1980s, with the college's compound visible through the greenery (cf. the image of Alemaya in figure 22). The area around Wondo Genet would also begin to suffer from deforestation in the 1990s and 2000s. Photo Sven Sjunnesson.

The Consequences of Academization

Enough changes were eventually made to the project proposal to satisfy Sida's managers, and they approved another four years of funding. SLU's support to Wondo Genet could thus continue. It was clear, however, that the college had changed markedly after the forestry faculty was transferred there. During its first decade, the then institute was geared, like the courses SLU eventually began to give there, to practice. In an account from 1983, forester Anders Dahlqvist, who taught at Wondo Genet, remarked that the incoming students generally held the view that being admitted to continuing education, even to a comparatively low-level course like the Wondo Genet diploma one, meant that the student was above practical work. In light of this, Dahlqvist (echoing Nils Lagerlöf's pronouncements from thirty years earlier) stated that much of the teaching at Wondo Genet focused on practice and on trying to achieve "changed attitudes to . . . working with one's hands."

It is instructive to compare Dahlqvist's description of Wondo Genet with that of forester Birger Hjelm, who worked there about one and a half decade later, from May 1999 to April 2001. Upon concluding his assignment, Hjelm noted

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 $^{^{866}}$ Anders Dahlqvist, "Skogslärare i Etiopien: Ilska, glädje, men aldrig tråkigt," U-landsskogisen 11 (1983): 10–11.

that "there is no doubt that the academic level has been raised. This raising of the academic level is of course an advantage and benefits a higher learning institution and more students get an opportunity to graduate with a higher degree." Hjelm thought, nevertheless, that this advantage was more than outweighed by the disadvantages of academic drift as it applied to the Wondo Genet context:

However, at the same time we can see that practical oriented education has declined at the college. Students in all levels get little or no proper practical training in forestry subjects. Many colleagues confirmed that previously (about 10 to 15 years ago) students where given more practical exercises and participated directly in forestry operations at the college. The decline in forestry operations has resulted in miss-managed forest plantations and, consequently, there are few demonstration plots showing sound management and most of the research trial are abandoned. Due to lack of management, there is also a continuously great loss of economical value since the resources isn't utilized in a proper way. As stated above, academic improvement can be a development factor, but not on the expense on neglecting practical activities which is the whole base for the College. The objective to establish improved academic level is, in my opinion, to ensure improved management, utilization and sustainable development on the natural resources. I must be honest and say that I didn't see much of this connection at the college. R68

The final point was particularly serious as it undermined the supposed link between academic education, sustainable management of natural resources and, ultimately, poverty alleviation, which was the main justification for the project. Refer to Hjelm, this was clearly manifested in the lack of management of the college's own forests. He noted that "such an essential tool" as a forest management plan had been lacking for most of the time he had spent at Wondo Genet. With a hint of sarcasm, he suggested that "[o]ne reason for this was that people responsible for production of the plan spent time preparing for their coming Ph.D. studies." Refer to the suggested that "suggested the plan spent time preparing for their coming Ph.D. studies."

The college's inability to restrict access to the natural forest above its premises was not directly related to internal change at Wondo Genet but must, as Sjunnesson argued in his almost-contemporaneous account, be understood in the larger context of political developments in post-Mengistu Ethiopia. Increased regional autonomy, with the regions organized along ethnic lines, had reduced

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⁸⁶⁷ Birger Hjelm, "Final Report at Wondo Genet College of Forestry in Ethiopia," 6, Sida, folder NATUR 1999-2236.

^{868 &}quot;Hjelm, Final Report at Wondo Genet," 6. Note that the quote is exact.

⁸⁶⁹ In the copy of the document that I examined at Sida's head offices in Stockholm, the last lines of the quote were underlined and annotated "not good!"

⁸⁷⁰ Hjelm, "Final Report at Wondo Genet," 6.

the college's maneuvering room: in a conflict between local farmers and the college over access to resources, the new regional and local authorities would tend to support the former. The lack of management of the college's plantation forests and exercise areas was, however, another matter. To Sjunnesson as well as Hjelm, this was a problem directly linked to a change in the college's profile. Sjunnesson noted that practical training had been "one of Wondo Genet's distinctive features" but that it had "largely disappeared" in 2000 as the teaching had been "academized."871 Hjelm reported that he had "faced an attitude among lecturers that practical exercises in a course can be handled over [sic] to subordinates and assistants," and he argued that "practical exercises and operations must be given higher priority and status. More training and exercises must occur in field by the academic staff."872

There is no reason to believe that SLU directly caused or desired these changes, but it was nonetheless implicated in them in the sense that its push for academization and its continuous attempts to mobilize Sida resources had enabled Wondo Genet to develop from forestry school to academic faculty. The result was ironic, for it was the attempt to convey the idea of academic forestry education as a union of theory and practice that was the clearest characteristic of SLU's support to Ethiopian forestry education. As it turned out, by the early 2000s most Ethiopian teachers at Wondo Genet were academically qualified but, at least as the Swedish experts understood it, largely uninterested in practical work. Consequently, the diploma training, the original raison d'être of the college, was discontinued in 2004, leaving only the undergraduate and postgraduate academic programs.⁸⁷³

Sida's ambition to create a new research program at Wondo Genet that would be oriented to social forestry and participatory research had likewise struggled. One part of strengthening the college's research capacity was to upgrade its staff by providing suitable candidates from the faculty with PhD training at SLU. This had been implemented vigorously, so that in 2003, four teachers with new PhDs were back at the college, nine were in the program in Sweden, and three more scholarships were to be awarded.⁸⁷⁴ But while the number of PhD students was significant and their PhD research could well constitute the basis of a future permanent research platform at the college, the program had not done much to stimulate local participation or a broader research program. A 2003 review of the project noted that the PhD candidates'

⁸⁷¹ Sjunnesson, "Återbesök med blandade känslor," 13.

⁸⁷² Hjelm, "Final Report at Wondo Genet," 6.

⁸⁷³ Gessesse Dessie and Menfese Tadesse, "Rethinking Forestry," 223.

^{874 &}quot;Sida Support to Wondo Genet College of Forestry: Final Report by a Review and Appraisal Mission, February/March 2003," p. 7, 15 July 2003, Sida, folder NATUR 1999-2236.

topics were focused on "natural science" and "traditional forestry realms." Despite SLU's participation, the PhD scholarships had thus not "fully secured the College the desired broader range of staff capabilities."875

Attempts had also been made to implement a research program at Wondo Genet itself. In the college's own newsletter from 2000, a joint article by the college's dean Tesfaye Teshome, Sven-Gunnar Larsson, and Daag Skoog described an ambitious plan to introduce "interdisciplinary and client orientation approaches in education, research and community service." Building on "the insight, that problems pertaining to the complexities of man/natural resource relations need to be solved with natural and social science in conjunction," the newsletter article discussed how "more holistic approaches" geared to the perceived problems of external stakeholders would "complement the traditional disciplinary perspective." 876 But this plan, which played directly on Sida's priorities, proved impossible to implement. Since many of the senior academic staff were in Sweden for PhD training, lack of manpower was a serious constraint. The Ethiopian researchers available at the college were academically inclined and discipline-oriented, and SLU had not done much, or been able to do much, to affect their choice of research topics. While, as the 2003 review noted, "the 1999 Project Document discusses the need for increased interdisciplinary focus and farmer participation," little such research had taken place. Instead, "the projects selected are almost exclusively classical natural science projects without participatory elements. Many of these have not been completed for various reasons." Some caution is appropriate here as I have not had access to the views of the Ethiopian researchers involved and cannot draw conclusions about their reasons for choosing certain research topics over others. It seems, however, that SLU did not particularly push for interdisciplinarity; the 2003 review suggested that "[t]he drive by SLU on interdisciplinary research has been limited."877 An Ethiopian silvi-culture was thus perhaps being created here, but it was a theoretic, academic, and discipline-oriented silvi-culture, emphasizing neither SLU's preference for theory and practice in combination nor Sida's preference for research into social aspects of forestry and farmer participation.

In 2003, as the end of the latest agreement between Sida and Ethiopia drew near, the situation at Wondo Genet was complex and multifaceted. On the one hand, the project could demonstrate a number of notable successes. Full

^{875 &}quot;Sida Support to Wondo Genet," i-ii.

⁸⁷⁶ Tesfaye Teshome, Sven-Gunnar Larsson & Daag Skoog, "The Only Forestry College in Ethiopia," *Wondo Genet Newsletter* 1, vol. 1 (2000): 2, the Umeå Administrative Office archives, series F3 a, vol. 1, Swedish University of Agricultural Sciences archives.

^{877 &}quot;Sida Support to Wondo Genet," 9.

responsibility for both the BSc and MSc forestry programs had been transferred to Wondo Genet and its parent institution, then known as Debub University (and presently as Hawassa University). The number of staff with higher academic degrees had increased significantly and would continue to do so as more fresh PhDs returned from Sweden. This had, according to the 2003 review, contributed to "the recognition of WGCF as a leading academic institution in the natural resources sector."878 But since there were few noticeable trickle-down effects and in fact some evidence that the academization had impacted negatively on local forest management, the apparent success was deeply problematic both for the funders at Sida and for SLU's advisors and experts (again, I have not been able to examine how their Ethiopian counterparts viewed the developments). Both organizations had held high hopes for better knowledge transfer conditions once all parts of the project were gathered at Wondo Genet, but now they had reason to be disappointed in the silvi-culture that had taken hold there. SLU's practical teaching model had not been adopted, the interdisciplinary and participatory research advocated by Sida had not gotten off the ground, and the mismanagement of Wondo Genet's forests seemed to indicate that academic education in fact did not contribute to the sustainable management of natural resources. This posed a fundamental challenge to the project and its potential continuation, well formulated by Birger Hjelm in a manner that, in its way, was not too far removed from the 1970s debate over CADU: "One reflection and a fair question: If all or most of the input goes to already privileged groups, how is this meeting up to Sida's main objective: the fighting of poverty?" In the copy of this document stored at Sida's head offices in Stockholm, someone has underlined Hielm's question, probably considering it an important issue to be brought up in future negotiations.879

Action Research: The Final Push

SLU was aware that the lack of progress in areas Sida considered crucial would come to be a concern in future negotiations and had taken steps to mitigate the situation. In 2002, a joint WGCF/SLU investigative mission was commissioned to more thoroughly examine the prospects of interdisciplinary and participatory research at Wondo Genet and propose "a feasible structure for such a programme, including a strategy for its initiation." Reminiscent of

^{878 &}quot;Sida Support to Wondo Genet," i.

⁸⁷⁹ Hjelm, "Final Report at Wondo Genet," 7.

⁸⁸⁰ "Research for Development at Wondo Genet College of Forestry, Ethiopia: Findings of WGCF/SLU Mission in Relation to a Proposed Future Program on 'Development Oriented Interdisciplinary Thematic Action Research', October 28-November 15, 2002," 10 January 2003, Sida, folder NATUR 1999-2236.

SLU's earlier attempts at obtaining resources for development-related interdisciplinary research in Sweden, the mission highlighted that the (revived) FRC, now part of the Ethiopian Agriculture Research Organization, had "pointed out that the major research problems in forestry relates [sic] to socioeconomic issues, whilst the present research by 99% relates to biophysical issues." In other words, even if it by this time was generally acknowledged that socioeconomic factors were crucial to forestry development, this was not reflected in the research programs at Wondo Genet.

To attempt to change this, the mission proposed to initiate what was labeled "development-oriented interdisciplinary thematic action research," or DOIT-AR for short, at Wondo Genet. The cumbersome concept essentially meant research grounded in, and guided by, the needs of a broad network of stakeholders, which would build on close interdisciplinary collaboration. By bringing in local interest groups such as peasant associations, the idea was that the college's research could contribute more directly to the welfare of the population in the area. This meant that the focus would be more on people than on trees; the report noted that one implication of the DOIT-AR approach would be to "put the condition and well-being of the human population in the foreground." In practice, this still depended on forest management, and the report continued by saying that "[a]t a more direct level," the strategy would "contribute to develop farm and industrial forest, develop integrated and sustainable forest management that is socially acceptable and economically viable; diversify farming activities for better land use." In the terminology I have employed in the dissertation, DOIT-AR represented an extensive attempt to introduce a service science perspective at Wondo Genet; it was intended as an attempt to learn from farmers, and it was to be forestry in the service not just of forest industries and forest administrators, but in the service of the people living in the vicinity of the college. The actual work was to be located at five sites, each representing a different type of forest environment. Most of the proposed research would focus on sustainable livelihood development in relation to land use and land access rights.⁸⁸²

In the new program document, which became the basis for a final agreement on Swedish support to Wondo Genet from 2003 to 2008, DOIT-AR, to be implemented with support from SLU, was incorporated as an important part of the college's activities.⁸⁸³ The document also included a kind of counterpart to DOIT-AR within the undergraduate education, with a ten-week

^{881 &}quot;Research for Development at Wondo Genet," 5.

^{882 &}quot;Research for Development at Wondo Genet," 7-17.

⁸⁸³ "Debub University Wondo Genet College of Forestry: Support to Institutional Development January 2004 – June 2008," p. 22, October 2003, Sida, folder NATUR 2004-0173.

field attachment system called "Community-Oriented Practical Education," or COPE, being made mandatory for the BSc students. COPE can be seen as an attempt to get back to the practical forestry education advocated by SLU but with a new focus on local communities corresponding to the idea behind the DOIT-AR research program.

Sida welcomed the ambitious new action research plans, but also noted that the budget and activities for DOIT-AR were underspecified in the program document and that most of the activities indicated were workshops and seminars rather than "core activities," i.e., participatory research in the field. 884 The program did indeed get off to a slow start: at a consultative meeting held in late 2007, at which representatives of Wondo Genet, Sida, and SLU discussed project operations for the final period up to December 31, 2008, the college, supported by SLU, requested an extension of the DOIT-AR program until 2010. It had taken longer than estimated to initiate the program on account of it being a new and complicated endeavor with no previously developed approaches to build on. Nonetheless, the college described the efforts made as "very encouraging" and noted that the "[local] farmers have started to appreciate and reap the benefits of the program," that "the interest and involvement of the staff has been considerably increased," and that "[s]ome field results are serving as sources of curriculum enrichment."885 Sida, however, saw no possibility of extending the program.

The available written source material of interest to the present analysis effectively ceases with the minutes of this meeting. It is thus hard to judge the extent to which the DOIT-AR program and the COPE element of the BSc program fulfilled their objectives. Mats Sandewall, who was SLU's project coordinator from 2002 to 2009, suggested that about twenty smaller research projects were initiated, but that the project was then phased out without becoming self-sustaining. Some of the smaller projects lived on for a while longer before being stopped.⁸⁸⁶ Probably contributing to the problems of getting things off the ground was that the number of students at Wondo Genet

Meeting minutes, Consultation meeting on Institutional Development Programme (January 2004 – June 2008), pp. 2–3, 25 May 2004, Sida, folder NATUR 2004-0173.

⁸⁸⁵ Meeting minutes, consultative meeting on the final Plan of Operations for Wondo Genet, for the period 1 July 2007 to 31 December 2008, p. 4, 19 November 2007, Sida, Sida electronic archives, 2004-000431 – Eti Wondo Genet.

Mats Sandewall, e-mail to author, 27 March 2015. A number of articles describing the work performed within DOIT-AR were published in an edited report, which also contains a couple of more synthetical, evaluative articles. These are positive, but likely also biased, as they were written by key actors at Wondo Genet and formed part of a request for more funding. Motuma Tolera, Mulugeta Lemenih, and Jermey Flower-Ellis, eds., *Development-Oriented Interdisciplinary Thematic Action Research (DOIT-AR): Research With a Practical Contribution to Development* (Wondo Genet: Wondo Genet College of Forestry and Natural Resources, 2009).

had surged in the early 2000s as a result of new government policies. This became a large constraint on the college's resources.⁸⁸⁷

In 2009, DOIT-AR officially ended along with all Swedish development cooperation with Wondo Genet. SLU's institutional collaboration with the college likewise ceased.⁸⁸⁸ To mark the occasion and summarize what had been learned over thirty years of cooperation, a concluding conference was organized at the college's new conference hall. Invited speakers included present and former teachers and project administrators as well as Sida and Ethiopian officials. The Swedish ambassador also attended, as did the president of Ethiopia, Girma Wolde-Giorgis. That Wondo Genet had been radically transformed by three decades of Swedish support was readily apparent even by visual impression. Those visitors who had not been at the college for some time were greeted by a remade campus, much larger and with a number of new buildings, including the new conference venue (compare the image of the conference hall in figure 25 below with the venue of the 1987 graduation ceremony depicted in figure 20). Through both location and content, the concluding conference thus directly demonstrated how much Swedish aid and the interaction with SLU had changed Wondo Genet. But at least to some of the participants, there was a connection between the improved state of the college's campus and the troubling state of the local forests.⁸⁸⁹ The campus improvements had been part of a project to create academic forestry education that had also consistently emphasized the virtues of practical training for the management of natural resources. But as it turned out, academia and practical forestry had proved hard to reconcile within the project and at Wondo Genet.

⁸⁸⁷ Sandewall, "Swedish Support," 2.

⁸⁸⁸ I have not explored if SLU considered continuing the collaboration without SIDA funding, but it would be an interesting topic to consider in light of the strategy for global cooperation SLU has developed since 2009 (se below).

⁸⁸⁹ Sjunnesson, interview.



Figure 25. Sven-Gunnar Larsson (light suit) and other dignitaries at the 2009 conference that marked the conclusion of Swedish support to higher forestry education in Ethiopia. Sida's extensive investments in Wondo Genet had, among other things, resulted in the construction of this new auditorium (compare with the graduation photograph in figure 20 above). Photo Sven Sjunnesson.

Silvi-Cultural Encounters

SLU spent twenty-three years teaching forestry and developing forestry education in Ethiopia, a significant development cooperation effort by any measure. Several factors explain why this engagement came about. First, both IRDC and SLU's Faculty of Forest Sciences were searching for new forms of development engagements for SLU in the mid-1980s. IRDC favored securing a more active development aid role with the management of projects being commissioned to SLU, while the forestry faculty, under its new dean Per-Ove Bäckström, was interested in expanding and systematizing its contacts with the developing world. Second, Sven-Gunnar Larsson, the dean of SLU's School of Forest Engineers in Skinnskatteberg, was in the right place at the right time when he worked in Ethiopia in the mid-1980s. He was of singular importance to the initiation of the cooperation due to the significant influence he exercised both in Ethiopia and in Sweden. Third, SLU's central management backed the engagement. Both Vice-Chancellor Mårten Carlsson and university director Görel Oscarsson took an active interest, as did, at the outset, the retired vice-

chancellor Lennart Hjelm. Fourth, the Ethiopian authorities welcomed Swedish aid in this field and expressly wanted to enlist SLU to provide it.

The most characteristic feature of SLU's attempt to teach forestry in Ethiopia was the emphasis on forestry education as a partially practical activity. This was a strong reason why the first undergraduates were sent to Sweden: alongside exposure to the Swedish forestry model and to Swedish academic culture, the trip enabled access to forests for practical training, something much less available in Ethiopia. Even the forested lands around Wondo Genet were inadequate, SLU argued: only by having one of the semesters in Sweden could the requisite practical training be provided. To continuously train Ethiopian undergraduates in Sweden was impossible, but access to forests remained a point of silvi-cultural tension. The conflict over how and when to possibly move the temporary BSc program from Wondo Genet to Alemaya reflected a dispute between the Ethiopian Ministry of Agriculture and the Commission for Higher Education as well as concerns over practicalities like accommodation, but it also directly reflected diverging conceptions of forestry education. Alemaya had no forests and thus afforded little opportunity for on-site exercises. This was not a problem for the CHE, which conceived of its forestry degree as theoretical as well as general enough to be co-read with agronomy students during the first two years. Nor was it a major issue for Alemaya's dean of forestry, who believed that Ethiopia was better served by another kind of forestry education that was more geared to agroforestry. But it was a problem for SLU, which was never fully satisfied with Alemaya as a location for forestry education as its experts understood it.

This reflects how the Swedish model of such education, which shaped most of SLU's work in Ethiopia, had developed in a silvi-cultural context where forests were an important economic resource and where easy access to forests was available to all who were interested. It rested on the belief that familiarity with practical forestry work was important on all educational levels and so required some practical experience for admission even to the five-year forester course. Consequently, most applicants to academic forestry education in Sweden had had early exposure to forest environments and were interested in outdoor activities. The situation in Ethiopia was completely different. There was little forest industry to speak of, no history of forestry education, and generally a strong focus on theory over practice in related applied science fields, such as agriculture. Thus, SLU's involvement in Ethiopian forestry provides another example of the approach to development that we encountered in the earlier chapters. Though it strived to build local capabilities and was

practice-oriented, it rested on a form of centrist thinking that manifested as clear limits on what could and ought to be adapted.

The particular example of forestry deserves some further attention because Swedish authorities have been very explicit in promoting the Swedish forestry model as relevant to the developing world. Success narratives of forestry as key to last century's rural development in Sweden have functioned as a basic ideological premise of Swedish forestry but have also legitimated the export of Swedish forestry knowledge to the rest of the world. This was made explicit in the Swedish government's 2011 forestry sector action plan, called The Forest Kingdom – With Values for the World. It updated older success narratives with the balance between production and environmental goals that characterizes the current national forestry policy. In addition, it stated as an explicit goal that "Sweden will spread knowledge [globally] about the Swedish model and sustainable forestry and thus contribute to increased poverty reduction and the fight against global warming." The present study has demonstrated some characteristics of this Swedish model as applied abroad in the decades before The Forest Kingdom, and arguably highlights some risks of centrist thinking inherent in this kind of ideology. 890 More historical research could provide further input into how Swedish forestry knowledge has been applied abroad and perhaps hint at other pitfalls to be avoided in the future.

In particular during the 1990s and beyond, SLU increased its efforts to take the local context into account when designing its training programs. But the tension between the Swedish education model and conditions in Ethiopia nevertheless proved impossible to resolve. As the academization in Ethiopia continued and the forestry college at Wondo Genet drifted academically, the gulf between practice and theory grew rather than shrank. By the early 2000s, Swedish visitors and staff were distressed at the inadequate attention paid both to practical education and to the practical management of the college's forest resources. In the final stages of the aid program, SLU then somewhat belatedly pushed for the implementation of a stakeholder-mobilizing action research project, which in many ways was pioneering but got off to a slow start and was then phased out when Sida's support ended in 2009. Though an original approach within the project and a reflection of contemporary priorities for Swedish forestry aid, it also drew on the older Swedish ideal of service science. But its implementation, in

⁸⁹⁰ For a more in-depth analysis of the values and ideologies embedded in the Forest Kingdom strategy, see Sara Holmgren and Seema Arora-Jonsson, "The Forest Kingdom – With What Values for the World? Climate Change and Gender Equality in a Contested Forest Policy Context," *Scandinavian Journal of Forest Research* 30, no. 3 (2015).

part as a response to forest management issues, reveals that the aid program had generated results never intended by SLU, which had always promoted a vision of academic forestry education based on a combination of theory and practice. In the end, SLU's experts found themselves in a paradoxical situation: they were in favor of both academization and practical training, but these were two goals that turned out to be very difficult to combine under the conditions of their Ethiopian silvi-cultural encounters.

In retrospect, SLU's push for academization can be judged to have been successful in the sense that it constituted a crucial part of the creation of an academic forestry education and research environment in Ethiopia. When SLU concluded its engagement at Wondo Genet in 2009, the latter had been transformed from a small, aid-dependent forestry institute under the Ministry of Agriculture into a facility fully integrated into the national structures of higher education, competent to provide both undergraduate and postgraduate instruction on its own. The education provided had diversified over the years, with the largely production- and forest industry—oriented approach of the early years being complemented with environmental and people-oriented perspectives. However, the increasing academization also resulted in a decreased emphasis on practical training. In terms of creating a faculty founded on the forestry education values SLU had championed throughout the project—and this was in a sense the more important goal from SLU's perspective—it was thus less successful.

The effect the engagement in Ethiopian forestry has had on SLU and Swedish forestry expertise has been harder to discern from the sources. ⁸⁹¹ What is clear is that, thanks to the large number of PhD students who came from Alemaya and Wondo Genet to SLU, a number of teachers and researchers in Sweden became acquainted with conditions and problems in Ethiopia, and this brought new perspectives and research topics to the faculty. As a very rough indicator, a search in SLU's publication database, SLUpub, finds twelve publications from the forestry faculty since 2010 with the word Ethiopia in the title. ⁸⁹² While by no means a massive output, it indicates that some work connected with Ethiopian problems is still ongoing. Also, the home page of the School for Forest Management, formerly the School of Forest Engineers, notes that "[c]o-operation and exchange with educational establishments outside Sweden is a tradition" and that it is of great importance to staff and students. ⁸⁹³

⁸⁹¹ Perhaps it is also too early to draw conclusions about this; the engagement ended only three years before I started working on this book.

⁸⁹² http://www.slu.se/sv/bibliotek/soka/sok-i-slupub/, search performed 1 April 2015.

^{893 &}quot;School for Forest Management," http://www.slu.se/en/departments/school-of-forest-management, last modified 16 December 2013.

This tradition was created by the engagement in Ethiopia. It remains, however, to be seen whether these two examples are just lingering traces of what concluded in 2009, or whether they are indicators of a more permanent effect that will continue to affect work at the faculty in the future.

Conclusions

ARNE BJÖRNBERG, WHOSE voice opens this book, is largely forgotten as a historical figure today, as is the agency he headed. Both Björnberg and his NIB were perhaps rightly criticized for failing to meet the demands of the context in which they were to work. Yet his speech at Ultuna in 1962 was in line with the times, and his call for experts to turn to global problems of food production and agricultural development was, at least in part, realized. In fact, Swedish agrarian experts had already begun in the early 1950s to frame their knowledge in the context of foreign aid. Significantly increasing in numbers when the engagement began to be institutionalized in the following decade. Swedish veterinarians. agronomists, and foresters formulated strategies they believed would help produce more food for a growing global population, combat rural poverty, and contribute to a more sustainable use of natural resources. In the process, they cooperated closely with the Swedish development aid authorities, whose agendas both shaped, and were shaped by, the available expertise. My account and analysis of part of these developments make up the contents of the dissertation thus far, and in this four-part final chapter, I will offer a concluding discussion.

In the first part, I explain why the three Swedish agrarian colleges began to strongly promote the relevance of their expertise to development aid, particularly in the 1960s. In the second part, I offer a characterization of Swedish agrarian expertise and discuss how the nature of the expertise shaped the interventions the experts designed and carried out. In the third part, I suggest a periodization of Swedish agrarian expertise in development aid and consider how the ways in which experts collaborated with aid authorities constrained or enabled certain activities. The fourth and final part does not take my research questions as a starting point but rather brings the historical findings to bear on the present and the future in a discussion of SLU's present-day development cooperation activities.

Transcending Historical Tensions: Establishing Swedish Agrarian Expertise in Development Aid

The initiation of significant aid activities at the three colleges can be dated rather precisely. Nils Lagerlöf began to give his international courses at the Veterinary College in 1954, the Agricultural College sent its proposal for a

development project abroad to NIB in 1964, and the College of Forestry signed an agreement of institutional cooperation with SIDA and established a developing-country section in 1970. The last-mentioned was largely modelled on the Agricultural College and is thus of less interest here. Considering the two other colleges, both Lagerlöf at the Veterinary College and Lennart Hjelm and his colleagues at the Agricultural College proceeded in a similar way. Both were presented with an opportunity to engage in a form of development aid. Both rejected the opportunity as presented, and instead formulated a new development problem, more congruent with their own expertise and interests. Finally, both were able to convince authorities and funding bodies of the suitability of their own proposal.

In both cases, the initial impulse came from the outside, reflecting the growing demand for agrarian expertise at development agencies, such as FAO and NIB. This demand, part of the growth of a general political and administrative framework for development aid internationally and in Sweden, was a sine qua non for the engagement of the colleges and their expertise. More particularly, FAO needed experts for its program of sending technical consultants on modernizing missions across the globe and thought it had found one such expert in Nils Lagerlöf. As for NIB, it had been taking stock of the increasingly active discussion of agriculture in the international aid debate and reached out to the Agricultural College for its special competencies in agricultural education. In both cases, the experts can be said to have taken advantage of the demand for their expertise and used it to create something of their own. The process was similar both for Lagerlöf and for the Agricultural College: the initial proposal triggered network building and interest mobilization that culminated—again in both cases—in counterproposals far more ambitious than what had initially been on the table. Lagerlöf took a comparatively simple technology transfer project and turned it into a program of extensive specialist training, which he advocated as the only realistic way to modernize Indian cattle breeding. Hjelm and his colleagues were asked to help out with educating foreign students in Sweden but responded with a proposal for a major science-driven agricultural development project in Africa.

Both Lagerlöf and the Agricultural College professors suggested that the original proposals for aid in their fields of expertise were methodologically inadequate and would fail to help the intended beneficiaries. Both were also able to convince funding bodies—NIB and SIDA, and the Central Committee, FAO, and the government of India, respectively—to sponsor their own, grander, proposals, which were eventually realized. But they had different reasons for engaging in this work of problem formulation and persuasion. For Lagerlöf, the courses in veterinary obstetrics-gynecology were primarily a

personal project, driven, besides his desire to help, by his own professional and scientific interests. These factors were certainly relevant at the Agricultural College as well: there is no reason to doubt that Hjelm and his colleagues had a genuine interest in development and a desire to assist poorer countries, and it is clear that engaging in development aid provided a way into new fields of work and new careers for several of those involved. But for Hjelm and the Agricultural College, there were also more complex institutional motives involved. It was not long before Hjelm began to afford a prominent place for developing-country work in the new visions he was formulating of the future of his college. He wanted to place Swedish agricultural science and expertise in new contexts, and envisioned the Agricultural College as a considerably broader institution, engaged in domains hitherto well beyond its boundaries. These included participating in development aid, training agronomists for assignments abroad, and performing research intended to have applications in developing countries.

To understand Hjelm's motives, we have to recall that earlier research on the history of Swedish agrarian institutions of higher learning has identified a shift or turning point in their history in the mid-1960s. Having up until then been small, sector-oriented, and, to a significant degree, practical institutions, they then began a process of change that created the broad research university SLU is today (presently, there is even a discussion about whether or not to remove agriculture from the university's name altogether). Earlier studies explain this shift in terms of safeguarding the three colleges of the Ministry of Agriculture in a changing societal context, particularly with respect to criticism from the environmental movement that threatened the societal legitimacy of modern agriculture. The shift has also been explained as part of a struggle to secure for the institutions of the agrarian sciences a larger share of the funds that poured into the Swedish higher education system at the time.

Both the impact of the environmentally motivated criticism and the comparative lag in funding growth could be understood as symptoms of a more fundamental problematic. Over the longer term, the establishment of modern, industrial Sweden implied that agriculture would lose its standing as the central sector of production in Sweden as in the rest of the industrialized world, and thus that its institutions would lose influence. As historian Kiran Klaus Patel puts it in summarizing what he describes as the declinist narrative of modern

⁸⁹⁴ In the spring of 2014, SLU's then vice-chancellor Lisa Sennerby Forsse suggested on her official blog, with reference to other agricultural universities and faculties in Europe which have removed the word agriculture from their names, that it was time to start a discussion about SLU's name as well. Lisa Sennerby Forsse, "Dags att lyfta namnfrågan för SLU," http://blogg.slu.se/rektor/2014/04/14/dags-att-lyfta-namnfragan-for-slu/, last modified 14 April 2014.

agriculture, "the economic, social and political leverage of agriculture shrank" as "it became Western societies' sacrifice on the altar of modernity." As Patel rightly notes, one might tell this as a success story instead—entailing a celebration of contemporary agriculture as a wonder of efficiency—and it is fair to say that the postwar transformation of Western and Northern European agriculture incorporated elements of both sacrifice and triumph. But whether the transformation is understood as the one or the other, one of its outcomes was a decreased influence for institutions associated with agricultural interests. Hjelm and his colleagues' attention to development aid reflected a growing concern over this situation. To maintain the Agricultural College's relevance, they had to widen its scope and make claims on new political domains; on new sectors of society that could complement the links to the domestic agricultural sector. As Hjelm perceived that the need for agrarian experts working in and for the developing world would increase significantly in the future, development aid came to be included among them.

There was also a second aspect to the engagement, part of a slightly different project of legitimacy. Paying attention to global problems would not just widen the scope of the college but could also be a way to attract interest in wider social circles and among people and institutions perhaps less concerned with agriculture as such but very interested in developing-country problems. But this move came with its own set of paradoxes, as is indicated by the Ultuna Student Union's magazine's questioning of the relevance of the college's research program in 1976, or by Hjelm's frustrated response to the critics of CADU: that those who never had "caused a single seed to sprout" were unqualified to comment on problems of agricultural development. ⁸⁹⁶ Both the internal and external criticism related directly to the college's attempts to lay claim to agricultural development abroad as a new area of expertise: these attempts had placed its expertise and its strategies in new contexts where they could be discussed on fresh premises.

To recapitulate, my argument is that the Agricultural College began to frame its expertise in the context of development aid as part of a wider process of broadening and change that, ultimately, amounted to a project of legitimacy. Such projects are central to the history of the agrarian sciences. As I discussed in the introduction, agrarian experts have historically been torn between their desire to appear legitimate in the eyes of, on the one hand, agricultural practitioners and agricultural policymakers, and on the other hand, natural scientists. In the 1960s, this traditional bipolar tension was problematized by

⁸⁹⁵ Kiran Klaus Patel, "The Paradox of Planning: German Agricultural Policy in a European Perspective, 1920s to 1970s," *Past & Present* 212, no. 1 (2011): 239.

⁸⁹⁶ See note 566 above.

challenges from environmental movements and by concerns over the future leverage of agriculture in an industrialized society. At least as it played out in the Swedish setting, the foray into foreign development was, I argue, part of a broader attempt to deal with this new situation. Ultimately, it was about *transcending the historical tension* between the sector and science by claiming new areas and striving to appear as relevant also in the eyes of a new and wider audience. Strategists like Lennart Hjelm believed that such transcendence was needed to counter the fundamental challenges faced by the institutions of agrarian expertise in the 1960s.

The relationship established between the Agricultural College and the aid authorities as a consequence of this new framing thus served to help reposition the former in a changing domestic social and institutional landscape. But it also situated Swedish agrarian expertise in a new global context. Answering, as it were, Arne Björnberg's call for agricultural experts to assume worldwide responsibilities, the Agriculture College's experts set about devising agronomic improvements to developing country agricultures. Next I will discuss some of the characteristic features of how they and other Swedish agrarian experts related to this new situation of applying their expertise abroad.

Practice and Localism: A Swedish Ideology of Agrarian Development

Once established as relevant to Swedish development aid, the agrarian expertise represented at SLU and its predecessors exercised influence on it over more than five decades. This happened in two ways: by the direct influence the experts had on those projects in which they had prominent planning or supervisory roles, and by the direct and indirect influence they wielded through the existence of the institutional collaboration with SIDA. In the dissertation, I have discussed three development aid projects or programs in which SLU or its predecessors—or representatives of them—played a leading role: Nils Lagerlöf's international courses in animal reproduction, the CADU project, and the Faculty of Forest Sciences' support to forestry education in Ethiopia. These projects were far apart in both time and space. Two of them were primarily focused on achieving development through educating a social elite, while the third aimed directly at the development of peasant agriculture. But the three projects nonetheless had a number of things in common. All three aimed, directly or indirectly, at putting technoscientific research and knowledge to use in stimulating agrarian primary production. The experts who planned and managed them all championed local adaptations of knowledgeeven if the scope of the actual adaptation varied—and also favored a large degree of practical instruction and work.

The projects' orientations directly reflected the fact that as practiced in Sweden the agrarian sciences were partly site-bound sciences, characterized by a strong service science ideal, through most of the twentieth century. The focus on the local in the Swedish agricultural and forestry experimentation system, which had its roots in the nineteenth-century establishment of the agrarian sciences, remained even after the start of more notable agrarian academic drift in the 1960s, and this focus carried over to development aid. Accordingly, the instances of agrarian development aid presented here were, for the most part, informed by localistic understandings of development. Swedish agrarian experts generally emphasized the importance of producing knowledge locally so that it would be directly useful in the intended settings. They also strived to build local capacities.

Likewise, Swedish academic education in agriculture, forestry, and veterinary medicine included significant practical components through most of the period studied here, and this orientation to practice became an important part of the professional identities of those thus educated. This too carried over to development aid and is particularly recognizable in the education-oriented projects: both Lagerlöf's courses and the forestry education support to Ethiopia strongly emphasized the development of practical skills. This clashed with conceptions in India and Ethiopia of practical work as associated with the uneducated and the lower social classes, and part of the idea of focusing on practical training had to do with changing these attitudes. One can discern an egalitarian motive behind the Swedish experts' approach, with its concern that a modern expert, though in an elite position, nonetheless was under an obligation to lead by example and to get his or her hands dirty. This suggests an entire problem complex of intellectual history that concerns the relationship between intellectual elites and practical work in various times and places throughout history, and how this has shaped scientific and technological development. But it is also a concrete problem in the history of development aid that would be interesting to study further: How common or uncommon was this practical orientation in agrarian development aid generally? How did it affect results? How was it received in different settings, and for what reasons?

Though concerned with the spatialities of knowledge transfer, the Swedish experts simultaneously tended towards centrist thinking: the (possibly inadvertent) universalizing of one's own experiences, understandings, and ideologies. In the projects studied here, this primarily manifested in the experts' strict keeping to the fundamental development models that they advocated. The models (even if they otherwise differed) all included a sensitivity to the need to

adapt to new settings, but this sensitivity did not extend to the models themselves. This is again especially salient in the education projects. Both built strongly and explicitly on Swedish blueprints. These were perceived as superior to available alternatives, and this led the experts to demand the adjustment of everything that they understood as falling beyond the strict limits of appropriate education. It is particularly notable in the Ethiopian case, where Swedish understandings of forestry and forestry education remained largely unquestioned starting points for a considerable time, even though it soon became apparent that these models faced a number of obstacles when implemented in Ethiopia. In that case, centrist thinking became a major counterweight to the localism nonetheless expressed by the foresters' attempts at capacity-building and at creating curricula adapted to Ethiopian needs.

To be clear, the above is not to argue that it is per definition a bad idea to promote Swedish models abroad. On the contrary, there is nothing intrinsically wrong with choosing the model one is familiar with as a starting point for a knowledge transfer effort, and it seems clear that the Swedish experts promoted development strategies they genuinely believed were better than alternative approaches. My point is rather that it can be very hard to critically examine and adjust the fundaments of one's own professional identity and knowledge base and that this ought to be taken into account, perhaps more than the Swedish experts tended to do when working in new environments.

The strategies advocated within the three projects shared enough characteristics for me to propose that they manifest an underlying *ideology of agrarian development*, linked to and dependent on what I earlier described as a Swedish agricultural modernism and shared in and reinforced by the rather close-knit networks of experts associated with SLU. Its core components were a practical, productivist orientation and a local focus combined with a comparative inattention to social concerns and a degree of centrist thinking. The focus on the local and the practical contributed to the many technical successes the three projects achieved. Most notably, CADU's bringing about of a local Green Revolution in Chilalo was directly due to the importance that the Agricultural College afforded to local, applied, and adaptive research work. Compared with many other rural and agricultural development projects in Africa, CADU's research strategies produced impressive results particularly in terms of increasing yields. In its time, CADU's success in these respects was probably unequaled on the continent.

The ideology's second dimension reflected another side of the Swedish agrarian research and education system, namely, that it prioritized technical over social aspects of agrarian development. For example, while nominally committed to the participatory research program Sida pushed for within Ethiopian forestry,

it was only by the end of the program that SLU began to demonstrate an active interest in such work (and then seemingly as a reaction to the looming cancellation of the project). More importantly, CADU's planners prioritized production above other factors, and this played a large role in the resulting evictions of tenants in Chilalo. The trope of technicians and social engineers blind to the human costs of their attempts to create a better world is not unheard of in narratives of Swedish modern history, and it has relevance here as well. There is little doubt that the Agricultural College's experts had a technocentric approach to rural change in Ethiopia as well as in Sweden. It also deserves to be pointed out that for all the human consequences of expert interventions in Swedish agriculture—rural depopulation, farm abandonment, etc.—these interventions were part of a broader planned policy of social reconstruction and integration that included significant measures of support to those affected as well as good prospects for future employment. By contrast, the evicted farmers in Ethiopia could not expect government support nor be equally confident of being able to find alternative ways of making a living.⁸⁹⁷

A question that arises with respect to this development ideology is to what extent it changed over time. On the one hand, accumulated experiences from development work as well as contextual changes apparently affected how Swedish experts construed agrarian development. This is particularly noticeable in the discussions over academization and in the Ethiopian education project. In both instances, Swedish agrarian experts presented opinions on, for example, social development and the need for socioeconomic approaches that were far advanced from attitudes expressed in the 1960s. Yet on the other hand, the core of the ideology appears to have been quite robust in practice—the focus on production and practical education remained throughout the period studied here—and perhaps part of what looks like change was largely cosmetic. It would be interesting to study other agrarian aid projects around the period of change in the 1980s and 1990s, to enable comparisons with respect both to how the ideology developed and how representative my SLU-centered findings are of Swedish agrarian aid in general.

The discussion above also has some implications with respect to the literature. The Swedish experts conformed to what Scott calls a high-modernist ideology in the sense that they generally believed strongly in science as a positive social force and in that they were uninterested in modifying the core of their professional paradigms based on local encounters. At the same time, they promoted practice-based expertise and rejected universalism, instead striving to develop site-specific solutions. So while a project like CADU certainly was an

⁸⁹⁷ Thanks to Mårten Carlsson for making this point clearer to me.

expert-driven extension of the state's power into new domains, and thus akin to the objects of Scott's criticism, its leading experts still operated quite differently from how he suggests high-modernist experts normally proceed. This suggests that caution is needed before conflating what in practice can be distinct stances with overarching terms such as high modernism and that more attention should be paid to the exercise of power in different development aid settings. The Swedish agrarian experts in fact brought many of their service science ideals with them when they went abroad. They thus tended to strongly promote a union of theory and practice and could include significant localism in otherwise high-modernist agrarian development ideologies in a way that Scott's theorizing does not wholly recognize.

Though the Swedish agrarian experts favored far-reaching changes that they judged would promote modernization, they were unlike revolutionary modernization theorists in that they rarely advocated radical breaks with the past. Nils Lagerlöf explicitly argued that, for practical reasons, religious views on cattle that he himself found deeply problematic should still be factored into the planning as they were not likely to immediately disappear, and CADU's Agricultural College planners envisioned development through improved rather than fundamentally new agricultural practices. While more limited in scope, these findings show for Swedish agrarian development aid experts something of what Helen Tilley and others have shown for British colonial expertise: scientists and development experts working abroad could demonstrate a considerable degree of interest in local environments and practices even as they were carrying out more or less radically transformative projects. But in the present case, this interest was primarily motivated by its contribution to the intended transformations, and unlike what often happened in the cases Tilley examines, it rarely began to influence the goals or the contents of the knowledge project itself.

The consideration that practice was at least as important as theory was not a unique characteristic of the agrarian aid but was a strong ideological stance in many fields of Swedish development aid, particularly in its early days.⁸⁹⁸ I have not attempted cross-national comparisons, but there are strong indications that this ideology prevailed outside Sweden as well: writing on the Nordic Tanganyika Project, which started in the 1960s at Kibaha in Tanzania, Jarle Simensen suggests that "[t]here was a certain Nordic flavor to its activities, an emphasis on applied oriented curriculae, practical service and grass roots contacts."⁸⁹⁹ In another work, Simensen also addresses a different and

⁸⁹⁸ See e.g. many of the accounts by early aid workers in Gumbel, Kärre, and Wieslander, ...och världen växte.

⁸⁹⁹ Simensen, "Norwegian-Tanzanian Aid Relationship," 59.

somewhat later Nordic collaborative project in Kenya, and notes that it was criticized for "focusing too much on the production for sale, and too little on the effects on society as a whole." Other similarities abound as well: Norwegian fishery experts in India in the 1950s resisted simple technology transfer solutions in a manner that in some respects was very similar to Lagerlöf's stance; and Norwegian foresters tried to support forestry education in Uganda through adapting Norwegian curricula and introducing practical training. These examples, and more could certainly be found, suggest that the Swedish agrarian experts approached development in ways similar to their Nordic counterparts.

The dimension of centrist thinking was also possibly common to Swedish or Nordic aid at large. Political scientist Ann-Sofie Nilsson suggests as much in her discussion of a more general tendency of Swedish expertise to presume its own superiority. In her book on the Swedish Social Democratic Party's international activism, Nilsson argues that the ruling Social Democrats, in their eagerness to make Sweden a "moral superpower," acted as "[m]oralists - selfappointed interpreters of right and wrong." She seeks historical explanations in missionary traditions and a "Lutheran heritage" of moralizing but also suggests that the more specifically modern moralism was rooted in a belief in the superiority of the Swedish Social Democratic model for social development and welfare as well as in the Social Democratic approach to foreign relations. These explanations are interesting to consider in the present context, even if one does not otherwise share Nilsson's openly tendentious criticism or is ready to accept her speculative claims about the influence of the "Lutheran heritage." As I discussed in the introduction, the construction of the welfare state was closely linked to science and technology. It seems wholly probable that the evident successes in creating the industrialized welfare state at home suggested to Swedish experts that their approaches to development were valid. This could also hold for the agrarian domain. It could in fact be even more pronounced there, for there existed long traditions of "missionary" activities targeted at Swedish peasants, and by their very nature, such activities had a dimension of correcting errors. Even if the agrarian missionaries were committed to service science and were ready to assign a substantial role to farmers' problems and skills in their research process, their role as experts still implied that they had some ability to discern between better and worse practices that the peasants themselves lacked. At any rate, international comparisons of expert-promoted

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⁹⁰⁰ Simensen, Norsk utviklingshjelps historie. 1, 156.

⁹⁰¹ For the fishery aid example, see further my comparison with Lagerlöf in Bruno, "Nils Lagerlöf," 42; about the Norwegian forestry education aid to Uganda, see Simensen, *Norsk utviklingshjelps historie. 1*, 148.

development ideologies within the Nordic region would be an interesting avenue for further research. Comparative studies could clarify both to what extent Simensen's "Nordic flavor" and Nilsson's moralism were more general features of Nordic development aid as well as whether or not these features were particularly prominent in the agrarian domain. It could also bring more insight into how transnational influences within this region shaped the practice of development aid. But an equally relevant research topic would be to challenge Simensen's idea of a Nordic-flavored aid by contrasting it with a broader set of international examples. Did the Nordic countries consistently promote development in a unique way, or is this simply a self-image with little basis in historical fact?

I also want to return to the question of the gendered nature of the expertise that upheld the development ideology and managed its implementations. As I mentioned in the introduction, agrarian education in Sweden was strongly gendered male at least until and through the 1980s. Most of the experts who feature in the dissertation were thus educated in male-dominated environments. It can be assumed that this background led to certain preconceived notions about male and female characteristics and proper roles that formed part of the more general centrist thinking and shaped the experts' proposed strategies at different levels. While I have not actively engaged with this dimension in my narrative and analysis, I want to suggest it as another possible avenue for further research. Starting from the acknowledgment that gender is an important analytical dimension for the examination of power, and thus of expertise, a more serious investigation into the gendered nature of Swedish agrarian development would very likely add more nuances to the results presented here.

To conclude, I finally want to caution against overstating the causal role of the agrarian development ideology I have discussed. It is better, I think, to understand it as having shaped rather than caused the positive and negative effects it resulted in, as these effects were also closely intertwined with a widespread authoritative conceptualization of the development process more generally. In the introduction, I quoted Timothy Mitchell's argument about development being "a politics of techno-science," bringing into play scientific and technical expertise to "improve the defects of nature, to transform peasant

⁹⁰² There is an extensive literature on gender aspects of development, dating back to Danish economist Ester Boserup's pioneering Woman's Role in Economic Development from 1970. For an introduction, see e.g. Kum-Kum Bhavnani, John Foran, and Priya A. Kurian, "An Introduction to Women, Culture and Development," in Feminist Futures: Re-Imagining Women, Culture and Development, ed. Kum-Kum Bhavnani, John Foran, and Priya A. Kurian (London: Zed, 2003). For a more general argument about the usefulness of gender analyses for historians, see Joan W. Scott, "Gender: A Useful Category of Historical Analysis," The American Historical Review 91, no. 5 (1986).

agriculture, to repair the ills of society, and to fix the economy."903 This belief in an expert fix, the basis of the entire concept of development, was extremely powerful during the postwar period, but was also deeply problematic, as Mitchell makes clear in his book. One particular problem, as this story of Swedish agrarian expertise illustrates, is that there is very often a fundamental incongruity between the ambition to improve nature and the aspiration to repair society's ills. It seems impossible to implement techniques and ideals based on scientific rationality in new settings without resulting upsets in the social order. As I understand it, this is close to what Anna Lowenhaupt Tsing means with her metaphor of friction as both productive and destructive, and it is an observation also made much earlier by sociologist Bernard Barber:

Rationality, wherever manifested, has the same effect of producing changes and of undermining established social routines. Social instability is in part, then, the price we pay for our institutionalization of rationality. 904

Barber's conclusion is not particularly startling. To upset the social order is the very point of implementing rational methods in the name of development. The concept of development in fact implies the undermining of established routines and their replacement with something ostensibly better; it can, as John H. Perkins points out, be understood as a euphemism for the promotion of Schumpeterian creative destruction. Development experts have varied in terms of the extent to which they have wanted to replace old structures with new, and many, though far from all, have been sensitive to the human costs involved. But rather few have maybe been fully aware of the difficulties and *intrinsic* conflicts involved in applying expert knowledge in order to fix nature or transform peasant agriculture. Looking at my objects of study, and particularly perhaps at CADU, I would advance that they serve as good examples of what tends to happen when scientific rationality is efficaciously put to work in a new environment. Its effects then are often simultaneously productive and destructive.

From Individual Projects to Academization: The Rural Development Pair in Swedish Agrarian Aid

Much of Swedish agrarian and rural development aid was, up until the early 1990s, characterized by its close links to external, institutionalized consultants who provided expertise. Of these consultants, the Agricultural College and

⁹⁰³ Mitchell, Rule of Experts, 15.

⁹⁰⁴ Bernard Barber, Science and the Social Order (London: George Allen & Unwin, 1953), 211.

⁹⁰⁵ Perkins, Geopolitics, 15.

later SLU were the most significant and have been in focus in the present study. I have identified characteristics of, and traced continuities and discontinuities in, the SIDA-SLU institutional collaboration, which I have labeled a rural development pair. To facilitate a discussion of this pair, I will begin by suggesting a periodization of my findings on how SLU's agrarian expertise has been involved in development aid:

- ➤ Individual projects (1953–1961)
- ➤ The formative moment (1962–1968)
- The rise of the rural development pair (1969–1985)
- ➤ The academization of agrarian aid (1986–2009)

In early 1953, Nils Lagerlöf went to India on behalf of FAO. He was not the first Swedish agrarian expert to work in the developing countries, but his trip to India marks the start of the first significant agrarian aid project. The first period I propose, 1953–1961, therefore starts with him. It was a period of *individual* projects, of which Lagerlöf's reproduction courses at the Veterinary College was the most prominent example (other individuals, for example Karl-Fredrik Svärdström at the Agricultural College, were also engaged as international experts or involved in small-scale teaching activities with a connection to the developing world at the time). Characteristic of Lagerlöf's project as well as of these other activities is that they involved no attempt at establishing a more permanent development aid agenda. The activities, such as they were, reflected individual motivations and interests. This phase temporally corresponds to the Central Committee period of Swedish development aid and to a comparatively UN-centric and small-scale aid internationally, which is no coincidence: in the 1950s, the three colleges had neither the reason nor the possibility to engage in more far-reaching aid efforts. They only had room for individual projects, which also was the only form compatible with the surrounding organizational structures for development aid.

A second period, 1962–1968, can be described as *the formative moment* for Swedish agrarian aid. Between 1962 and 1968, the Agricultural College, led by Lennart Hjelm, strived to secure a role for itself and its expertise within Swedish development aid, and in doing so, laid down the foundation for what would later become the college's, and then SLU's, institutional role. The formative moment gradually came to an end, and by 1968, when a permanent coupling between SIDA and the Agricultural College was established through the developing-country section and the advisory committee at Ultuna, it can be said to have ended. But the link that by then had been established around the CADU project, a major SIDA effort initially directed by Hjelm's former student Bengt Nekby, gave the Agricultural College a central position within

Swedish agricultural aid. Contributing to the college's formative influence were the early problems at NIB, and particularly the troublesome experiences from an early agricultural project implemented without having adequate agronomic expertise involved. That there were few private firms in Sweden with the requisite expertise at this time contributed as well. Swedish agricultural modernization was a state-driven effort, and its experts congregated at the institutions of higher education and research as well as at other public authorities, such as the National Board of Agriculture. 906

Contributing to making this period formative for the agrarian aid was that it was a formative moment for Swedish aid more generally. The period stretches from the first government bill on development aid to the second, after which aid budgets began to swell in reach of the goal that 1% of the Swedish gross domestic product should be allocated to development assistance abroad. The period also extends from the establishment of NIB with its still-large degree of direct influence from the popular movements and the responsible minister Ulla Lindström, through the first phase of formalization and bureaucratization of Swedish aid effected by Ernst Michanek and his coworkers. By 1968, SIDA was firmly established. At the same time, Michanek began to lose political influence due to the general leftist political climate. In particular, he was challenged by the establishment of a politically radical aid department within the Ministry for Foreign Affairs.

The period from 1969 to 1985 is characterized by *the rise of the rural development pair*. In this period, the colleges', and then SLU's, roles as long-term, institutionalized consultants to SIDA took shape. It also saw the growth of institutional structures, first at the three colleges and then at SLU, to manage the collaboration with the aid agency. During this period, and particularly after 1978, SLU functioned as a consultant, providing SIDA with primarily experience-based expertise in the fields of education, recruiting and consulting. Together, the rural development pair of SLU and SIDA coproduced significant parts of Swedish agrarian aid, largely through an informal relationship characterized by prominent personal networks and a blurred border between the two organizations.

The rural development pair created problems for SLU. On the one hand, its management supported the cooperation with SIDA as it was enthusiastic about foreign development and wanted to make both development aid and development-related research permanent areas of work at the university. On the other hand, the university found itself in a situation where the International

⁹⁰⁶ A number of employees of the National Board of Agriculture would also provide expertise to the aid authorities, most notably Gösta Ericsson, who left the Board to work in aid and later achieved a very prominent position within SIDA.

Rural Development Center, an organization that in practice was oriented almost exclusively to SIDA's practical needs and had no self-evident place at SLU, handled the core development activities. This was further aggravated by the Ministry of Agriculture's lack of interest in SLU's development aid activities. A twofold problem of the legitimacy of development aid at the university evolved. On the one hand, IRDC, essentially a developing-countryoriented consulting organization with little academic expertise at hand, struggled for its legitimacy within SLU. On the other hand, SLU found no support for its aid activities at its principal ministry. SLU did not during this period achieve a satisfactory solution to either part of the problem. Its development aid activities nonetheless grew significantly owing to a general expansion of Swedish rural development aid. The latter created something of a self-reinforcing pattern in which the expertise gathered at SLU was a precondition for SIDA's increased focus on rural development, which, in turn, drove an expansion of IRDC at SLU. But this pattern also exacerbated the problem of IRDC's legitimacy, for its expertise was only to a very limited extent academic.

Finally, the period from 1986 to 2009 can be described as the academization of agrarian aid. Toward the mid-1980s, SLU began in earnest to attempt to refocus its engagement in foreign development on the core tasks it had as a university. This meant providing support to universities abroad and providing academic expertise based on a platform of higher education and research; it implied the systematic academic study of development as a complement to participation in development aid. It was an attempt to solve issues of legitimacy primarily with respect to the aid authorities, which in this period gradually began to question the form of support SLU was providing. SLU's and IRDC's management thus strived to create a new form for the aid engagement. My interpretation is that this initially did not amount to an attempt to replace the more practical activities but rather to complement them in a way that would make them more congruent with SLU as a whole.

The most apparent example is the struggle to secure permanent resources for rural-development-related teaching and research, which eventually led to the creation of the Department of Rural Development Studies in 1996. Another expression of the academization of aid is the Faculty of Forest Sciences' education project in Ethiopia, explicitly founded on the idea of bringing SLU's aid engagement closer to academic activities. This was also embedded in an overarching strategy of making SLU's development-related-activities part of the internationalization of the university more generally, something which became steadily more important over the course of the period. In part, the increasing push for academization was a response to

SIDA's changed needs of expertise, both in terms of content and forms of access. As SIDA's overarching goals for its rurally-oriented development aid shifted away from food production and agricultural development problems, SLU's development expertise found it hard to demonstrate its continued relevance. These problems were exacerbated by the increasing influence of NPM methods that changed how government agencies could relate to each other. But the academization was also related to internal changes at SLU. A turning point seems to have come with the 1993 government bill on research, which partly redefined SLU's role with regards to the agricultural sector and thus opened up for new fields of research.

As I argued at the end of chapter 5, the changes both at SLU and SIDA with regards to what constituted relevant problems for the respective organizations reflect a broader reconceptualization of agrarian issues, in Sweden but also in the West more generally. While the Agricultural College and SLU had engaged with development aid partly in anticipation of such change, they had—until the early 1990s—only exported the older, productivist kind of agrarian expertise. After that, new perspectives became part of the development discussion at SLU and in the projects it was involved in, and the academization provided a framework for these perspectives. At the same time, as I suggested above, the older development ideology remained strong in practice and the tension between the older and newer approaches to agrarian expertise remains, at least in part, unresolved even at today's SLU.

The periodization above reflects the most significant trends of continuity and change in my study. But there were also continuities across the periods. Most importantly, there was *strong support from the central management of SLU* for development aid through most of the period studied here. From SIDA's perspective, Lennart Hjelm's personal engagement became a guarantee for the long-term viability of the cooperation. Hjelm's successor, Mårten Carlsson, continued this engagement. Though he had no personal experience of foreign development, he was committed to its existence at SLU and helped safeguard the university's relationship with SIDA after Hjelm retired. Görel Oscarsson, SLU's university director under both Hjelm and Carlsson, also played an important role in this regard.

Though attempts at academizing SLU's development activities started in the mid-1980s, it would take another ten years before a university department of rural development could be created. The institutional collaboration between SLU and SIDA thus retained much of its nonacademic and informal character throughout the 1980s and continued to enable some activities while constraining others. The cooperation made much of SIDA's work with agrarian development possible through its provision of recruiting, documentation and

consulting services. But the cooperation also served SLU's purposes. It enabled the education of SLU's students in matters relating to developing-country agriculture. More importantly, for those keen to see SLU involved with development, the link to SIDA guaranteed a continuing role for the university in foreign aid. Its history of a long-term engagement in development assistance became an important argument for securing new funding as the collaboration with SIDA broke down.

The way the rural development pair was set up also came to constrain activities on both sides. The existence of IRDC shaped SIDA's access to SLU's expertise. As noted, SIDA had easy access to the consultants at IRDC and the experience-based development expertise they represented. However, this also made it more difficult for SIDA to deal directly with the individual departments and the scientific expertise gathered there. And since IRDC remained dependent on SIDA for almost all of its activities, it came to be closely attuned to SIDA's goals and functions, rather than to other interests within the university or the wider academic community. This dependence on SIDA became a major constraint also on SLU's development-related activities and goals more broadly. The clearest example is in fact the push for academization itself. Though the aim of establishing permanent academic research on developing-country agriculture was first formulated as early as in the mid-1960s, it proved impossible to realize it within the framework of the rural development pair.

From the Enskede Slaughterhouse to SLU Global

Over the last years, historians and development scholars have begun to make joint arguments to the effect that practitioners and policymakers involved in development assistance have much to gain from historical studies which increase their understanding of the intellectual, practical, and institutional heritage of their work. A sophisticated understanding of past patterns of development, and through them of the present, can help future decision-making. Presently, this might be especially important in relation to agricultural aid, which after a time of decline is now returning to the agendas of major development agencies. Against this, the final section of this

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⁹⁰⁷ C. A. Bayly et al., eds., *History, Historians and Development Policy: A Necessary Dialogue* (Manchester: Manchester University Press, 2011); Ha-Joon Chang, "Rethinking Public Policy in Agriculture: Lessons from History, Distant and Recent," *The Journal of Peasant Studies* 36, no. 3 (2009); Michael Woolcock, Simon Szreter, and Vijayendra Rao, "How and Why Does History Matter for Development Policy?," *The Journal of Development Studies* 47, no. 1 (2011).

⁹⁰⁸ For a more general argument on this point, see also John Tosh, *Why History Matters* (Basingstoke: Palgrave Macmillan, 2008), chapter 3.

dissertation will discuss some of the present ways in which SLU exports its agrarian expertise in light of the historical study that has preceded it.

The year after SLU's support to Wondo Genet ended, the university adopted a new strategy called "Science for Global Development." In outlining the role of SLU in future Swedish development aid, this strategy makes explicit a number of assumptions about the agrarian sciences, economic development, and the possible contributions of SLU. The strategy's premise is that agriculture and forestry are science-based activities, necessary for economic development. In light of the consideration that SLU has a unique scientific competence in these fields in Sweden, the strategy states that SLU has a "clear global mandate" to participate in development aid. 909 More concretely, the strategy proposes three ways in which SLU can help alleviate global poverty: through research, capacitybuilding, and the provision of expertise. Research refers to academic research performed together with partners in developing countries in areas of relevance to global development problems. Capacity-building primarily refers to the training of academics from developing countries and explicitly draws on SLU's history in this regard. It is seen as a purely academic matter and mainly as a question of supporting education in developing countries, complemented by internationally oriented master's programs at SLU. Provision of expertise, finally, is a role similar to the one earlier played by the consultants at IRDC. The strategy suggests that "many of SLU's staff have built up expertise in areas of considerable relevance to the global development agenda," and that this can support the decision-making of public authorities or other policy organs. 910 However, the strategy specifies the nature of the expertise as scientific, which contrasts with the primarily experience-based expertise that dominated at IRDC.

These proposed roles thus indicate that the academization of aid at SLU has continued in the twenty-first century and that it now has fully replaced the older approaches. Theoretical and academic perspectives, rather than practice and experience, are today central to all forms in which SLU wants to export its expertise. But here one needs to be careful to distinguish between different senses in which the concept of academization can be used. Thus far, I have primarily used it in the sense of a shift from participating in development aid to teaching and conducting research on development (as in IRDC becoming the Department of Rural Development Studies), and in the sense of making SLU's participation in development aid more academically focused (as in Ethiopia). It

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^{909 &}quot;Vetenskap för global utveckling – SLU:s bidrag till fattigdomsbekämpningen (Dnr SLU ua 10-186/10)," https://www.slu.se/Documents/externwebben/overgripande-slu-dokument/samverkan-dok/agric-sci-global-dev/Pektorsbeslut_PGU_100929.pdf, last modified 27 September 2010.

^{910 &}quot;Vetenskap för global utveckling," 3.

can, however, also be understood in a third sense, and this is increasingly what has happened at SLU more recently: as an ideologically motivated imperative to get in line with what is understood as international academic norms. Academization in the first two senses is not intrinsically opposed to practice and experience: studying development academically does not preclude practical participation (the Ethiopian forestry project went on long after IRDC was closed down), and there can certainly be room for an orientation to practice within, for example, academic capacity-building through support to universities abroad (as the Ethiopian case demonstrates). But the way the strategy is worded suggests the more ideological understanding: it clearly states that both capacity-building and the provision of expertise shall be based on "research of high scientific quality." This is the language of academic drift of a kind that affords little importance to practice-based expertise, at least unless it happens to make impressions in high-impact scientific journals.

The academization is also visible in the organizational structure created to implement the strategy. To help turn strategic goals into practical activities, the SLU Global program and office were established in 2011. The office comes directly under the vice-chancellor and thus occupies an organizational niche very similar to the one once filled by IRDC. SLU Global is, however, a rather different kind of organization. Its tasks include internal and external communication about SLU and global development, but it also coordinates four thematic research programs about topics judged important for the present situation in the developing world. The orientation is thus primarily scientific and academic.

SLU Global carries the engagement at the central university level. Another part of SLU's present engagement is Sida's Helpdesk for Environment and Climate Change, perhaps the clearest example of an organization geared to the strategy's goal of providing expertise. The helpdesk is situated at the Department of Urban and Rural Development and is run as a joint operation with a division of the University of Gothenburg. The former is the successor to the Department of Rural Development Studies, which itself was formed out of IRDC when the latter was disbanded in 1996. According to its self-presentation, the helpdesk "gives support to Sida, on demand, by providing advice and strategic guidance on environmental integration at policy, program and project level." This description of its task evokes an organization that, although smaller and much more limited in scope, is close to the IRDC's consulting unit. Somewhat ironically, IRDC's old organizational niche has thus

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^{911 &}quot;Vetenskap för global utveckling," 4.

⁹¹² "Sida's Helpdesk for Environment and Climate Change," http://www.slu.se/sidahelpdesk, last modified 15 January 2016.

been filled by an academically oriented secretariat, whereas consulting tasks rather similar to IRDC's are now housed within the academic department painstakingly created to replace it. But again, the kinds of expertise provided—and demanded—have changed, as the name betrays: neither agricultural production nor rural development more generally is presently in focus. Even so, the consulting role and a more strictly research and teaching role presently coexist within SLU. Does this fact indicate that the university will be able to continue to play both roles in the future? On the one hand, the academization of aid is not likely to be rolled back, and so SLU's main role vis-à-vis the developing world will most probably remain to collaborate academically with other universities. On the other hand, I see no reason why there would not be room for various helpdesk arrangements as well, in particular in areas where SLU has competencies that for one reason or another are difficult for Sida to acquire on the open market.

The extent to which SLU will be able to play a role, either as academic partner or consultant, will largely depend on the stances taken by its leadership. Historically, the central management has often strongly supported developing-country activities and this support has been central to the relative prominence of such activities at the university. Continued support seems a precondition for any significant involvement by SLU in future development cooperation. Such support will also be necessary in order to integrate global perspectives in all of the university's activities, as the new strategy rightly points out as important. The relative isolation of IRDC and others working with development issues at SLU in the past were a notable constraint on earlier activities.

Another precondition for a future SLU engagement is that the government continues to regard it as important that SLU plays a role. SLU's future place in the governmental organization will influence this. Its position under the Ministry of Agriculture proved an obstacle to its development aid activities during the first four decades. The effects of its present position under the Ministry of Enterprise and Innovation remain uncertain. Beyond the organizational position, an even more determining factor is the development of Swedish aid policy. SLU only has a role to play as long as the goals and contents of Swedish aid develop in a way congruent with the expertise available there.

This latter point, however, raises crucial questions of what sort of agrarian expertise SLU can, ought to, and will be expected to provide today and in the future. If the academic norms grow ever more dominant at SLU, as they seem to be doing today, I would argue that this represents a loss to the extent that it precludes attention to local and practical matters. Development aid may by its very nature be a fundamentally ambivalent endeavor, but if science-driven

agrarian development assistance is to be provided, then I believe local and practical perspectives are of central importance. For example, a project like CADU can be justifiably criticized in a number of ways, as indeed it was in its own time and occasionally still is today. But however much its top-down approach and technocentrism made it problematic, its fundamental premises of poverty reduction and support to small farmers through self-help by means of service science interventions still made it a more positive project than many, perhaps most, other attempts at the time. This crucially hinged on the importance afforded to the local by the designers at the Agricultural College. And local and practical perspectives will be as important, if not more, if new development strategies move away from highly fossil-fuel-dependent strategies to more ecological and energy-sustainable approaches.

This should not be taken to mean that academization is a wholly negative or problematic process. SLU has a lot to contribute to academic research of relevance for agrarian and rural development, and the academic perspective is necessary in order to make these fields better integrated with the rest of the university and to open them up as academic career paths—both issues with which IRDC struggled and ultimately failed to solve. And as I noted, it is not an inevitable conclusion that academization precludes a focus on the practical and the local. However, the more academization becomes a matter of ideology, the more it comes to be opposed to the ideal of service science, and so there is cause for concern about the possibilities of uniting a very strong academic focus with a practical, local, and utilitarian orientation. The example of Wondo Genet demonstrates some of the problems that could conceivably arise. Furthermore, the present academic focus of SLU's development cooperation activities reflects an accelerating academization, in the ideological sense, of the university as a whole at present. 913 This process ultimately makes it an open question as to what extent local and practical perspectives will remain strong enough at SLU to exert any influence over future development-related activities.

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⁹¹³ Roland von Bothmer et al., "Vägval vid SLU: Hur förändras ett universitet?," (Uppsala: Swedish University of Agricultural Sciences, 2013), 205–06.

Sammanfattning

I föreliggande avhandling analyserar jag den roll teknovetenskaplig agrarexpertis spelade i svenskt utvecklingsbistånd från 1950 till 2009. Min empiriska utgångspunkt är de tre fackhögskolor som historiskt sorterade under Jordbruksdepartementet (och inte Utbildningsdepartmentet): Lantbrukshögskolan, Skogshögskolan och Veterinärhögskolan, från 1977 sammanslagna till Sveriges lantbruksuniversitet (SLU). Dessa högskolor utgjorde viktiga centra för svensk agrarexpertis under efterkrigstiden, och min studie behandlar frågor om varför och hur deras forskare, lärare och administratörer ställde sina kunskaper i utvecklingsbiståndets tjänst.

Avhandlingen analyserar tre olika problemkomplex. Det första rör hur olika slags svensk agrarvetenskaplig expertis kom att betraktas som relevant i en biståndskontext. Hur kom det sig att de tre högskolorna fick roller inom biståndet? Vilka aktörer var drivande? På vad berodde deras intresse? Jag identifierar ett antal ledande aktörer, och förklarar hur de lyckades formulera utvecklingsproblem som var kompatibla med den expertis som fanns vid högskolornas och samtidigt kunde accepteras av finansiärer och biståndsutförare. Jag visar också hur dessa problemformuleringar, i synnerhet på Lantbrukshögskolan, samtidigt användes för att uppnå andra organisatoriska mål.

Det andra problemkomplexet handlar om hur de svenska experterna förhöll sig till utvecklingsproblematiken och till sin egen kunskaps tillämpning i biståndssammanhang. Någon systematisk kunskap om jord- och skogsbruk i den typ av miljöer som var aktuella fanns inte i Sverige då min studie tar sin början. Problematiserades detta av de ledande aktörerna, och i så fall hur? Vilka utvecklingsstrategier förespråkade de? Varför valdes dessa? Hur förändrades strategivalen över tid? Vilka konsekvenser fick strategierna när de omsattes i praktik? Dessa frågor besvaras genom att studera tre olika biståndsprojekt där högskolorna eller representanter för högskolorna har haft framträdande roller. Projekten var åtskilda i tid och rum, men strategierna de baserades på har ändå tillräckligt mycket gemensamt för att göra det möjligt att argumentera för att de alla var uttryck för en gemensam, underliggande agrar moderniseringsideologi.

Det tredje problemkomplexet handlar om samarbete och samarbetsformer mellan den agrara expertisen vid högskolorna och Sveriges biståndsmyndigheter. Alla tre högskolorna, och sedermera SLU, arbetade med biståndsmyndigheterna. Det viktigaste samarbetet var det institutionaliserade konsultförhållande som rådde mellan SLU och biståndsmyndigheten SIDA från 1978 till 1996. Hur och varför skapades detta institutionella, långsiktiga samarbete? Vad utmärkte det? Vilka slags aktiviteter möjliggjorde det, och vilka hindrade det? Hur utvecklades samarbetet över tid? Jag tydliggör att samarbetet tidvis var obalanserat och de båda parternas mål åtskilda, ibland mycket påtagligt. Samtidigt utmärktes det av starkt ömsesidigt förtroende, och kom under en period att utgöra en slags grund för det då relativt omfattande svenska lantbruksbiståndets teori och praktik.

Någon tidigare historisk forskning som direkt behandlar Sveriges jordbruksbistånd och den agrara expertisens roll i detta bistånd finns inte. Avhandlingen orienterar sig emellertid mot två för ämnet relevanta och något bredare forskningsfält: de agrara vetenskapernas institutionella historia, och Sveriges biståndshistoria. Jag tar fasta på den framträdande spänningen mellan teori och praktik inom agrarvetenskapernas institutionshistoria, och redogör för tidigare forskning som visar hur även lantbruksvetenskaperna i Sverige har karaktäriserats av dessa spänningar. Av central betydelse är Lantbrukshögskolans övergång till en bredare och mer vetenskaplig inriktning under 1960talet. Detta skifte är samtida med biståndsverksamhetens inledning på universitetet, men tidigare forskning har inte diskuterat eventuella samband mellan de två, och denna lucka fylls av föreliggande avhandling. När det gäller tidigare forskning om svenskt utvecklingsbistånd tar jag fasta på de kopplingar som har påvisats mellan biståndet och Sveriges inhemska expertis. Eftersom Sverige saknade en kolonial kunskapsbas fick biståndet i hög grad byggas dels på inhemsk kunskap, och dels på kontakter med andra länder. Saken har dock inte belysts på det agrara området tidigare, trots att landsbygdsutvecklingsbistånd särskilt under 1980-talet utgjorde en betydande del av det svenska biståndet.

Då studien täcker en relativt lång tidsperiod gör jag inga anspråk på att inkludera alla händelseförlopp av relevans för ämnet. Istället har jag valt ut de episoder som enligt min bedömning har haft störst inflytande på den historiska utvecklingen från 1950 till 2009. Mitt källmaterial utgörs huvudsakligen av skriftligt material från SLU:s (inklusive de tre högskolorna) respektive de olika svenska biståndsmyndigheternas arkiv. Utländskt källmaterial används enbart i den utsträckning det har funnits i de svenska arkiven. Detta utgör ett möjligt problem som jag också diskuterar närmare i avhandlingen. Min bedömning är dock att det mest relevanta materialet för att besvara mina frågeställningar finns i svenska arkiv. Utöver det skriftliga materialet har jag också genomfört en serie intervjuer med individer som på olika sätt har varit involverade i utvecklingsbistånd på eller i samarbete med SLU.

I det följande sammanfattas innehållet i avhandlingens respektive empiriska kapitel kort. Därefter presenterar jag något utförligare mitt sista kapitel, med studiens slutsatser inklusive en diskussion om svensk teknovetenskaplig agrarexpertis i biståndet idag och i framtiden.

Kapitel 2 – Praktisk träning för moderna praktiker: Nils Lagerlöf, Indien och tidigt svenskt utvecklingsbistånd på Veterinärhögskolan, 1950–1960

Kapitel 2 diskuterar den första biståndsaktiviteten av betydelse inom ramarna **Jordbruksdepartementets** tre högskolor. Veterinärhögskolans professor i obstetrik-gynekologi, Nils Lagerlöf, och den specialutbildning i husdjursreproduktion inriktad mot u-landsveterinärer som han drev från och med mitten av 1950-talet. Kapitlet placerar in dessa kurser i 1950-talets bistånd och dess allmänna betoning tekniköverföring som moderniseringsinstrument. Under ett uppdrag i Indien som FN-expert hade Lagerlöf reagerat på vad han såg som naiv optimism inför möjligheten att rationalisera den indiska nötkreatursaveln genom att införa artificiell insemination. Han betraktade detta som en teknik som var dåligt anpassad till rådande förhållanden i Indien, och menade att reformer av Indiens veterinärutbildning var en nödvändig förutsättning för att börja använda ny seminteknik. De kurser han kom att ge i Sverige var, åtminstone till en början, tänkta som en del av dessa reformer.

I kapitlet argumenterar jag för att Lagerlöfs biståndsprojekt kan förstås i ljuset av hans övertygelse att teknik- och kunskapsöverföringar måste anpassas till mottagarsammanhangen, och hans starka intresse av att exportera den svenska, praktiskt inriktade modell för undervisning i obstetrik-gynekologi som han företrädde på Veterinärhögskolan. Detta innebar att han förordade en utvecklingsstrategi som betonade anpassning till lokala förhållanden, men samtidigt byggde på en svensk modell som inte i sig var öppen för modifikation. Denna kombination av att vilja lokalanpassa sin kunskap för att underlätta dess tillämpning, men att samtidigt sluta sig inom sin egen expertis gränser, har Lagerlöfs biståndsaktiviteter i påtaglig grad gemensamt med de övriga projekt som behandlas i avhandlingen. Däremot skiljer det sig från dem genom att huvudsakligen vara ett individuellt projekt, där Lagerlöf framförallt drevs av personliga motiv och intressen.

Kapitel 3 – Det formativa momentet: Lantbrukshögskolan och formeringen av svenskt jordbruksbistånd, 1960–1965

Ämnet för kapitel 3 är formeringen av ett biståndsengagemang vid Lantbrukshögskolan i Ultuna utanför Uppsala under den första halvan av 1960-talet. Under denna period tillskansade sig högskolan ett stort inflytande på planeringen av svenskt bistånd på lantbruksområdet. I kapitlet analyserar jag framväxten av en koppling mellan Lantbrukshögskolan och de svenska biståndsmyndigheterna, liksom den uppfattning om lantbruksbistånd som högskolan företrädde i sina kontakter med de senare. Jag visar hur intresserade aktörer vid högskolan, viktigast rektor Lennart Hjelm, på ett aktivt sätt försökte koppla ihop arbetet vid högskolan med det växande svenska biståndet och med den internationella, vetenskapsbaserade jordbruksutveckling som senare har blivit känd som den gröna revolutionen. Detta kan förstås som en del av ett försök att säkra en bredare social och politisk legitimitet för högskolan, men drevs också av yrkesmässiga och vetenskapliga intressen.

Den strategi högskolan förordade, och också fick biståndsmyndigheterna att acceptera, byggde på vetenskapliga insatser i mindre jordbruk i syfte att öka avkastningen, och i förlängningen jordbrukarnas inkomster, utan att minska behovet av arbetskraft på landsbygden. Strategin prioriterade forskning med syfte att anpassa kunskap och innovationer till lokala miljöer utifrån antagandet att bristen på lokal anpassning och tydligt gynnsamma alternativ var den främsta orsaken till bondemotstånd mot nya jordbruksmetoder och insatsmedel. Strategin var däremot inte i någon högre grad sysselsatt med sociala förutsättningar och konsekvenser, områden som låg Lantbrukshögskolans expertisfält. Den utmärktes alltså, liksom Lagerlöfs strategi tio år tidigare, samtidigt av anpassningsvilja och slutenhet inom den egna expertisens gränser.

Kapitel 4 – Från Ultuna till Addis och Arussi: Lantbrukshögskolan och svenskt landsbygdsutvecklingsbistånd till Haile Selassies Etiopien, 1965–1974

Kapitel 4 fortsätter där kapitel 3 slutar, och analyserar följderna av Lantbrukshögskolans biståndsstrategi omsatt i praktik inom ramen för det så kallade CADU-projektet i Etiopien. Kapitlet undersöker också hur arbetet i Etiopien kom att påverka högskolan och bidra till att förstärka kopplingen mellan högskolan och SIDA. CADU är ett berömt (i vissas ögon ökänt) landsbygdsutvecklingsprojekt som har behandlats utförligt av tidigare samhällsvetenskaplig forskning. Min historiska studie av projektets ursprung på Lantbrukshögskolan innebär dock ett nytt fokus som på flera sätt nyanserar

tidigare arbeten, framförallt genom att jag tydliggör kopplingen till Ultuna och den expertis som fanns där. I kapitlet visar jag hur de lokala anpassningar som den svenska expertisen förespråkade nådde påfallande framgångar, även om anpassningen i många fall var svårare än man kanske hade räknat med. Jag visar också att bristen på sociala perspektiv medförde att produktionsökningarna fick negativa sociala konsekvenser för många av de fattiga jordbrukare som var projektets främsta målgrupp.

Kapitel 5 – Landsbygdsutvecklingsparets uppgång och fall: Det institutionella samarbetet mellan SIDA och SLU, 1966–1996

Ämnet för kapitel 5 är det institutionella samarbetet mellan SLU och SIDA som växte fram genom Lantbrukshögskolans engagemang i CADU-projektet, och som blev särskilt viktigt under 1980-talet då SLU:s u-landsavdelning fungerade som en så kallad institutionell konsult åt SIDA:s lantbruksbyrå. Jag beskriver samarbetet som ett *landsbygdsutvecklingspar*, ett begrepp som anspelar på teknikhistorikern Mats Fridlunds forskning om relationen mellan svenska tekniska storföretag och statliga myndigheter under 1900-talet. Begreppet används för att uppmärksamma vikten av nära personliga relationer för samarbetet, liksom dess relativt långa utsträckning i tid, bortom ramarna för enskilda samarbetsprojekt.

Kapitlet spårar alltså landsbygdsutvecklingsparets ursprung tillbaka till CADU, men fokuserar särskilt på perioden efter SLU:s bildande 1977. Jag två samarbetet: huvudsakligen aspekter av konsultverksamhet som ordnades vid SLU för att tillgodose SIDA:s lantbruksbyrås behov av extern expertis, och dels SLU:s egna strävanden att upprätta akademisk forskning om landsbygdsutveckling i anslutning till samarbetet med SIDA. Genom dessa två exempel kan de spänningar som karaktäriserade samarbetet synliggöras och analyseras. Huvudsakligen handlar det om spänningar kring gränserna för SLU:s engagemang och kring frågan om vilken slags expertis som var relevant för SIDA, men problem kring samarbetets organisationsformer berörs också. Kapitlet avslutas sedan med en analys av u-landsavdelningens avveckling och omvandling till en institution för landsbygdsutveckling 1996, något som också innebar slutet för landsbygdsutvecklingsparet.

Kapitel 6 – Silvi-kulturella möten: SLU och svenskt skogsutbildningsbistånd till Etiopien, 1986–2009

Kapitel 6 undersöker SLU:s stöd till högre skogsutbildning i Etiopien under 80-, 90-, och 2000-talen. SLU:s skogsfakultet engagerades i SIDA:s stöd till den etiopiska skogssektorn under mitten av 1980-talet, och en mer genomgripande institutionell samverkan med etiopiska utbildnings- och forskningsinstitutioner inleddes efter Mengistu-regimens fall 1991. Det pågick sedan fram till 2009, då SLU avslutade sitt engagemang i det som vid det laget var (och fortfarande är) en skoglig och naturresursorienterad högskola med utbildningar både på kandidat- och masternivå.

I kapitlet diskuteras huvudsakligen hur det jag kallar silvi-kulturella spänningar uppstod när SLU:s skogsexpertis började tillämpas i Etiopien. Begreppet syftar till att fånga upp hur dess spänningar inte enbart handlade om skogsundervisningen i sig utan också berörde bredare socio-kulturella skillnader. Den huvudsakliga spänningen rörde SLU:s försök att tillämpa en svensk och i många avseenden praktiskt orienterad modell för undervisningen i ett land där både sociala och skogliga förhållanden skilde sig markant från Sverige. På ett mer generellt plan handlade det också om vad akademisk skoglig utbildning innebär och vilken inriktning den bör ha under de förhållanden som rådde i Etiopien.

Kapitel 7 – Slutsatser

avslutande kapitel presenteras studiens avhandlingens slutsatser, strukturerade efter de tre problemkomplex som har undersökts. När det gäller frågan om hur olika slags svensk agrarvetenskaplig expertis kom att betraktas som relevant i en biståndskontext är den huvudsakliga slutsatsen att det byggde på ett aktivt arbete, framförallt från Lantbrukshögskolans ledning och med rektor Lennart Hjelm i spetsen, som syftade till att koppla ihop högskolan med biståndsmyndigheterna. Hjelm började efter sitt tillträde som rektor identifiera ett behov av nya verksamheter som kunde ge en ny slags politisk och social legitimitet. Högskolans verksamhet hade fram till dess huvudsakligen legitimerats genom sina nära kopplingar till de inhemska sektorsintressena. Denna legitimitet problematiserades av den framväxande miljörörelsen, som utmanade det moderna jordbruket som högskolan representerade i detta sammanhang. Ett annat, och allvarligare, problem var att jordbruket i allt mindre utsträckning uppfattades som en central näringsgren i det industrialiserade Sverige. För att behålla Lantbrukshögskolans relevans krävdes därför nya verksamhetsformer, bättre anpassade till de samhälleliga omständigheterna. Denna analys sammanföll i tid med

utvecklingsbiståndets alltmer framträdande roll i politik och civilsamhälle. Eftersom bistånd var ett område där agrar expertis var relevant blev det ett område som högskolan intresserade sig för. I mer generell mening kan man formulera slutsatsen som att högskolan under början av 1960-talet identifierade ett behov att komma bortom den traditionella position där legitimitet kunde hämtas antingen från naturvetenskapen eller från lantbruksnäringen. Ett engagemang i utvecklingsbiståndet var ett av flera sätt på vilket högskolan sökte sig bortom denna klassiska dikotomi. Slutsatsen ska emellertid inte förstås som att högskolan engagerade sig i biståndet enbart av egenintresse. Av allt att döma var dess företrädare övertygade om att expertisen de representerade skulle vara till stor nytta för utvecklingsländerna, samtidigt som ett engagemang där skulle kunna vara till nytta för högskolan.

Frågan hur den svenska expertisen förhöll sig till utvecklingsproblematiken och till sin egen kunskap i denna kontext diskuteras utifrån de tre biståndsprojekt som har studerats i avhandlingen. De tre projekten har tillräckligt mycket gemensamt för att möjliggöra slutsatsen att de alla byggde på en underliggande, agrar utvecklingsideologi. Denna byggde å ena sidan på en betoning av lokal kunskapsproduktion, lokala anpassningar och uppbyggandet av förmågor i mottagarlandet; och å andra sidan på en nedtoning av den agrara utvecklingens sociala aspekter och en viss slutenhet vad beträffar modifiering av de egna fundamentala utgångspunkterna. En viktig anledning till det förra var att agrarvetenskaperna i Sverige var åtminstone delvis platsbundna vetenskaper under större delen av 1900-talet. Det fanns ett fokus på det lokala särskilt inom det svenska jordbruks- och skogsvetenskapliga försökssystemet, som sedan fördes över till Sveriges agrara bistånd genom de tre högskolorna och sedermera SLU. Det fanns också en betoning på praktiska moment i utbildningarna vid alla tre högskolorna, och denna betoning på praktik som en oundgänglig del också av en akademisk yrkesutbildning fick även den genomslag i biståndet. Nedtoningen av det sociala reflekterar en annan dimension av det svenska agrara moderniseringstänkandet, nämligen en relativ avsaknad av intresse för jordbruksutvecklingens sociala dimensioner. Den välkända bilden av tekniker och sociala ingenjörer som agerar utan tillräckliga hänsyn har viss relevans här. Samtidigt får inte slutsatsen drivas för långt. Studien av CADU visar på en viss öppenhet för antropologiska studier och förmåga till självreflektion. Emellertid kom detta, i linje med moderniseringsideologin, till slut ändå att underordnas inom ramen för en strategi som framhöll vikten av inkomstdrivande produktionsökningar.

Svaret på frågan om hur samarbetet mellan biståndsmyndigheterna och den agrara expertisen utvecklades över tid kan sammanfattas med hjälp av följande periodisering:

- ➤ Individuella projekt (1953–1961)
- ➤ Den formativa perioden (1962–1968)
- ➤ Landsbygdsutvecklingsparets framväxt (1969–1985)
- Akademisering av det agrara biståndet (1986–2009)

fasta på de huvudsakliga kontinuiteterna Periodiseringen tar diskontinuiteterna över tid. Den inledande perioden, individuellt bistånd, karaktäriserades av individdrivna projekt som inte i någon större utsträckning var kopplade till respektive högskola som institution. Den formativa perioden under 1960-talet utgör också en formativ period för svenskt bistånd i stort, och i detta fall tar den specifikt fasta på hur framförallt Lantbrukshögskolans manövrerande gentemot biståndsmyndigheterna lade grunden för den roll SLU skulle komma att spela i svenskt bistånd under ungefär tre decennier. Namnet på nästa period, institutionellt bistånd, syftar både på SLU:s roll som institutionell konsult åt SIDA och på framväxten av institutionella strukturer för att hantera denna roll. Perioden utmärks av ett nära samarbete mellan SIDA och SLU, dock främst på SIDA:s villkor, och av en konsultverksamhet med få akademiska förtecken. Den sista perioden kännetecknas framförallt av en alltmer intensiv strävan från SLU:s sida att akademisera kontakterna med utvecklingsländerna och därmed inlemma dessa kontakter mer i universitets vanliga arbete. Det gäller både konsultverksamheten i Sverige, som så småningom avvecklades och ersattes av en akademisk institution, och arbetet i fält, vilket i avhandlingen representeras av skogsfakultetens engagemang i högre skoglig utbildning i Etiopien.

Efter den diskussion av resultaten som sammanfattas ovan avslutas avhandlingen med en del som, utifrån den historiska studien, reflekterar över svensk agrarvetenskaplig expertis i utvecklingssamarbetet idag och framåt i tiden. Jag framhåller ett starkt engagemang från SLU:s ledning, samt en svensk utvecklingspolitik som tar fasta på landsbygds- och livsmedelfrågor, som avgörande faktorer för om denna expertis ska ha en roll att spela. Vidare diskuteras värdet av den lokala och praktiska inriktning som SLU och högskolorna historiskt har företrätt i utvecklingsarbetet, och den möjliga risken att den redan långt drivna akademiseringen inom dagens SLU leder till en nedtoning av denna inriktning. Det finns anledning att betrakta en sådan som utveckling som problematisk, eftersom det trots åtskilliga brister ändå finns fog att hävda att det är just den lokala och praktiska inriktningen som historiskt har varit den agrara expertisens viktigaste bidrag till svenskt utvecklingsbistånd.

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Birgegård, Lars-Erik	28 January 2014			
Bäckström, Per-Ove	25 February 2015			
Carlsson, Mårten	28 January 2013			
Einarsson, Stig	7 March 2013			
Fones-Sundell, Melinda	26 November 2014			
Forsse, Anders	14 May 2013			
Gerremo, Inge	12 February 2013			
Holmberg, Johan	29 October 2013			
Håkansson, Sigurd	29 January 2013			
Isaksson, Nils-Ivar	27 March 2014			
Leander, Lars	7 March 2014			
Malmer, Anders	21 March 2013			
Markensten, Klas	19 September 2014			
Nekby, Bengt	15 April 2013			
Norén, Sten	13 June 2013			
Oscarsson, Görel	21 September 2015			
Rydén, Per (telephone)	25 February 2013			
Sandewall, Mats	19 March 2013			
Sjunnesson, Sven	29 January 2015	29 January 2015		
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Appendix A: List of key actors

The information below, and corresponding unreferenced biographical information in the body of the text, comes from standard biographical resources like *Svenskt biografiskt lexikon* and *Sveriges statskalender*, or from resources specially focused on agrarian professionals: *Svensk biografisk veterinärmatrikel, LHS Matrikel, Sveriges jägmästare och forstmästare*, among others. I have also drawn on obituaries published in newspapers and professional journals. For the foreign actors, I have pieced together information from archival material, books, journals, and webpages. The resulting accounts are often inprecise and I have been unable to find years of birth and death for most Ethiopian actors.

Name	Short biography
Aklu Girgre	Ethiopian civil servant; vice-minister of agriculture and head of the NRCD-MD 1984–1988.
Augustinsson, Lars (b. 1924)	Swedish agronomist; at SIDA 1966–1989, head of the agricultural division 1986–1987; 1988–1989.
Badege Bishaw (b. 1953)	Ethiopian forester and plant scientist; dean of the forestry faculty at Alemaya University of Agriculture 1987–1989.
Bane, Allan (1914–1997)	Swedish veterinarian; professor of obstetrics-gynecology at the Veterinary College/SLU 1962–1978.
Bendixen, Hans Christian (1897–1976)	Danish veterinarian; professor of veterinary pathology at the Danish Veterinary and Agricultural University; veterinary officer at the Animal Production Branch of FAO 1951–1952.
Bendz, Mårten (b. 1937)	Swedish forester; vice-chancellor of the College of Forestry 1972–1976; later active as independent consultant.

Bengtsson, Bo (b. 1939)	Swedish agronomist; did SIDA-funded studies of tropical agriculture at the University of the West Indies (together with Lars Leander and Hans Johansson); then employed by CADU 1967–1968; head of the Developing-Country Section (Agricultural College/JHS) 1968–1976; later at SAREC, research director (head of the agency) 1983–1991.
Bergenstråhle, Carl (1909–1977)	Swedish diplomat; Ambassador to Ethiopia 1967–1972.
Birgegård, Lars-Erik (b. 1941)	Swedish economist; consultant at SLU's International Rural Development Center 1978–1981; head of IRDC's analysis unit 1986–1994.
Björnberg, Arne (1908–1983)	Swedish civil servant; secretary-general of NIB 1962–1964.
Broadley, Herbert (1892–1983)	British civil servant, deputy director-general of FAO 1948–1958.
Brännäng, Eskil (b. 1924)	Swedish agronomist; professor (statsagronom) of animal breeding at the Agricultural College 1967–1980; member of the Agricultural College's developing country advisory committee.
Bäckström, Per-Ove (b. 1937)	Swedish forester; dean of SLU's Faculty of Forest Sciences 1983–1995.
Carlsson, Mårten (b. 1936)	Swedish agronomist; vice-chancellor of the Swedish University of Agricultural Sciences 1982–1994.
Croon, Ingemar (b. 1943)	Swedish agronomist; worked at the Developing-Country Section (Agricultural College) 1972–1974; IRDC 1977–1985.
Dagnatchew Yirgou	Ethiopian agronomist; CADU crop production expert. Later appointed general manager of the Institute of Agricultural Research in Addis Ababa; member of the team responsible for the final appraisal of CADU and EPID in 1974.
Dalling, Thomas (1892–1982)	British veterinarian; veterinary officer at the Animal Production Branch of FAO in the 1950s.
Danell, Börje (b. 1939)	Swedish veterinarian; student and associate of Nils Lagerlöf; director of the rural development division at JHS 1976–1977.
Edgren, Gösta (b. 1935)	Swedish civil servant; state secretary with responsibility for development aid at the Ministry for Foreign Affairs 1982–1990.

Ericsson, Gösta (1924–2005)	Swedish agronomist; represented the National Board of Agriculture in NIB's agricultural group; later director of LANT 1973–1976; head of department at SIDA 1976–1980; 1986–1989.
Fones-Sundell, Melinda (b. 1954)	American agricultural economist; consultant at IRDC 1978–1986; junior researcher at IRDC's analysis unit 1986–1991.
Forsse, Anders (b. 1924)	Swedish civil servant; head of division at NIB 1963–1965; head of department at SIDA 1965–1974; director-general of SIDA 1979–1985.
Frykman, Bengt (b. 1938)	Swedish forester; liaison officer and project coordinator for SLU in Ethiopia, 1994–1997.
Garcia-Thärn, Amalia (b. 1950)	Swedish civil servant; the SIDA officer managing the collaboration with SLU in the early 1990s.
Gerremo, Inge (b. 1941)	Swedish civil servant; held various positions at SIDA's agricultural division and IRDC between 1968 and 1992.
Gårdlund, Torsten (1911–2003)	Swedish economist; interested in development problems; expert participant in the SIDA committee that reviewed the first report on a rural development project in Ethiopia 1966.
Hansson, Artur (1909–1970)	Swedish agronomist; professor of animal breeding at the Agricultural College 1962–1970.
Henock Kifle	Ethiopian economist; executive director of CADU 1974(?)–1975.
Heppling, Sixten (1918–2010)	Swedish civil servant; executive secretary of the Central Committee for Swedish Development Aid to Less Developed Areas 1952–1962.
Hjelm, Birger (b. 1961)	Swedish forester; worked at Wondo Genet College of Forestry 1999–2001.
Hjelm, Lennart (1915–2009)	Swedish agronomist; professor of agricultural economics at the Agricultural College 1955–1971; vice-chancellor of the Agricultural College 1963–1977; vice-chancellor of SLU 1977–1982; chairman of the Agricultural College's developing country advisory committee 1968–1977; chairman of the advisory board to IRDC 1978–1989.
Holmberg, Johan (b. 1942)	Swedish civil servant; economist at CADU 1971–1973; at EPID 1973–1976; head of SIDA's agricultural division 1980–1986.

Isaksson, Nils-Ivar (b. 1932)	Swedish agronomist; professor of agricultural economics at the Agricultural College 1972–1977; director of IRDC 1978–1996.
Kalderén, Lars (1928–2015)	Swedish civil servant; head of division at SIDA 1965–1970.
Khan, Akhter Hameed (1914–1999)	Pakistani social scientist; initiator of the Comilla project in East Pakistan
Knutsson, Karl Eric (1932–2002)	Swedish social anthropologist; attached to the CADU planning team in 1966; expert participant in the SIDA committee that reviewed the first report on a rural development project in Ethiopia 1966.
Lagerlöf, Nils (1895–1970)	Swedish veterinarian; professor of obstetrics and ruminant medicine at the Veterinary College 1934–1948; professor of obstetrics and gynecology 1948–1962; vice-chancellor 1957–1962; initiator of the college's international courses in animal reproduction; held various international expert assignments.
Larsson, Sven-Gunnar (1936–2010)	Swedish forester, dean of the School of Forest Engineers 1974–1996; held various positions and was a driving force in SLU's forestry education collaboration with Ethiopia 1986–2003.
Leander, Lars (b. 1937)	Swedish agronomist and civil servant; did SIDA-funded studies of tropical agriculture at the University of the West Indies (together with Bo Bengtsson and Hans Johansson). Later held various positions at CADU and SIDA 1966–1974; at SIDA 1976–1978; and again at SIDA 1983–1990 (1987–1990 at the DCO in Addis Ababa).
Lexander, Arne (1936–2006)	Swedish social anthropologist, attached to the CADU planning team 1966–1967.
Linder, Harald (1921–2009)	Swedish agronomist; held various positions in agricultural societies and the Agricultural College's special counselling division; head of CADU's crop production department 1966–1969; at EPID 1970–1973.
Lundgren, Bengt (1916–1983)	Swedish veterinarian; chief veterinarian of the Möre Breeding Association / the East Sweden Insemination Center 1945–1983; part of Nils Lagerlöf's mission to India in 1953–1954.
Markensten, Klas (b. 1942)	Swedish civil servant; head of SIDA's agricultural division/natural resources management division 1989–1994.

Michanek, Ernst (1919–2007)	Swedish civil servant; secretary-general of NIB 1964–1965; director-general of SIDA 1965–1979.
Nekby, Bengt (b. 1930)	Swedish agricultural economist; member of the NIB/SIDA agricultural group 1964–1965; head of division at SIDA 1965–1966; Swedish development aid attaché in Ethiopia 1966–1967; executive director of CADU 1967–1970.
Norén, Sten (b. 1937)	Swedish forester; head of the College of Forestry's Developing-Country Section 1970–1975; consultant at IRDC 1980–1994.
Nyström, Harald (1898–1974)	Swedish physician and missionary; head of the mission hospital in Asella 1952–1966.
Oscarsson, Görel (b. 1936)	Swedish civil servant; university director of SLU 1977–1998.
Paulos Abraham	Ethiopian economist; executive director of CADU 1970–1974(?).
Pellbäck, Sven (1933–2015)	Swedish agronomist and civil servant; head of SIDA's agricultural division 1976–1980; at IRDC 1982–1996; acting director 1982–1987.
Pålsson, Ernst (1910–1985)	Swedish veterinarian; chief veterinarian of the Ystad Breeding Association 1943–1967; teacher of artificial insemination at the Veterinary College 1967–1976; part of Nils Lagerlöf's mission to India in 1953-1954.
Rönquist, Per-Erik (1924–1965)	Swedish civil servant; head of division at NIB 1962–1965; acting secretary-general 1963–1964.
Rubarth, Sven (1905–1996)	Swedish veterinarian; professor of pathological anatomy (from 1970 pathology) at the Veterinary College 1947–1971; director of the international pathology courses 1962–1971.
Sandewall, Mats (b. 1953)	Swedish forester; taught at Wondo Genet College of Forestry 1993–1995; coordinator of SLU's support to Wondo Genet 2002–2009.
Schmiterlöw, Carl G. (1916–1984)	Swedish physician; vice-chancellor of the Veterinary College 1962–1977.
Settergren, Ingemar (1922–2008)	Swedish veterinarian; director of SIPAR 1970–1987.
Singh, G. B. (1906–1986)	Indian veterinarian; participant in the first international course in animal reproduction at the Veterinary College 1954–1955.
Sjunnesson, Sven (b. 1936)	Swedish forester; dean of academic affairs at the Wondo Genet Forestry Resources Institute / Wondo Genet College of Forestry 1986–1990.

Skoog, Daag (b. 1942)	Swedish agronomist; employed at IRDC from 1980; later worked in various positions within SLU's support to Ethiopian forestry.
Ståhlberg, Harald (1914–1994)	Swedish agronomist; FAO land reform expert in Ethiopia in 1965.
Stålfors, Harry (1867–1938)	Swedish veterinarian; professor of obstetrics and ruminant medicine at the Veterinary College 1917–1933.
Svärdström, Karl-Fredrik (1908–1989)	Swedish economist; professor of agricultural economics at the Agricultural College 1949–1973.
Taye Gulilat	Ethiopian civil servant; commissioner of higher education in the mid- and late 1980s.
Tesfa Bushen	Ethiopian civil servant; vice-minister of agriculture in the 1960s and 1970s.
Tham, Carl (b. 1939)	Swedish liberal, later social democratic, politician and civil servant; director-general of SIDA 1985–1994.
Toborn, Johan (b. 1945)	Swedish economist; worked at CADU and EPID in the 1970s; consultant at IRDC 1981–1996; managing director of Agriuniverse AB.
Torstensson, Gunnar (1895–1997)	Swedish agronomist; vice-chancellor of the Agricultural College 1958–1963.
Wik, Martin (b. 1932)	Swedish agronomist; at CADU 1968–1971.
Åberg, Börje (1911–1994)	Swedish scientist; professor of plant physiology at the Agricultural College 1956–1977; member of the NIB/SIDA agricultural group 1964–1966.
Åberg, Ewert (1909–1983)	Swedish agronomist; professor of crop production at the Agricultural College 1962–1976; member of the NIB/SIDA agricultural group 1964–1966.
Åkerberg, Erik (1906–1991)	Swedish agronomist; director of the Swedish Seed Association 1956–1971; member of the NIB/SIDA agricultural group 1964–1966.
Öman, Signar (1910–1981)	Swedish missionary; later director of NIB's farm in Algeria in the early 1960s.

Appendix B: List of organizations

English name	Swedish name	Acronym
Agricultural College	Lantbrukshögskolan	LHS
Agricultural Division (SIDA)	Lantbruksbyrån	LANT
Agricultural Economics Research Institute	Jordbrukets utredningsinstitut	JUI
Alemaya University of Agriculture (founded as the Imperial Ethiopian College of Agricultural and Mechanical Arts)		AUA
Central Committee for Swedish Development Aid to Less Developed Areas	Centralkommittén för svenskt tekniskt bistånd till mindre utvecklade områden	CK
Central Institute for Agricultural Experimentation	Centralanstalten för försöksväsendet på jordbruksområdet	
Centre for Agricultural Adjustment (Agricultural College)	Arbetsgruppen för lantbrukets anpassning	ALA
Center for Agricultural and Economic Adjustment (Iowa State College)		
Chilalo Agricultural Development Unit		CADU
Children's Nutrition Unit		CNU
College of Forestry	Skogshögskolan	SHS
Commission for Higher Education (Ethiopian Ministry of Education)		СНЕ
Consultative Group for International Agricultural Research		CGIAR
Cornell University		
Danish Veterinary and Agricultural University	Kgl. Veterinaer- og Landbohöjskole (på danska)	KVL

Department of Animal Breeding and Genetics (SLU)	Institutionen för husdjursförädling och sjukdomsgenetik	
Department of Crop Production (Agricultural College / SLU)	Institutionen för växtodling / Institutionen för växtodlingslära	
Department of Economics and Statistics / Department of Economics (Agricultural College / SLU)	Institutionen för lantbrukets företagsekonomi / Institutionen för ekonomi och statistik / Institutionen för ekonomi	
Department of Obstetrics and Gynecology (Veterinary College / SLU, founded as Obstetrics and Ruminant Medicine)	Institutionen för obstetrik och gynekologi (ursprungligen obstetrik och bujatrik)	
Department of Rural Development Studies (SLU)	Institutionen för landsbygdsutveckling	
Developing-Country Section (Agricultural College / College of Forestry)	U-landssektionen	
Ethiopian People's Revolutionary Democratic Front		EPRDF
Expanded Programme of Technical Assistance (United Nations)		ЕРТА
Extension and Project Implementation Department (Ethiopian Ministry of Agriculture)		EPID
Faculty of Forest Sciences (SLU)	Skogsvetenskapliga fakulteten	
Faculty of Veterinary Medicine (SLU)	Veterinärmedicinska fakulteten	
Federation of Agricultural Societies	Riksförbundet Landsbygdens folk	RLF
Food and Agriculture Organization of the United Nations		FAO
Ford Foundation		
Forestry Research Centre / Silviculture Research Centre (Ethiopia)		FRC / SRC
Gothenburg School of Economics	Handelshögskolan vid Göteborgs universitet	
Haile Selassie I University		
Hawassa University		

Intensive Agricultural Districts Program		IADP
International Development Association		IDA
International Rural Development Center (SLU)	U-landsavdelningen / IRDC	IRDC
Iowa State College		
Karolinska Institutet	Karolinska Institutet	KI
Kasetsart University		
Kibaha Education Center		
Minimum Package Program		MPP
Ministry for Foreign Affairs (Sweden)	Utrikesdepartementet	UD
Ministry of Agriculture (Sweden)	Jordbruksdepartementet	
Ministry of Education (Sweden)	Utbildningsdepartementet	
Ministry of Enterprise and Innovation (Sweden)	Näringsdepartementet	
Ministry of Finance (Sweden)	Finandepartementet	
Ministry of Natural Resources Development and Environmental Protection (Ethiopia)		MNDREP
Nagpur Veterinary College		
National Board of Agriculture (Sweden)	Lantbruksstyrelsen	
National Board of Universities and Colleges (Sweden)	Universitets- och högskoleämbetet	UHÄ
National Forestry Research Institute (Sweden)	Statens skogsförsöksanstalt / Statens skogsforskningsinstitut	
National Institute for Agricultural Experimentation (Sweden)	Statens jordbruksförsök	
National Research Institute for Farm Construction (Sweden)	Statens forskningsanstalt för lantmannabyggnader	
National Veterinary Institute (Sweden)	Statens veterinärmedicinska anstalt	SVA
Natural Resources Conservation Development, Main Department (Ethiopian Ministry of Agriculture)		NRCD-MD
Natural Resources Management Division (SIDA)	Naturbruksbyrån	NATUR

Oklahoma Agricultural and Mechanical College /		
Oklahoma State University		
Research Information Center / Special Counseling Division (Agricultural College)	Konsulentavdelningen / Specialrådgivningen	
Rockefeller Foundation		
Royal Swedish Academy of Agriculture	Kungl. Lantbruksakademien	KLA
Royal Swedish Academy of Agriculture and Forestry	Kungl. Skogs- och lantbruksakademien	KSLA
Rural Development Analysis Unit (IRDC)	Enheten för analys av landsbygdsutveckling	
School for Forest Management / School of Forest Engineers (SLU)	Skogsmästarskolan	SMS
School of Veterinary Medicine (Lusaka, Zambia)		
Stockholm School of Economics	Handelshögskolan	HHS
SwedForest		
Swedish Agency for International Assistance	Nämnden för internationellt bistånd	NIB
Swedish Agency for Research Cooperation with Developing Countries	Styrelsen för u-landsforskning	SAREC
Swedish Government Advisory Board on International Aid Issues	Beredningen för internationella biståndsfrågor (ofta känd som U- beredningen)	
Swedish Government Research Advisory Board	Forskningsberedningen	
Swedish Higher Education Authority	Universitetskanslern	
Swedish International Development Authority	Styrelsen för internationell utveckling	SIDA
Swedish International Development Cooperation Agency	Styrelsen för internationellt utvecklingssamarbete	Sida
Swedish International Programme on Animal Reproduction		SIPAR
Swedish National Board of Public Building	Byggnadsstyrelsen	
Swedish National Land Survey	Lantmäteriverket	
Swedish Seed Association	Sveriges utsädesförening	

Swedish State Power Administration	Statens Vattenfallsverk	
Swedish Telecommunications Administration	Televerket	
Swedish Trade Union Confederation	Landsorganisationen i Sverige	LO
Swedish Union of Agricultural Banks	Sveriges jordbrukskasseförbund	
Swedish University of Agricultural Sciences	Sveriges lantbruksuniversitet	SLU (historically SUAS)
Swedish University of Agriculture, Forestry and Veterinary Medicine	Jordbrukets högskolor och SVA	JHS
United Nations Development Program		UNDP
United States Agency of International Development		USAID
University of the West Indies		
Veterinary College	Veterinärhögskolan	VHS
Wondo Genet College of Forestry		WGCF
Wondo Genet Forestry Resources Institute		WGFRI
World Bank (International Bank for Reconstruction and Development)	IBRD	
World Health Organization		WHO

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