



AgriFoSe2030 Report 4, 2018

An AgriFoSe2030 Final
Report from Theme 1,
Social and economic
dimensions of smallholder
based agriculture and food
security

A review of Uganda's Agricultural Policy and how it addresses AgriFoSe2030's Target Groups

Frank Mugagga^a, Lydia Kakooza^b and George Asiimwe^c

^aDepartment of Geography, Geoinformatics and Climatic Sciences, Makerere University; ^bDepartment of Agricultural Production, Makerere University; ^cGlobal Green Growth Institute, Uganda

AgriFoSe2030

Agriculture for Food Security 2030
- Translating science into policy and practice



Today more than 800 million people around the world suffer from chronic hunger and about 2 billion from under-nutrition.

This failure by humanity is challenged in UN Sustainable Development Goal (SDG) 2: "End hunger, achieve food security and improve nutrition and promote sustainable agriculture".

The AgriFoSe2030 program directly targets SDG 2 in low-income countries by translating state-of-the-art science into clear, relevant insights that can be used to inform better practices and policies for smallholders.

The AgriFoSe 2030 program is implemented by a consortium of scientists from the Swedish University of Agricultural Sciences (SLU), Lund University, Gothenburg University and Stockholm Environment Institute and is hosted by the platform SLU Global.

The program is funded by the Swedish International Development Agency (Sida) with a budget of 60 MSEK over a four-year period starting in November 2015. News, events and more information are available at www.slu.se/agrifose

ISBN: 978-91-576-9552-9

Contents

Acknowledgements	3
Summary	3
1. Introduction	3
2. The main policies in Uganda’s agricultural sector	4
2.1. The National Agriculture Policy	4
2.2. The Comprehensive National Development Planning Framework Policy	4
2.3. The National Development Plan II (2015/16 – 2019/20)	4
2.4. The Agriculture Sector Strategic Plan (ASSP) of 2015/16-2019/20	4
3. Other crucial policies/strategies in Uganda’s agricultural sector	5
3.1. The National Agricultural Extension Policy (NAEP)	5
3.2. The National Fertilizer Policy (2016)	5
3.3. The Draft National Seed Policy (2014)	5
3.4. The Draft Irrigation Policy and National Irrigation Master Plan or Uganda (2010 – 2035)	6
3.5. The National Agricultural Advisory Services Act, 200115	6
3.6 The National Agricultural Research Organization Act 200516	6
3.7. The Uganda National Land Policy 201317	6
3.8. Other government policy commitments	7
3.9. CAADP and Malabo Declaration	7
4. CAADP implementation in Uganda	7
4.1. CAADP/DSIP Achievements, challenges and Lessons Learnt	7
5. Lessons learnt in DSIP implementation	8
References	9

How to cite this report:

Mugagga F, Kakooza L, Asiiimwe G. 2018. A review of Uganda’s Agricultural Policy and how it addresses AgriFose2030’s Target Groups. AgriFoSe2030 reports 2017-4.
ISBN: 978-91-576-9552-9

Summary

This paper provides an overview of existing agricultural policies in Uganda and how they address the key AgriFose2030 target groups that include; smallholder farmers, women and youth. One of the main policies in Uganda's agricultural sector is the National Agriculture Policy (NAP) which deals with commercialization of smallholder agriculture through accessibility of financial services such as, loans. However, NAP lacks a consistent and implementation framework thereby hindering proper transformation and increase of agricultural production in the sector.

The Agriculture Sector Strategic Plan (ASSP) of 2015/16 to 2019/20 lays out the priorities and interventions that are crucial to transforming smallholder farmers into commercial farmers. The five year strategy focuses on improving the accessibility of critical farm inputs such as, fertilizers as well as value addition and markets for the agricultural produce. However, the strategy is constrained by unfavorable conditions for agricultural transformation such as, inadequate participation of women and youth and limited extension services.

The National Agricultural Extension Policy (NAEP), 2016, was developed to provide long term strategic direction for agricultural extension services in Uganda. The agricultural extension services facilitate smallholder farmers to sustain agricultural production and shift from subsistence farming to market-oriented and commercial farming. However, there are some challenges faced by the implementation of the policy such as, reduced funding for agricultural extension service delivery in the national budget and insufficient human resource that is inadequate to implement the agricultural extension reforms.

The National Agricultural Extension Strategy (NAES) 2016/17 to 2020/21 is expected to improve efficiency of agricultural production, competitiveness, and commercialization of smallholder farmers. The strategy empowers and allows participation of smallholder farmers, women, and youth so that they can benefit effectively from extension services and develop value chains that address their needs. In addition, NAES advocates for stronger linkages with research, educational and farmer institutions among smallholders to improve agricultural production.

The National Fertilizer Policy of Uganda (2016) ensures availability of affordable, accessible, high quality, safe, profitable and sustainable fertilizer to smallholders to achieve sustainable production. The policy promotes awareness of fertilizers and encourages the participation of smallholders, women and youth in the marketing of fertilizers. However, smallholder farmers lack knowledge/information of how to improve soil fertility, their proper use, the high cost and poor supply in Uganda.

Though not yet implemented, the Draft of National Seed Policy 2014 (NSP) ensures that smallholders have access to adequate, affordable, high quality and safe seed and planting material that is crucial for agricultural intensification. This policy focuses on increasing awareness, proper dissemination of seed related profitability information among smallholders to increase agricultural productivity. For example, the policy encourages smallholders, women and youth to conserve the best crop varieties with high food security value.

The Draft Irrigation Policy and National Irrigation Master Plan for Uganda (2010-2035) has provision for smallholders that engage in subsistence farming and those who are shifting from subsistence farming to commercial farming to increase their agricultural production and productivity.

Acknowledgements

We are grateful to the AgriFoSe2030 Project theme 1 leaders especially Prof Agnes Andersson Djurfeldt and Prof Magnus Jirström for trusting us to undertake the review. We greatly benefitted from the internal reviews by colleagues at our respective Departments as well as the external peer reviewers that critiqued the final manuscript. We are also grateful to the ongoing research and education collaboration between the Department of Geography – Lund University and the Department of Geography, Geoinformatics and Climatic Sciences - Makerere University. It is from this initiative that our participation in the AgriFoSe2030 project was realized. We are also grateful to our beloved families who have always been a source of inspiration and support.

1. Introduction

Agriculture is the backbone of Uganda's economy and more than 85% of the total population depends on agriculture as the main source of livelihood.¹ In the financial year (FY) 2016/17 budget, the agriculture sector contributed 26% to Uganda's Gross Domestic Product (GDP) and a growth of 3.2% from 2.3% of FY 2014/15.^{2,3} The agricultural sector's budget for FY 2016/17 increased by about 65% (from UGX 343.46 billion in FY 2015/16 to UGX 823.42 billion) with an aim to transform the agriculture sector by facilitating mechanization, efficient access to inputs and appropriate technologies, increased storage and market access. In the FY2016/17, the Government of Uganda (GoU) has pledged to, (i) continue to provide improved breeding and planting materials and pesticides; (ii) intensify regulations through increased disease surveillance, (iii) improve disease diagnostics and enforcement of animal laws at both central and local government levels; (iv) conduct agricultural research and development; (v) construct irrigation infrastructure including on-farm valley tanks, valley dams, and medium to large scale irrigation schemes for communities; (vi) finance post-harvest handling facilities for commodity storage through the agricultural credit facility; (vii) develop and implement a comprehensive National Agriculture Finance Policy and Strategy to support private sector investment in agriculture; and establish an Agriculture Insurance Scheme to reduce farm risks and attract investment in agriculture.

This baseline report provides an overview of the agricultural policies in Uganda, based on a review of key regional and national agricultural policy documents. The overarching aim is to provide information on existing agricultural policies at the regional and national level as well as provide evidence if and how such policies address the three AgriFose2030 target groups including smallholder farmers, women, and the youth.

2. The main policies in Uganda's agricultural sector

2.1. The National Agriculture Policy

Uganda's agricultural sector of today is based influenced by the National Agriculture Policy (NAP) which was approved in 2013 by the Ministry of Agriculture, Animal Industry, and Fisheries (MAAIF) to achieve food and nutrition security and improve household incomes through coordinated sustainable agricultural productivity and value addition, better employment opportunities and promoting domestic and international trade.⁴ NAP also partly seeks to develop a private sector led agriculture sector in Uganda. Specifically, NAP is to;

- Promote agricultural enterprises that enable households to earn daily, periodic and long-term incomes to support food purchases.
- Promote and facilitate the construction of appropriate agro-processing, storage infrastructure, value addition and marketing at appropriate levels to improve post-harvest management.
- Develop and improve food handling, marketing and distribution systems.
- Link domestic, regional and international markets; support the establishment of a national strategic food reserve system.
- Support the development of a well-coordinated system for collecting, collating and disseminating information on agricultural production.
- Support food and nutrition security across households, communities and agricultural zones.
- Encourage and support local governments to enact and enforce bylaws and ordinances that promote household food security through appropriate food production and storage practices.

Therefore, NAP plays a very big role in Uganda to provide the necessary frameworks upon which strategies and programs for developing the agricultural sector are based. NAP also handles the commercialization of smallholder agriculture through accessibility to financial products and services (loans and savings).⁵ However there are challenges faced by NAP, for instance, lack of a consistent policy regime which has affected the transformation of the agricultural sector and lack of coherence in policy implementation which need to be clarified so that stakeholders can be reassured of possibilities to increase production in the agricultural sector.³ In addition, there is need to clarify how the allocated funds will have an impact on the agricultural productivity in the National Development Plan II Core Projects such as, the Agricultural Development Cluster Project (ADCP) that aims to raise productivity of coffee, maize, rice, beans and cassava in specified clusters of districts across the country; and the Markets and Agricultural Trade Improvement Programme Project-2 (MATIP II) on improving market infrastructure, value addition and trade facilitation.

2.2. The Comprehensive National Development Planning Framework Policy

Comprehensive National Development Planning Framework policy (CNDPF) is comprised of five main elements namely; the 30 year national vision, 10 year national development plan, the 5 year national development plans, annual plans and budgets.⁶ Uganda Vision 2040 aims at transforming Uganda from a peasant, low income country to a middle income country.⁶ The Uganda Vision 2040 policy intends to provide development paths and strategies to operationalize the mission statement which is "A Transformed Ugandan Society from a Peasant to a Modern and Prosperous Country within 30 years".^{6,7} In the Vision 2040 under agriculture, there is provision of transformation of the sector from subsistence farming to commercial agriculture to enable sustainable food security, income and provide employment along the commodity value chain of production, processing and marketing.⁶ There is also emphasis of increasing agricultural productivity through development of irrigation schemes, use of improved seeds and cultivars and development of a phosphate industry in Tororo to reduce the cost of fertilizer. Uganda's Vision 2040 recognizes agriculture as the major contributor to gross domestic product (GDP) and main source of employment/labour force in the country and sector with great potential to increase labour productivity.⁸

2.3. The National Development Plan II (2015/16 – 2019/20)

Currently, the country is implementing the second phase of the National Development Plan (NDP II) in the series of six, five-year Plans all aimed at achieving Uganda's Vision 2040. The NDP II (2015/16-2019/20) is designed to lead Uganda towards middle income status by 2020, which is the goal of Uganda's Vision 2040 that emphasizes sustainable wealth creation, employment and inclusive growth.⁷ NDP II has provision of commercialization of agriculture to increase production and productivity along the value chains. NDP II also focuses on agro-processing and marketing as mean of achieving Uganda's Vision 2040.

2.4. The Agriculture Sector Strategic Plan (ASSP) of 2015/16-2019/20

The Agriculture Sector Strategic Plan (ASSP) of 2015/16-2019/20 was designed as a continuation of the Agriculture

Sector Development Strategy and Investment Plan (DSIP) of 2010/11-2014/15, which was launched as a fulfillment of the Comprehensive Africa Agriculture Development Programme (CAADP).⁸ The DSIP had sought to improve household incomes and food security through (i) increased productivity through sustainable intensification (ii) increased access to markets and value addition through improved safety standards and quality assurance across crops, livestock and fisheries sectors, (iii) create a suitable environment for investment in agriculture and strengthen institutions in the agricultural sector.⁹ Currently, ASSP is Uganda's basic tool for implementing CAADP with a major target of increasing agriculture growth rates of 6% per year, for the next 5 years.⁸ ASSP also looks at the development priorities of the NDP II. ASSP hopes to achieve a competitive, profitable, and sustainable agricultural sector. A sector that can be transformed from subsistence farming to commercial agriculture to create employment opportunities, especially for the youth and women, and increase household incomes by ensuring household food security. Specifically, ASSP emphasizes the need to increase production and productivity of agricultural commodities and enterprises through increased access to critical farm inputs. This is meant to enhance access of inputs such as, fertilizers also for smallholders improving their access to markets and value addition, thereby strengthen the quality of agricultural commodities. ASSP also emphasizes the strengthening of the agricultural services institutions to enable a good environment for investment, knowledge and technological innovations for increased agricultural productivity and food security.⁸

3. Other crucial policies/strategies in Uganda's agricultural sector

3.1. The National Agricultural Extension Policy (NAEP)

The NAEP was approved in 2016 along with the National Agricultural Extension Strategy (NAES) 2016/17- 2020/21.¹⁰ NAEP is expected to improve nutrition security and household incomes and promote an access for all farmers and other value chain actors to appropriate information : NEAP will provide options for interventions for the short, medium- and long term and solutions to mitigate problems of low production, productivity, and household incomes. NAEP is also mandated to provide agricultural extension services to support sustained agricultural production among smallholder farmers and enable them shift from subsistence agriculture to market oriented and commercial farming. The NAES originated from the National Agricultural Extension Policy 2016 and works alongside the five-year NDP II (2015-2020). NAES is mandated to specifically establish a well-coordinated, harmonized agricultural extension delivery system for increased efficiency and effectiveness; An extension service able to empower farmers and other value chain actors (youth, women and other vulnerable groups) to effectively participate and benefit equitably from agricultural extension processes and demand for services. This will be done through developing a sustainable mechanism for packaging and disseminating appropriate technologies to all categories of farmers and other beneficiaries in the agricultural sector;

The planning, implementation, and monitoring processes of NAES ensure empowerment and inclusive participation of smallholder farmers, women, and youth so that they can benefit effectively from extension services and develop their value chains to address their needs. NAES also focuses on smallholders by advocating for their stronger linkages with research, educational and farmer institutions to improve agricultural production. Therefore, the new agricultural extension strategy is expected to greatly improve production efficiency, competitiveness, and commercialization of smallholder farmers.

3.2. The National Fertilizer Policy (2016)

The National Fertilizer Policy of Uganda (2016) was designed in line with the Vision 2040 and the NDP II to ensure that smallholder farmers obtain affordable and accessible fertilizers, which increase agricultural productivity and farm incomes.¹¹ Specifically, the fertilizer policy aims to strengthen the capacity of farmers to engage in safe, profitable and sustainable fertilizer use; and enhance regulatory and institutional capacity to ensure quality, environmentally safe supply and use of fertilizers to achieve sustainable productivity and production. The policy will ensure availability of high quality, affordable, safe fertilizers to smallholders; and increase its use by promoting awareness of fertilizers and countering anti-fertilizer campaigns. In addition, the policy will encourage participation of smallholder agriculture, women, and youth in the marketing of fertilizer.

3.3. The Draft National Seed Policy (2014)

The draft of National Seed Policy 2014 (NSP) was approved in 2013 to ensure the availability of adequate, high quality and safe seed and planting material to smallholders to increase agricultural production and productivity that guarantees food security and improved incomes.^{12,13} The purpose/objective of the policy is to foster a competitive, profitable and sustainable market-led, regulated and coordinated seed industry, whereby smallholders access affordable quality seed and planting materials that are vital for agricultural intensification. One of the principles of the policy is to enhance productivity in farming systems through availability of good quality seed from all seed systems, which are accessible, affordable, and preferred by smallholders. The policy aims at raising awareness, ensure

dissemination of seed related productivity and profitability information, which will increase the use of quality seed by smallholders and result into increased productivity. The policy highlights the role of extension services and distribution networks in increasing the adoption of improved varieties and use of quality seed. The seed policy (i) promotes smallholders and community groups including those led by women or youth to conserve crop varieties that have a high food security value; (ii) facilitate the youth, women and other vulnerable groups to strategically intervene to enhance the availability of quality seed (iii) promote awareness on the different seed classes to reach all actors in the informal seed system including women; (iv) promote agricultural extension in agri-business skills and enterprise development for seed business and ensure that women and youth get equal benefits from this service provision; and (v) support farmer's groups, including those led by women and youth to register producers of quality declared seeds. In order to operationalize the NSP draft of Uganda, MAAIF formulated the National Seed Strategy (NSS) of 2014/15- 2019/20 that contains detailed activities.¹³

3.4. The Draft Irrigation Policy and National Irrigation Master Plan or Uganda (2010 – 2035)

The draft Irrigation Policy of Uganda and National Irrigation Master Plan for Uganda (2010-2035) whose main objectives "Poverty Alleviation and Economic Growth as a result of the sustainable realization of the country's irrigation potential mitigating the effects of climate change and contributing to the transformation of Uganda society from a peasant to a modern and prosperous society" are in line with the NDP II.¹⁴ The draft irrigation policy has been formulated with similar objectives as the Framework Master Plan (FMP) and will be articulated as an integral part of the FMP. Specifically, the irrigation policy is to ensure improved and expanded irrigation infrastructure and practices contributing to poverty alleviation and economic growth in Uganda as a result of farmer managed, small scale schemes and best practice service delivery and an enabling investment environment for irrigated crop production, value addition and/or service provision.¹⁴ The irrigation policy focusses on smallholders who practice subsistence farming and emerging farmers who are drifting from subsistence farming to commercial farming; and commercial farmers who grow cash crops to increase their agricultural production and productivity. Irrigation contributes to sustainable food production and food security, poverty alleviation, and increases the economic growth when the schemes focus on improved yields of high value crops, value additions and livelihood differentiation accruing to increased trade goods and market activity.¹⁴

3.5. The National Agricultural Advisory Services Act, 200115

The National Agricultural Advisory Services Organization is a semi-autonomous public agency within the Ministry of Agriculture Animal Industry and Fisheries (MAAIF), responsible for public agricultural advisory/extension services. The National Agricultural Advisory Services (NAADS) Programme was created in 2001 by an Act of Parliament to specifically address constraints of lack of access to agricultural information, knowledge, and improved technology among rural poor farmers in the country. NAADS is currently being implemented in all Districts, Municipalities and Sub counties of Uganda. The organization is mandated to provide agricultural advisory services by an Act of Parliament, the NAADS Act 2001. In accordance with the decentralization policy, all districts are implementing the NAADS programme through existing Local Government administrative and technical arrangements for agricultural service delivery. The NAADS act envisions a decentralized farmer owned/controlled agricultural advisory service system with increasing participation of the private sector. Its mission is to increase farmers' access to information, knowledge,, and technology for profitable agricultural production It is premised on the following objectives; (i) To promote food security, nutrition and household incomes through increased productivity and market oriented farming (ii) To empower all farmers to access and utilize contracted agricultural advisory services (iii) To promote farmer groups to develop capacity to manage farming enterprises. (iv) To create options for financing and delivery of agricultural advice for the different types of farmers. (v) To catalyze the participation of the private sector to fund agricultural advisory services.

3.6 The National Agricultural Research Organization Act 200516

This Act provides for the development of an agricultural research system for Uganda for the purpose of improving agricultural research services delivery, financing and management; This Act provides for the establishment of a National Agricultural Research Organization (NARO) with its governing council and a body corporate to serve as the apex body for guidance and coordination of all agricultural research activities in the national agricultural research system.

3.7. The Uganda National Land Policy 201317

This policy envisions a transformed Ugandan society through optimal use and management of land resources for a prosperous and industrialized economy with a developed services sector. Its overall goal is to ensure an efficient, equitable and optimal utilization and management of Uganda's land resources for poverty reduction, wealth creation and overall socio-economic development. Objective four of the policy aims at redressing historical injustices to protect the land rights of groups and communities marginalized by history or on the basis of gender, religion, ethnicity and

other forms of vulnerability to achieve balanced growth and social equity. Principle two of the policy emphasizes equity and justice in access to land irrespective of gender, age, disability, or any other reason created by history, tradition and custom.

3.8. Other government policy commitments

In the recent past, Uganda has committed to several regional, continental, and global agricultural development and partnership policies and programs. They include the East African Community (e.g. EAC Agricultural and Rural Development Policy, EAC Agricultural and Rural Development Strategy), COMESA (e.g. COMESA Seed Trade Harmonization Regulations); African Union (e.g. CAADP, Malabo Declaration, Africa Agenda 2063), MDGs and now Post 2015 Development Agenda/Sustainable Development Goals (SDGs).

3.9. CAADP and Malabo Declaration

CAADP is a continental initiative for raising economic growth through agriculture-led development. Its goals are to eliminate hunger and, to reduce poverty through agriculture. African governments committed to allocate at least 10% of national budgets to agriculture and to adopt sound policies and build capacities to achieve sustainable agricultural growth of at least 6%. Some of the recent continental commitments which directly relate to CAADP and agricultural transformation and food security include;

Malabo Declaration on Agricultural Growth and Transformation for Shared Prosperity and Improved Livelihoods aims at sustaining the CAADP momentum. In addition to reaffirming CAADP the Malabo Declaration targets investment finance in agriculture, ending hunger by 2025, halving poverty by 2025, boosting intra-African trade in agricultural commodities, and enhancing the resilience in livelihoods and production systems to climate variability and other shocks. The driver for this change and transformation is stronger systemic capacity in: planning; policies and institutions; coordination and partnerships; knowledge and skills; data and statistics; mutual accountability; and investment financing.

Declaration on Nutrition Security for Inclusive Economic Growth and Sustainable Development in Africa which recommits to ending hunger by 2025 through investment in human capital, and reducing child stunting to 10% and underweight to 5% by 2025 and in particular, focusing on the first 1,000 days.

4. CAADP implementation in Uganda

Uganda committed to CAADP in 2010 when government and its partners signed a CAADP Compact and launched the Development Strategy and Investment Plan to operationalize it. It was customized to reflect Uganda's agricultural context and needs. Government, Non State Actors (NSA), donors, continental and regional institutions endorsed the Compact and the DSIP. Since then government has formulated agricultural policies and programs to strengthen agricultural policy implementation.

4.1. CAADP/DSIP Achievements, challenges and Lessons Learnt

Progress on agricultural marketing

Marketing and trade is liberalized but needs to be regulated. Capacities for regulation have increased but they are still inadequate to enforce quality standards. Except for a few commodities such as coffee and fish, international export trade performance has remained below potential partly due to strict quality standards and dominance of unprocessed exports (MAAIF, 2016).

Private sector involvement

Successful public-private partnerships have been developed/strengthened in oil palm, sunflower, tea, coffee, etc. The private sector, especially small and medium enterprises, is still weak and faces high costs of doing business.

Increasing the availability and access to food and productive safety nets

The country is considered food secure though some parts of the country still face seasonal food stress. Levels of hunger and child malnutrition have generally declined but are still unacceptably high (MAAIF, 2016).

Progress on stakeholder engagement and partnership development

Policy formulation process is generally consultative though most often adhoc and long. The Agricultural Sector Working Group (ASWG) (MAAIF) is in place but it is not fully inclusive of all state and non-state actors. MAAIF has also established joint sector reviews of the performance of the sector though the process, event agenda, and recommended actions are dominated by government (MAAIF, 2016).

Progress on institutional development

The capacities of MAAIF and local governments for planning, statistics, implementation, and M&E are improving but are still low, inadequate to implement the agriculture policy effectively. Information sharing and learning among the sector actors is still weak. Most of the agricultural sector's Development Strategy and Investment Plan (DSIP) components require collaboration and coordination with several ministries and local governments, but these are still weak and unable to collaborate and coordinate sufficiently (MAAIF, 2016).

Progress in building alliances for investment

There are some examples where government, the private sector and/or donors have built/strengthened e.g. Agribusiness Trust (aBi), Vegetable Oil Development Project, EU equity fund for smallholder farmers and Agricultural Credit Facility.

Resource mobilization and allocation

The DSIP has served as a resource mobilization tool. Both Government and donors are providing public funding required for implementing the DSIP though wide funding gaps still exist. Donor projects are closely aligned to the DSIP though most aid is still delivered through off-budget project support rather than on-budget or sector budget support. Despite the fact that Local governments implement majority of the sector DSIP activities, they get less than 40% of the sector budget. In the last five years over 90% of what? was allocated to advisory services.

5. Lessons learnt in DSIP implementation

A review of the DSIP performance identified the following as some of the key lessons and opportunities:

- Participation of community based seed/input producers expedites multiplication, ownership and access to improved seeds and planting materials;
- Commitment, good will and support from national and grassroots political leaders have been critical in the promotion of technology uptake;
- Smallholder farmers can utilize financial services for agricultural investments, and, with technical support and appropriate loan products, they have the capacity to repay their loans.
- Proactive engagement with key stakeholders is important in resolving issues of concern in implementation
- Effective extension services, skills development and a good marketing system are necessary for adoption and use of agricultural production and mechanization technologies.

The identified opportunities include:

- The establishment of the single spine extension system will improve service delivery and improve coordination and collaboration between central and local governments
- Current government investments in infrastructure and human capacity development will reduce binding constraints to agricultural marketing and value addition
- There is positive attitudinal change towards irrigation, conservation agriculture and use of production enhancing inputs.
- Several ongoing and upcoming projects and policies will offer opportunities for improving household incomes and food security.

References

1. The Uganda National Farmers Federation (UNFFE). (2017). Agriculture has been the backbone of Uganda's economy.
2. Setting tomorrow's priorities. A look at Uganda's 2016/17 National Budget, June 2016 <https://www.pwc.com/ug/en/assets/pdf/budget-bulletin-2016-2017.pdf>.
3. Uganda Budget Highlights 2016. <https://www2.deloitte.com/content/dam/Deloitte/ug/Documents/tax/Budget%20highlights%20UG%202016.pdf>
4. FAO (2015). Country situation and role of agriculture. Country Fact Sheet on Food and Agriculture Policy Trends.1-6
5. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2011).National Agriculture Policy, Final Draft.
6. Uganda Vision 2040, 1-136. <http://npa.ug/wpcontent/themes/npatheme/documents/vision2040.pdf>
7. Uganda Vision 2040. (2015). Second National Development Plan (NDP II) 2015/16-2019/20, 1-344.
8. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2016). Agriculture Sector Strategic Plan 2015/16-2019/20“Draft.1-199.
9. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2010). Agriculture for Food and Income Security. Agriculture Sector Development Strategy and Investment Plan: 2010/11-2014/15.1-160
10. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2016).National Agricultural Extension Policy of Uganda. National Agricultural Extension Strategy.1-65.
11. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2016). National Fertiliser Policy. 1-33.
12. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). (2014). National Seed Policy.1-36.
13. Ministry of Agriculture, Animal Industry and Fisheries (MAAIF) (2011). National Agriculture Policy, 8-45.
14. Ministry of Agriculture Animal Industry and Fisheries (MAAIF). (2015). Uganda National Seed Strategy 2014/15 – 2019/20.1-118
15. Ministry of Finance, Planning & Economic Development. (2016). Are Agriculture Sector Policies and Interventions in Uganda Gender Sensitive and Responsive? Budget Monitoring and Accountability Unit (BMAU) Briefing Paper (2/16). 1-4.
16. Ministry of Lands, Housing and Urban Development (MLHUD) (2013). The Uganda National Land Policy. 8-9
17. Ministry of Water and Environment (2011). A National Irrigation Master Plan for Uganda (2010-2035).1-218
18. The National Agricultural Advisory Services Act, 200115
19. Government of Uganda (GoU). (2005). The National Agricultural Research Organization Act 2005. Section 3.
20. MLHUD (2007). The National Land Use Policy. 34 – 36.