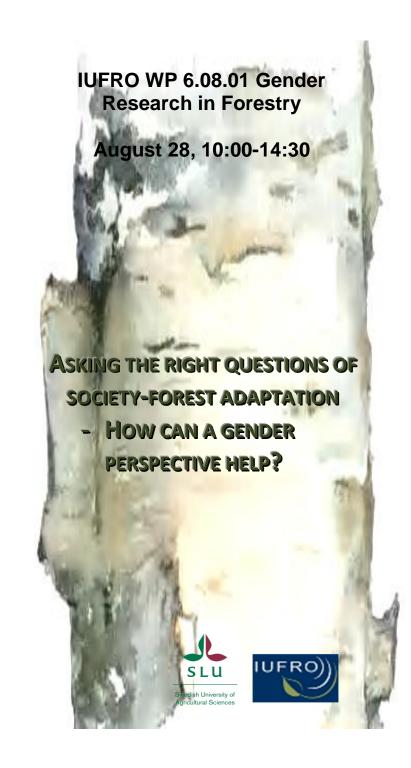
Session organizer:

Gun Lidestav, Dept of Forest Resource Management, SLU, Umeå, Sweden Janet Chaseling, Griffith University, Brisbane, Australia, Carol Colfer, CIFOR, Jakarta, Indonesia Maureen Reed, University of Saskatchewan, School of Environment and Sustainability, Saskatoon, Canada



Background

Climate change is influenced by a number of driving forces, due to human needs and activities, including people's attitudes to forest and forestry. Thus, the combined society-forest system is under continuous change and the mutual dependency is large and multifaceted. Further, the multiple use features of our forests imply that various and often conflicting interests and goals exist for their management. With the increasing demands for timber, renewable energy, biodiversity, recreational areas together with high hopes on the forests as a mean to reduce climate change effects, these conflicts can be expected to increase. Definitions, property rights, right of use and obligations will become re-negotiated and in this process, the priority of interpretation will affect the outcomes for different stakeholders as well as for the issue of adaptation at large. Pressures on society and forest may reduce the space for adaptation over time, while new adaptive possibilities may emerge. The adaptive capacity of the society-forest system is fundamentally guided by its present state including different interest and stakeholder groups and stakeholder groups. Understanding the present status, values and perspectives about adaptive capacity of different stakeholders as well as historical adaptation perspectives processes are crucial in order to develop adaptive capacity and resilience while considering future changes and uncertainties.

Content

The issue of adaptation of forest and forest management to changes in climate conditions is complex. By adding a gender perspective, the complexity will be even higher; yet, it may help illuminate important aspects of adaptation not otherwise considered. Research related to vulnerability to a range of natural disasters internationally suggests that female life expectancy is more severely affected by natural disasters than male life

expectancy. This gap is attributed primarily to lower socioeconomic status of women as well as to social norms and role behaviors that favor male survival. The impacts of climate change may therefore be more severe for girls and women than for boys and men. Thus, a focus on gender will sharpen the research questions formulated and the results and solutions presented. For example, a focus on gender and the use of feminist frameworks will help us understand how resources, work, time, and power, are distributed across different levels in society and how gender positioning of individuals and social groups affects their vulnerability and adaptive capacity related to climate change. The purpose of this Session is therefore to bring together researchers from forestry/forest management with gender researchers in order to identify and elaborate on some innovative, interesting and important questions as a basis for future multidisciplinary research.

Session organizer:

Gun Lidestav, Dept of Forest Resource Management, SLU, Umeå, Sweden

Maureen Reed, Univ. of Saskatchewan, School of Environment and Sustainability, Saskatoon, Canada

Janet Chaseling, Griffith Univ., Brisbane, Australia, Carol Colfer, CIFOR, Jakarta, Indonesia

Program

10.00 – 10.15 Welcome and Introduction to the session topics, WP coordinator Gun Lidestav

10.15 – 12.00 Oral presentations (6 x 15 minutes)

- Adaptive capacity in forest –based communities, PhD Tim
 B. Williamson, Canadian Forest Service, Canada
- Interrogating Adaptive Capacity of the Society-Forest System through the Looking Glass of Gender: Questions and Prospects Prof. Maureen G. Reed, School of Environment and Sustainability and Department of Geography, University of Saskatchewan, Canada
- Adaptation of forest management among small-scale private forest owners. Assoc prof. Kristina Blennow, Southern Swedish Forest Research Centre, SLU, Sweden
- An explorative Norwegian gender perspective on adaptation of forest management among Swedish small-scale private forest owners. PhD Gro Follo, Centre for Rural Research, Norway
- The role of rural women in biodiversity and ecosystem conservation in Cameroon. Magha Nicoline Chi , African Youth Alliance Group Cameroon. Cameroon
- Gender and rubber plantations in Laos local practises in Namtha district, MSc Anna-Klara Nilsson, Department of Social and Economic Geography, Uppsala University

12.00 - 13.00 Lunch

13.00 – 14.30 Poster presentations:

Individual announcement (9 x 1 minute)
Session mingle and refreshment (80 minutes)

- Adaptive communication How to deal with target groups diversity and diverse messages. Patrik Häggqvist, Luleå University of Technology, Sweden
- Gender and forestry database. Lillemor Lyrén, SLU, Forestry Library, SLU, Sweden.
- Legitimacy in multi-level governance The case of forest certification. Johanna Johansson, Dept of Political Science, Umeå University, Sweden
- The balancing act of forest management and reindeer husbandry in Sweden. Per Sandström, Dept. of Forest Resource Management, SLU, Sweden
- Climate Change and Politics of Forests Cases from Chile and Sweden. Cristián Alarcón Ferrari, Department of Urban and Rural Development, SLU, Sweden
- Landscape approaches to sustainability: examples from Europe and India. Robert Axelsson, School of Forest Engineering, SLU
- Livelihoods and the question of forest governance in Ethiopia. Efrem Garedew, Dept of Forest Resources Management, SLU, Sweden
- Forest governance in Sissili province, southern Burkina Faso.
 Pascalini Lingani, Dept of Forest genetics and Plant
 Physiology, SLU, Sweden
- Swedish Forest Commons A matter of Governance? Eva Holmgren, Dept of Forest Resources Management, SLU, Sweden

ADAPTIVE CAPACITY IN FOREST-BASED COMMUNITIES

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The adaptive capacity of a community at any point in time is a function of prior investments (time, skills, knowledge, money, etc.) in assets (social capital, etc.). Rates of investment are shaped by traditions, institutions, and values and by local social, cultural, and economic circumstances but fundamentally the amount invested will be based on some expected return (not necessarily financial) and expected risk. Historically, in developed economies, the portfolio of assets that contribute to local capacities is usually reasonably well matched to current demands. However, given expectations of rapid environmental changes combined with other social, economic, and technological changes, the portfolio of adaptive capacity assets in forest-based communities may not be well matched to future demands. There are two main reasons. First. climate change can have feedbacks on adaptive capacity by modifying the availability of some assets that contribute to it (e.g. natural capital). Second, changed circumstances will require a different portfolio of assets over time and different types of investments. If climate risks are correctly perceived and anticipated (i.e., assuming rational expectations), one would expect that adaptive capacity asset portfolios would continue to grow and change consistent with community requirements. However, given expected rates of change, the uncertainty in future climate, and the tendency for humans to underestimate climate risks, autonomous investment in adaptive capacity resources may be lower and/or later than needed resulting in undersupply. This paper considers the evolution in thinking about adaptive capacity between the IPCC Third and Fourth Assessment reports and applies some of the new

concepts to the specific case of adaptive capacity in forest-based communities using detailed results from three case study communities in Canada.

Key words: adaptive capacity, forest-based communities, emergent vulnerability.

Interrogating Adaptive Capacity of the Society-Forest System through the Looking Glass of Gender: Questions and Prospects

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Adaptive capacity focuses on the ability to absorb, respond to, and even shape changes within a defined socio-political system. Researchers have suggested that adaptive capacity can be analyzed by learning about a given set of assets and endowments as well as formal and informal governance institutions. Assets are typically considered in terms capital formation and mobilization – including financial, ecological, built/technological, human, social, and political - while institutions include analyses of formal rules and procedures such as policies, programs and property rights as well as informal sets of relations including power relations, systems of knowledge, cultural norms, values and worldviews, social group formation and action, and livelihood systems. Surprisingly little work critically examines how any assessment of assets, endowments and governing institutions is shaped by gender-based assumptions or considers how gender can be used as an analytical category to consider how these formal and informal systems interact and affect adaptive capacity. Tim Williamson's paper begins to unpack these dynamics by examining differential preferences related to the interpretation of environmental impacts by women and men in relations to climate change and forestry communities. Understanding society-forest system adaptation will also require a reciprocal process of analysis. First, we must understand how gendered assumptions organize our understanding of the assets, institutions and ideologies that shape adaptive capacity (gender of adaptive capacity). For example, the characteristics and

mobilization of human and social capital differ by gender, requiring us to consider these differences in any tally of local assets. Second, we must also consider how our environmental management policies and daily practices work to produce and reinforce particular expectations of gender and adaptation (adaptive capacity of gender). For example, the masculine ideals associated with loggers may shape the capacity of forestry workers to adapt to changing circumstances. Consideration of this reciprocal set of relations helps us to raise new questions about what constitutes adaptive capacity and how we might govern ourselves to promote it.

ADAPTATION OF FOREST MANAGEMENT AMONG SMALL-SCALE PRIVATE FOREST OWNERS

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More than half of the Swedish productive forest land is owned by small-scale private forest owners. How they manage their forests will influence not only the fulfilment of their private goals but also the fulfilment of common goals. According to the fourth IPCC assessment report, adaptation to climate changes take place through adjustments to reduce vulnerability or to enhance resilience. Results from two separate mail surveys show that adaptation of forest management is taking place among Swedish small-scale private forest owners. The fraction of forest owners who stated that they have adapted their forest management was 11% in 1999 and 19% in 2004.

This study explores (i) whether there is an increase in adaptation or whether the difference between years can be explained by regional differences in sampling between the two studies, (ii) in what ways the forest owners had adapted their forest management and (iii) the motivations for having/not having adapted.

Key words: adaptation, climate change, forest owner.

An explorative Norwegian gender perspective on adaptation of forest management among Swedish small-scale private forest owners

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In response to the abstract on adaptation of forest management to climate changes among Swedish small-scale private forest owners (K. Blennow 2008), this paper explores which questions it may be fruitful to ask on the basis of insights from gender studies on Norwegian small-scale private forest owners. The paper suggests three areas for investigation in addition to those Blennow has suggested. These areas are from a social science perspective: The collective links the forest owners are engaged in with people working in forestry; the forest owners' forestry competence; some more of the might-be "lies" of survey as a method than the one Blennow touches upon.

THE ROLE OF RURAL WOMEN, IN BIODIVERSITY AND ECOSYSTEM CONSERVATION IN CAMEROON

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In the last few years, efforts to help rural women, grow and manage trees in Cameroon had little positive impact, because of the failure to incorporate rural women's participation. Most activities were based on assumptions that local farmers (80% women), participate in conserving forests resources, through the application of modern techniques. Rural women are largely responsible for securing food, water and energy for cooking and heating. However, drought deforestation and erratic rainfalls also cause rural women, to secure these resources and ensure long term benefits.

This paper indicates that rural women if included in the climate change campaign, can be true agents of change, inherent problemsolvers, good leaders in influencing national and local climate change policies, influence poverty eradication and contribute meaningfully to climate solutions and ensure long term environmental benefits.

Rural women must therefore be placed at the heart of relief efforts in the building of communities affected by calamities related to climate change. Rural women are and must continue to be stewards of natural resources and should be well positioned to develop strategies for adapting to changing environmental realities, as they are responsible for family needs most of which are sourced from the natural environment in which they live. More importantly rural women have demonstrated alternative agro forestry conservation measures like, beekeeping, tree planting, medicinal plants cultivation, organic farming and gardening, which highlights, the importance of forests in rural livelihoods and impacts on the health

of the environment at wider levels. Natural forests have important cultural values, and serves important ecosystem functions.

The paper concludes that, including rural women in ecosystems conservation, will further improve on the implementation of strategies, to alleviate poverty among an increasing number of people, especially women and youths, who increasingly have the temptation of converting natural forests areas into agricultural and grazing land.

KEY WORDS: Conservation, Livelihoods, Sustainability.Trees, & Women

Gender and rubber plantations in Laos - local practises in Namtha district

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This paper will have a theoretical character, giving an introduction to my PhD research project, taking place in the northern parts of Laos in Namtha district - Southeast Asia. The paper is also part of the PhD course Forest Governance, undertaken at the Swedish University of Agriculture Science – Umeå, where the course literature will operate as a theoretical framework for the applied case in Laos. A gender perspective in rubber plantations will therefore stand as an example in everyday and local gendered practises and its linkages to global processes of forest governance. Forestry, as a natural resource, has mainly been studied independently of gender relations and their significance for a holistic understanding of natural resource management in both research and in practice. Many researchers are also arguing for the need to take local experiences seriously in studying gender and the environment, as well as there is a need for linking the gendered local practises to a global, as well as regional setting, where the gendered activities are integrated with production and consumption, maintained by economic and political interests. The overarching aim of this paper is therefore to look into the forest governance processes at different levels and how these in theory are interlinked with the gendered use of rubber plantations at the local village level in Namtha district. How can socio-economic transformations on macro and meso level interlink with local gendered every day life? What does the threat of climate change as a global process mean to local gendered practises in rubber plantations?

Keywords: forest governance, gender, Laos, global processes, rubber plantations

Adaptive communication – How to deal with target groups diversity and diverse messages

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The Swedish private forest owners are a group that is characterized by diversity. We have through empirical research seen great differences in their interests, knowledge, and what kind of work they perform on their properties. These differences are in some ways but not always connected with gender, other factors also affect. This calls for a more diverse form of communication. This paper stresses the need for a strategic communication that, instead of a general understanding, takes its starting point in the diversity and that the strategies and the design of strategic communication is adapted to a more specific analysis of a more specific group of forest owner. One problem with this way of planning is that there is no data that specifies other than size of property, state of residence and gender. There have been and are research that aims at defining different ideal types of forest owners, research that is important but a problem with these ideal types is that they also are low resolved and still is not possible to seek out in registers. Therefore there is a need for a communication that, instead of trying on forehand to seek out forest owners, more expressly by the addressing and design meets and/or hits more specific target groups. That is why the strategy should be adaptive to the specific aim and the specific target groups characteristics and situation.

Keywords: gender, strategic communication, target groups

GENDER AND FORESTRY DATABASE

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Gender and Forestry database are the result of a project which started in 2003. In the beginning there was a bibliography made that later on has been converted to a database in which today contains more than 1 300 references. The initiative to the database was taken by the IUFRO Working party 6.08.01 Gender research in forestry. The aim of this database is to make gender issues in the forestry sector more visible and reachable for anyone who wants to study gender issues in forestry. The results of searches in 19 databases and library catalogues are compiled in this database of Gender and forestry. The terms used in the searches were forest, forest management, masculinity, gender, sex & women in different combinations. The search possibilities in the database are free text searching and advanced search. In the advanced search there are the search possibilities the following: terms anywhere, title, author, source and publication's year. You can narrower your search by choosing several of these search fields in the advanced search. New references will be continuously added to the database. Researchers, students or anyone who wants to study gender issues in forestry, e.g. in relation to climate change or other challenging issues of adaptation or mitigation. The bibliography is available on:

http://www.bib.slu.se/bibliotek/skogs/genus/genderandfor.pdf

Keywords: database, gender, free text searching, advance searching

LEGITIMACY IN MULTI-LEVEL GOVERNANCE – THE CASE OF FOREST CERTIFICATION

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Government has traditionally been associated with formal state institutions and its monopoly of legitimate power. However, since the last two or three decades governments in the industrialized democracies have been faced with new challenges. These challenges, such as globalization, have lead to reforms in traditional state structures and in the relationship between the state and civil society. Today we are witnessing an increasing array of multi-level governance systems which includes a variety of actors such as nongovernmental organizations (NGOs) and business associations active in policy formation and implementation in the public sphere. The dilemma with multi-level initiatives is however the question of legitimacy and accountability, especially since they lack traditional forms of democratic representation. In this paper, a theoretical discussion regarding legitimacy in multi-level governance systems is exemplified with the voluntary accreditation system The Forest Stewardship Council (FSC), which has come to play an important role for many stakeholders involved in the Swedish forestry. FSC explicitly excludes state- and party-political agencies, but the results have been that a number of rules and regulations concerning e.g. voluntary set asides, logging of old-growth forest and consultations with reindeer husbandry, have been extended from requirements stated in the Swedish Forestry Act. Drawing on a number of theoretical insights regarding governance, legitimacy and the role of NGOs and markets, preliminary results show that legitimacy in forest certification can be limited and problematic. Even if stakeholders can have different reasons for participating, they

together affect traditional political legitimacy, which opens up for new forms of legitimacy and accountability mechanisms. Keywords: forest certification, multi-level governance; legitimacy

The balancing act of forest management and reindeer husbandry in Sweden

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Reindeer (Rangifer tarandus) occupy 1/4 of the Earth's land surface, mostly in arctic and subarctic regions. Reindeer husbandry is carried out throughout much of Scandinavia and Russia, and has been introduced to parts of North America as well. In northern Scandinavia and parts of Russia, reindeer play a key role in the indigenous Sámi people's cultural identity, traditions and economy. In Sweden, the Sámi have grazing rights on 1/2 of the land-area. with reindeer use the mountains during summer and migrating to costal, forested areas during winter. Because of a lack of knowledge and understanding about each other's uses and needs, misunderstandings and heated debates has been common between the reindeer industry and other land users (forest, power, tourism and mining industry). To remedy such problems I illustrate how remote sensing and GIS-techniques can be used to gather and compile information about land-use activities and patterns among reindeer herders and other land-users. The work represents a novel user-oriented effort largely based on the work carried out by the principal end users – the reindeer herders. The basis for development of land-use plans for reindeer husbandry consists of 4 parts: 1. Collection and digital systemization of traditional ecological and landscape knowledge of reindeer habitat use; 2. Integration of this information with results from field inventories and satellite-based vegetation classifications; 3. Mapping and compilation of other land-user's activities; 4. Incorporation reindeer habitat use from GPS collars. The resulting land-use plans provide information that can facilitate consultation between the reindeer herders and other land-users and can facilitate operational work in reindeer husbandry. The work is now completed or ongoing in 14 reindeer herding units (in Swedish; sameby) covering a total area of 130 000 km². The work involves 120 reindeer herders as well as key personnel in the Swedish Forest Agency. The work can serve as a model for participatory involvement and planning, bringing indigenous knowledge and advanced remote-sensing techniques together in an interactive process.

Key words: Ecological land use planning, GIS, Indigenous ecological knowledge, Remote sensing

CLIMATE CHANGE AND POLITICS OF FORESTS: UNDERSTANDING RELATIONS AMONG LAW, MARKETS, ENVIRONMENTAL COMMUNICATION, AND GOVERNANCE - CASES FROM CHILE AND SWEDEN

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This paper offers and analytical framework for understanding and discussing relations among law, markets, environmental communication, and forest governance, and addresses it to interpreting emerging connections between climate change and politics of forests taking place in Chile and Sweden, two countries that have large and important forest sectors. The relevance of making such connections departs, among other things, from an increasing number of researches pointing out at conflicting objectives and goals concerning production originated in, and based on, the use and management of forests and tree plantations. Since such objectives and goals are connected to what the IPCC report (2007) denominates societies' needs, there are a number of key and emerging political issues implicated in decision-making processes linked to forest sectors. Therefore, this paper aims at developing those issues at a theoretical level and in doing so it theorizes how understandings of law, markets, environmental communication, and governance are related to, and developed within, specific politics of forests.

The paper is divided into four sections and some final conclusions. The first section reviews research findings about diverse goals for forestry production and different objectives of forest use and management within a context of climate change. The second section investigates the ways through which law, markets,

environmental communication, and governance can be placed within an analytical framework focused on forest sectors and their relations to climate change. The third section explains current dynamics, projections and discussions associated with the forest sectors in Chile and Sweden. The fourth section, and through using the analytical framework developed in part II, deals with both the Chilean and Swedish forest sectors and the politics of forests in both countries along with the incorporation of climate change into such politics. Finally, the paper presents some conclusions as well as prospects for further research.

Keywords: Climate Change; Politics of Forests; Law; Markets; Environmental Communication; Governance; Chile, Sweden

FOREST GOVERNANCE IN SISSILI PROVINCE, SOUTHERN BURKINA FASO

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Traditional ownership of forest land is changing in most African countries to a system of private or community ownership with often an overlapping of multiple rights and uses, unequal access to land and resources based on gender, age, ethnicity, and class. This study evaluates the ongoing changes in forest property rights in a context of common-pool forest management in Sissili province, Southern Burkina Faso. Data were collected by means of semistructured interviews and questionnaire surveys at the district and village levels. Secondary data were also used for the study. A total of 45 villages belonging to 7 districts were randomly selected for further investigation. The questionnaire was administrated in 1865 households randomly selected in the 45 villages; the informants were 50% of men and 50% of women, native or migrant, in each village. Ostrom and Schlager's bundles of rights framework was used to analyze the changes in forest property rights. Results show that forest resources were managed as common-pool but inequalities remained in terms of people's access to the resources. Migrants and often women were marginalized from the access to woodlands and forest resources, and are often excluded from the decision making process related to forest management. The study demonstrates that State appropriation of forest resources and the incentive to private property rights contribute to unsustainable utilization or conversion of forest land to other uses. State and private appropriation of forest land leads to the reduction of rights of people who already have marginal position in the rural community. Additional institutional arrangements are suggested to

ensure equitable and efficient forest management outcomes at the local and national levels.

Keywords: Burkina Faso, Common-pool, Forest management, Institutional arrangements, Property rights

Landscape governance approaches to sustainability

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Multiple global, European, national and company policies aim at sustainable development (SD). To realize the vision of SD a diversity of approaches have been developed with the aim to create neutral societal platforms where actors and stakeholders can meet, cooperate and produce new knowledge to solve local sustainability issues in a way that is acceptable to stakeholders in a geographical landscape or region. A suite of existing participatory initiatives designed to implement SD policies on the ground with examples from Europe was reviewed. Our evaluation of the concepts shows that they are similar when it comes to what dimensions of sustainable development that are emphasized but that there are differences in governance. All concepts have a participatory aim and aims to include partners from the public, private, and civil sector. However, when it comes to active governance levels and the designation process there are differences. Our more extensive experience with a few of the concepts shows that there are big differences between the conceptual level and on the ground implementations. After analyses of their trajectories of development, we conclude that although these initiatives originated from different sustainable development perspectives, they are evolving towards the aim of satisfying economic, ecological and socio-cultural dimensions by multi-level governance. This is consistent with the international terms landscape approach, ecosystem management and ecosystem approach. The need to evaluate experiences and results from these initiatives in terms of development and on the ground results is stressed to support social learning and facilitate scaling up of SD implementations. Finally, a transdisciplinary approach to evaluate and assess landscape sustainability using a suite of empirical studies of social-ecological systems which are subject to different implementation initiatives is presented.

Key words: policy implementation, landscape, governance, sustainable development, Biosphere Reserve, Model Forest, Agenda 21, Ramsar, Leader.

LIVELIHOODS AND THE QUESTION OF FOREST GOVERNANCE IN ETHIOPIA

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Forests are the habitats of flora and fauna, and they are important sources of income, materials and spiritual setup for many people. They provide environmental services like maintaining micro-climate, and safeguarding agricultural lands against, water run-offs. However, depletion of forests and woodlands are persistent problem in Ethiopia. Currently, forests make up only 4.2 per cent of the counties territory compared to 40 per cent about a century ago.

In the study, participatory information and secondary sources were used to assess woodland destruction and identifying the driving forces and the impacts of those destructions to poor farmers being unable to fulfill the basic human requirements. Results showed that almost all Acacia woodlands has been destroyed within 35 years, even in one of the study sites woodlands were destroyed prior to 1986. People are already experienced climatic variability (erratic rainfall, recurrent droughts), declining crop productivity and livestock raring, income loss and shortage of wood. In general poverty is exasperating in the area.

It was argued that, lack of approprite forest and forest related (such as land-use) polieces and regulations, and lack of enforcement have agravated indiscriminately forest degradation. In general, bringing back forests and woodlands, and conserving the existing ones in the country; there is a need of restructuring of the forestry sector by involving all stakeholders who have direct or indirect interest. Furthermore, by integrating sustainability and adaptation (climate change) concepts in forestry and forest related policies and practices; there are a number of possibilities to realise the full potential of the forest and woodlands as

economic, social, and environmental resources to meet the needs of the present and future generations.

Key words: forest destruction, forest policy, woodland, sustaiability, adaptation to climate change.