# **Foreword**

Government, through the Ministry of Agriculture, Animal Industry and Fisheries has formulated the National Agricultural Extension Strategy to guide, harmonize and implement agricultural extension services to farmers, farmers' groups, and other actors in agriculture value chains throughout the country.

This strategy is in response to government's commitment to realize an agricultural revolution in the country in line with the National Agriculture Policy (2013) and the National Agricultural Extension Policy (2016). It is intended to effectively and efficiently provide agricultural extension services in order to support sustained progression of smallholder farmers from subsistence agriculture to market oriented and commercial farming.

The strategy goal, objectives, and activities reflect consensus generated during highly interactive consultations and dialogues with extension service personnel and other stakeholders including farmers and farmers' groups, local governments, related ministries, departments and agencies, subject matter specialists, private sector, civil society, academia, policy makers and development partners.

Agricultural extension is and remains the "Heart and Soul" of the knowledge base of the Ministry of Agriculture, Animal Industry and Fisheries and is one of the most important elements for agricultural sector transformation. The reformed agricultural extension system is expected to significantly improve production efficiency, competitiveness and foster commercialization of smallholder farmers still engulfed in a viscous cycle of poverty.

Agricultural extension services, therefore, will be provided through a more pluralistic, inclusive, equitable, decentralized, integrated and harmonious system that links all categories of extension users along the value chain with appropriates services, innovative technologies and the market. The new extension system puts the smallholder farmer at the Centre. It advocates for stronger linkages with research, educational and farmer institutions for effective agricultural services delivery to farmers.

I thank everyone who has contributed to the formulation of the strategy and my Ministry is committed to sustain the momentum and enthusiasm generated during its implementation. Particular thanks go to members of the multi-sectoral and multi-institutional technical working group for steering the process; consultants for technical assistance; and support received from our development partners; particularly the United States Government through the Feed the Future Enabling Environment for Agriculture Activity, the Royal Netherlands Embassy, and the World Bank.

For God and My Country

Hon. Vincent Bamulangaki Ssempijja (MP) MINISTER Ministry of Agriculture, Animal Industry and Fisheries

# **Table of Contents**

Acro	onyms and Abbreviations	5
Glos	sary	6
<b>Executive Summary</b>		8
1. In	troduction and Background	9
1.1	Introduction	9
1.2	Strategy Context	9
2.	Situational Analysis	10
2.1	Previous Extension Approaches and Lessons Learnt.	10
2.2	Challenges and Constraints	12
2.3	Opportunities	13
3.	Strategic Direction	15
3.1	Development Problem	15
3.2	New Strategic Direction	15
3.3	Vision, Mission, Goal and Guiding Principles	15
4.	Objectives, Strategies, and Activities	17
5.	Institutional Arrangements for Implementation	37
5.1	Mandates, roles and responsibilities	37
5.2	Managing coordination and collaboration linkages.	43
5.3	Roles of other stakeholders	43
5.4	Ensuring effective data and information management.	45
5.5.	Creating an enabling legal framework	46
6.	Planning and financing framework for the extension service	47
6.1	Objective and Strategies	47
6.2	Structure of publicly financed extension budget.	47
7	Monitoring Evaluation and Learning Framework	40

# **Acronyms and Abbreviations**

ASSP Agricultural Sector Strategy Plan

Bn Billion

CAO Chief Administrative Officer CSO Civil Society Organization

DAES Directorate of Agricultural Extension Services

DAO District Agricultural Officer

DCDO District Community Development Officer

DCO District Commercial Officer
DLG District Local Government

DPMC District Production and Marketing Coordinator
DPMO District Production and Marketing Officer

DVO District Veterinary Officer

FY Financial Year

GoU Government of Uganda

ICT Information and Communication Technology

LG Local Government

MAAIF Ministry of Agriculture, Animal Industry and Fisheries

MDAs Ministries, Departments and Agencies

M&E Monitoring and Evaluation

MFPED Ministry of Finance, Planning and Economic Development

MTIC Ministry of Trade, Industry and Cooperatives

MT Metric Tons

NAADS National Agricultural Advisory Services

NAGRIC&DB National Animal Genetic Resources Center and Data Bank

NAEP National Agricultural Extension Policy
NAES National Agricultural Extension Strategy
NARO National Agricultural Research Organization

NDP National Development Plan

NGO Non-Governmental Organization

NSAs Non-State Actors

PMG Production and Marketing Grant PMO Production and Marketing Office

S.C Sub County

UCDA Uganda Coffee Development Authority

UGSH Uganda Shillings US\$ United States Dollars

ZARDI Zonal Agricultural Research and Development Institute

# Glossary

**Agriculture (also called farming or husbandry):** The art and science of growing crops, rearing of livestock, fish, bees, and other productive insects.

**Agricultural sector:** Includes crops, livestock, agro-forestry, fishing, apiculture, sericulture and other related activities.

Agricultural Extension Services: These include interventions/activities by government and NSAs that facilitate the access of farmers, their organizations, and other value chain actors to knowledge, information, and technologies; mediate their interaction with other relevant organizations; and assist them to develop their technical and management capacity in agriculture and family life. Agricultural Extension System: The agricultural extension system includes the entire set of organizations and institutions (public, private, civil society), that are involved in providing agricultural extension services.

Beneficiaries: Individuals and organizations directly reached and benefiting from agricultural extension services.

**Client-led extension services:** This is a type of service where extension service providers routinely adopt a mindset of listening carefully to the demands/needs of beneficiaries as a basis for any interventions. Commercial agriculture: Production of crops, livestock, fish, apiculture and sericulture products primarily for sale.

**Farmer Empowerment:** Building the capacity of individual farmers and farmer institutions to have greater access and control over structures and processes that transform their resources and assets into outcomes that they desire to achieve their goals.

**Extension Worker:** Personnel employed by agricultural extension service provider organizations (Government and NSAs) deployed to work directly with beneficiaries. Such personnel can be from a range of disciplines including agriculture, agricultural engineering, nutrition, agribusiness and related areas.

**Farmer:** A person who grows crops, or rears livestock fish, bees, silkworms and other productive insects.

**Formal linkages:** This is where organizations sign binding written agreements to guide their joint activities such as a memorandum of understanding. There are two types of formal linkages: 1) formal agreements to cooperate with extension services and 2) formal agreements to collaborate on extension activities, where joint collaboration on specific activities is defined and agreed upon.

**Farmer organizations:** Farmer organization is a generic word that includes farmer groups, farmer forum, farmer cooperatives, and other types of formal and informal collective structures.

Gender: Expected behavior and social characteristics (roles, responsibilities, decision making powers, status, access and control over resources) of men and women as determined by cultural norms in a particular community.

**Informal linkages:** These are working relationships between organizations with no written binding agreement. Multi - Stakeholder Platforms - This is a physical or virtual forum that brings together different stakeholders to interact and work together towards mutually agreed goals and objectives.

**Non-State Actors:** These entities or individuals that deliver extension services but are not part of government. Examples include; private extension providers, inputs dealers, traders, farmers' organizations and NGOs. **Private sector:** That part of the economy, which is run by private individuals or groups, usually as an enterprise for profit, and is not controlled by the state.

**Subsistence agriculture:** A type of farming in which most of the produce is consumed by the farmer and his or her household, rather than being produced for sale.

**Technical content:** All types of information, data, good practices, machinery, equipment, services, or other types of technology to be extended to beneficiaries.

Youth: Persons between the ages of 18 and 30 years.

# **Executive Summary**

The National Agricultural Extension Strategy (NAES) is derived from the National Agricultural Extension Policy 2016 and was developed through a wide consultative process. The NAES is also aligned with the Five-Year National Development Plan (NDP II) 2015-2020.

The Directorate of Extension Services (DAES) is mandated by the policy to work closely with existing MAAIF Departments and Agencies; other sector Ministries and Non- State Actors on the provision of agricultural extension services. The new strategic direction articulated in this strategy, is to transform extension from a system of parallel institutionally fragmented public and non-state actors to a well-coordinated, harmonized, regulated pluralistic service with multiple providers addressing diverse needs. The second dimension of the new direction is to address the extension needs along the entire value chain (as opposed to the previous focus on mainly primary production) and synergistic integration with other agricultural support services for optimum return on investment.

The strategy has therefore been designed based on four strategic objectives: (i) To establish a well-coordinated, harmonized pluralistic agricultural extension delivery system for increased efficiency and effectiveness. (ii) 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 (iii) To develop a sustainable mechanism for packaging and disseminating appropriate technologies to all categories of farmers and other beneficiaries in the agricultural sector (iv) To build institutional capacity for effective delivery of agricultural extension services.

The Strategy elaborates the mandates, roles and responsibilities of MAAIF, the Directorate of Agricultural Extension Services, technical Directorate and Agencies, Production and Marketing Departments of Local Governments, other relevant Ministries, Departments and Agencies as well as Non-State Actors. In particular, DAES will be the key facilitator and coordinator of all actors in extension service delivery during the implementation of this strategy.

These objectives will be vital in creating an efficient and effective agricultural extension service. The strategy has been designed with innovative approaches to not only enhance stakeholders' coverage, competencies and skills, but also to generate relevant and adequate information and knowledge base from dissemination to beneficiaries and to guide strategic interventions. The strategy also puts a premium on tracking and monitor progress, account to those concerned as well as learning and adapting for continuous improvements.

The implementation of the Strategy will require Uganda Shillings 888 billion over five years, of which UGX 294 billion will be Wage and UGX 593 billion Non Wage.

# 1. Introduction

In 2014, Cabinet approved the reform of the Agricultural Extension Services which resulted in the transfer of the extension function from the National Agricultural Advisory Services (NAADS) to a newly created Directorate of Agricultural Extension Services in the Ministry of Agriculture, Animal Industry and Fisheries (MAAIF). Under the same reform process, NAADS was reassigned the role of input distribution and strategic interventions. To enable the new Directorate to start with a clear direction and roadmap, in January 2016, the Ministry embarked on the formulation of the National Agricultural Extension Policy (NAEP) which Cabinet approved on 25th October, 2016.

To operationalize NAEP, the Ministry concurrently developed the National Agricultural Extension Strategy (NAES) which was approved by Top Policy Management in April 2016 and by Cabinet in October 2016. NAES is a detailed implementation plan for delivering the policy objectives of the NAEP. It elaborates the strategies and activities that will be implemented and the outputs that will be generated to achieve the objectives of the policy. It also defines the mandates, roles and responsibilities of various institutions and organizations that will be involved in the implementation of the Strategy. Furthermore, NAES presents the indicative budget required for implementing the Strategy as well as the results framework and the monitoring, evaluation and reporting arrangements.

### 1.2 Strategy Context

NAEP, which this Strategy will operationalize, is designed to contribute to the achievement of high level national and sector policy frameworks as well as the continental Comprehensive African Agricultural Development Program (CAADP) and the United Nations' Sustainable Development Goals. At national level, the Uganda Vision 2040 envisages a transformed Ugandan society from a peasant to a modern and prosperous country within 30 years. This transformation will be achieved, among others, through a modern and indigenous knowledge-based

agriculture as reflected in the National Agricultural Policy (NAP) whose vision is "a competitive, profitable and sustainable agricultural sector" that will be realized by "transforming the sector from subsistence farming to commercial agriculture".

The overall development and growth of the sector as stated in NAP is anchored on three strategic thrusts:
a) increasing production and productivity with a focus on selected strategic enterprises for each of the ten ecological zones in Uganda; b) strengthening capacity in technical areas of agriculture such as seeds, agrochemicals (including fertilizer), water for production, mechanization, etc.; and c) strengthening the capacity of government and non-governmental institutions in the sector to efficiently deliver productivity enhancing and regulatory services necessary for the sector's growth. Agricultural extension is one of the services that will play a pivotal role in realizing this transformation.

This role of agricultural extension has also been recognized and emphasized in all periodic national and sector development plans over the last two decades including the current National Development Plan (NDP II) (2015 /2016 - 2019/2020) and the Agricultural Sector Strategic Plan (ASSP 2015-2020). The sector strategic plan has consistently given emphasis to strengthening research and extension services, identifying and building key human resource capacity; technology adaptation and adoption at farm level including modern irrigation technologies; up scaling the transfer and utilization of food-production and labor-saving technologies for women farmers; increasing access to and use of critical farm inputs; promoting sustainable land use and soil management; nutrition and increasing access to agricultural finance with specific attention to women. All these priorities require effectively functioning extension services to realize.

The NAEP therefore, has been developed to provide long-term strategic direction for agricultural extension services in the country. The new strategic direction is to transform extension from a system of parallel

institutionally fragmented public and non-state actors to a well-coordinated, harmonized, regulated pluralistic service with multiple providers addressing diverse needs. The second dimension of the new direction is to address the extension needs along the

entire value chain (as opposed to the previous focus on mainly production) and synergistic integration with other agricultural support services for optimum return on investment. This Strategy is the vehicle for translating these policy direction into reality.

# 2. Situational Analysis

NAES is premised on lessons learnt from previous extension approaches as well as current challenges and opportunities. This section highlights these issues.

# 2.1 Previous Extension Approaches and Lessons Learnt.

Uganda has implemented several extension approaches from which valuable lessons have been gleaned to inform the development of NAES. The approaches include:

### 2.1.1 Coercive Approaches

coercive approaches to extension implemented during the pre-independence period. It was applied to introduce new crops, particularly cash crops and to enforce some priorities of the colonial administration such as adoption of soil conservation practices and household food security. The key actors in delivering extension services were the administration staff of the colonial government particularly chiefs, many of whom did not have professional training in agriculture or agricultural extension. While the practices and crops were beneficial to the farmers and communities, the approach used alienated the beneficiaries and created resentment. Consequently, the adoption was short-lived and not sustainable once the pressure was lifted. The lesson that emerges from approach is that it is important to bring the beneficiaries of extension to a place of understanding of why and how a practice or enterprise is good for them.

### 2.1.2 Demonstration Effect Approach

The demonstration effect also known as the progressive farmer approach involved provision of technical advice, inputs and credit to selected elite farmers. The rationale was to supplement the inadequate number of extension workers. In a few cases there was indeed a demonstration effect where other farmers adopted the improved farmers' practices which the progressive farmers were applying. However, some progressive farmers did not live up to expectation,

selection of farmers were defective, some farmers mismanaged the inputs provided for demonstration and others were reluctant to pass on the knowledge to other farmers. The approach therefore produced mixed results. The key lesson here was that the demonstration effect approach alone is not enough, it needed to be supplemented with other methods and better managed and supervised.

# 2.1.3 Educational and Methods approaches

These approaches focused on education of farmers and use of various extension methods to teach farmers such as training at District Farming Institutes, exposure visits, field days, radio and television programs, film shows (cinema), leaflets and posters. The approaches also placed emphasis on regular staff training. In general, these approaches resulted in improved farming practices, productivity and production. However, it was disrupted due to political turmoil which resulted unclear policy direction and at operational level low staff morale, inadequate tools and skills to undertake their duties. As a lesson, education and methods extension approach is still relevant but need to be part of a clear policy direction and require adequate resourcing.

# 2.1.4 Training and Visit Extension and Unified Extension Approaches

Uganda piloted the Training and Visit (T&V) from the mid 1980's. The approach involved a systematic planning, training of extension workers and visiting of farmers to deliver time-sensitive messages. To be effective, the approach required massive human, financial and logistical resources. It was therefore not sustainable and could not be scaled up to the rest of the country. Instead, a unified extension approach was adopted in an attempt to address the limited human resource at delivery level (Sub-county) and to enable diverse needs and challenges of the farmers to be addressed at once. In this approach, a technical officer at Sub-country level was expected to deliver extension messages on all subject matters including crops, livestock, fisheries, etc. Since the staff were not

prepared for this approach right from their training, it was a challenge to maintain the integrity of the technical content and methodology. The key lesson here is that extension workers need to be adequately equipped with content and methodolog to deliver them to beneficiaires.

# 2.1.5 National Agricultural Advisory Service approach

Backed by an Act of Parliament, the National Agricultural Advisory Services (NAADS) was implemented from 2001 to 2014. NAADS was one of the seven pillars of the Plan for Modernization of Agriculture (PMA) - a multi-sectoral Strategy under Uganda's strategic national planning and development framework at the time – the Poverty Eradication Action Plan (PEAP).

The design of NAADS was an offshoot of the global movement in the 1990's for reforming the national extension systems in developing countries and in Uganda from the PEAP studies which found that low productivity of Ugandan farmers was attributed to poorly functioning farmer-extension-research linkages and the consequent failure of the research and extension systems to respond to the real needs of the farmers. Emphasis was placed not only on improving extension and research efforts, but doing so under institutional arrangements that had been transformed to ensure increased responsiveness to farmer's needs.

Accordingly, the role of planning, implementation, monitoring and evaluation of advisory services would be shifted to farmers, with the local governments playing a predominantly facilitating and supervisory roles. Thus, NAADS was designed on the principles of: farmer empowerment, poverty targeting, gender mainstreaming, deepening decentralization, commercialization, fostering participation, managing natural resource productivity, increasing institutional efficiency, privatization, and market access.

The NAADS approach, marked a transition from a public sector supply-driven approach that characterized previous models to a private sector demand-driven and public funded extension service delivery system.

Although high levels of investment were made in NAADS implementation, the reform failed to deliver the expected transformation and was halted in 2014. The Inter-ministerial Technical Committee that was formed to review and reform extension services in the Country identified a number of factors that were both of design and implementation nature that negatively affected the NAADS program. These included:

- 1. The program was designed to be implemented alongside all seven pillars of PMA but it turned out that five of the seven pillars of PMA were never operationalized. As a result NAADS was progressively loaded with other responsibilities other than extension.
- 2. The NAADS design assumed that the public extension staff in local governments would be laid off and retooled to form a critical mass of service providers in the private sector. This was never realized as other broad agricultural functions such as regulations and inspection had to be attended to in local governments.
- 3. It was also assumed that the local government had sufficient technical capacity to implement the program. Decentralization however, had not taken root and local governments were grappling with capacity challenges.
- 4. The reform also assumed that the smallholder farmer had reached a level of development to demand, own and control the service which was not the reality in practice.
- 5. During implementation, it was expected that all institutions would play their complimentary role but there were no financial provisions made to ensure institutional compliance.
- 6. The implementation of the program was planned to be phased to enable lessons learnt to be for adapting and improved but instead it was characterized by speed as the program rapidly rolled out, without learning and adapting for improvements.
- 7. Expectation of stakeholders beyond the mandate of the NAADS program partly due conflicting messages about the program and external influence, leading to the tendency by NAADS to play multiple roles beyond what would ordinarily be expected of an extension program, notably the procurement and distribution of agricultural inputs.

8. Failure of NAADS to integrate fully with the existing decentralized extension services creating a semblance of two parallel extension service delivery systems that were in conflict.

As a result of the above challenges and in a bid to get a fresh start, Government reformed the nation extension service by transferring the responsibility and unction of delivering agricultural extension back to MAAIF by re-establishing a Directorate of Agricultural Extension at national level. As part of revitalizing the extension system, Cabinet directed the merging the NAADS structure and the District Production and Marketing departments at local government level to eliminate the parallel extension delivery systems thus creating a "single spine" extension system. It also directed the separation of procurement and distribution of inputs from the extension service delivery. Finally, Cabinet directed that the NAADS Secretariat be retained, restructured and reconfigured into a lean secretariat to focus on input chain management, strategic interventions and promotion of agribusiness and value addition technologies.

In sum, the key lessons from NAADS are:

- 1. There are different farmer types and categories with different extension service needs. Therefore it is essential to tailor approach and methods to various farmer categories.
- 2. Attaining universal coverage of extension beneficiaries is an immensely expensive venture. Public-private partnership where private sector actors deliver extension services is an option that can help with reducing the cost of extension services.
- 3. Commercial farmers can be used to provide effective extension services and a pull to move smallholder farmers to market orientation and commercialization.
- 4. There is need to have a clear separation of input delivery from agricultural extension delivery.
- 5. Overall, three broad lessons spring out from the previous extension delivery approaches. First, there has been inconsistent direction and approaches to extension. The changes of direction have been numerous and rapid thus undermining consolidation of best practices. Second, the

extension services has been mainly focused on the production segment of the value chain. As a result farmers have benefited only marginally from later segments of the value chain thus forfeiting and transferring value to other actors higher up in the value chain. It is essential to empower farmers with knowledge, skills and information to tap into the value addition segment of the value chain. Finally, the extension service has many players but they have been unrecognized, isolated from each other and uncoordinated.

## 2.2 Challenges and Constraints

A number of challenges and constraints have hindered the effectiveness and efficiency of the agricultural extension service. These are described below and these will be addressed by this strategy.

# 2.2.1 Barriers to adoption of technologies and best practices.

Several factors significantly influence farmers' demand for extension services and the adoption of improved technologies and practices; crop, livestock and fish productivity, sale of output, and house income. The main factors include gender and age of the household head, education including access to information, income sources, land and non-land productive assets, reliance on rain-fed agriculture, and access to all-weather roads. As a result, sixty eight (68%) of the agricultural households are trapped in subsistence production and are outside the money economy. These factors will be considered for the inclusive targeting of beneficiaries to maximize impact from the implementation of the interventions proposed in this strategy.

### 2.2.2 Lack of coordination and collaboration

The agricultural extension service in Uganda is fragmented and uncoordinated. The diverse players involved in the delivery of agricultural extension operate largely independently of each other and is some cases their operations are unknown and unrecognized. The players include; in the public sector - MAAIF Directorate of Agricultural Extension Services, Technical Directorates, Agencies (NARO,

Coffee Development Authority, Uganda Coffee Development Authority, etc.) and Local Governments and from the Non-State Actor; Non-Government Organization; Donor Projects; Academia and Private Sector Organizations and entities. The fragmentation has created gaps in service delivery, duplication of efforts and conflicting messages. It is essential for the agricultural extension services system to have formal and explicit mechanisms for coordination and collaboration established at every level of the extension system. This imperative is not only to create synergies and avoid redundancy during implementation of activities, but also to ensure a common message, standardizing of successful practices, and leveraging resources from the private sector, development partners, and other non-state actors.

### 2.2.3 Low coverage of extension beneficiaries:

The coverage of the extension system is very limited, estimated at 22%. This is partly a result of the downsizing of technical manpower that occurred during the restructuring of Government Ministries, Department and Agencies in the 1990's which by 2014 had increased the ratio of extension staff to farmers to over 1:5,000 compared to the recommended ratio of 1:500. Addressing this challenge will involve leveraging the capacities of all actors involved in the provision of agricultural.

### 2.2.4 Narrowly focused extension content

The subject matter content of extension has been limited to primary production which shrinks the opportunities for farmers to earn more from their product. For example, a Robusta coffee farmer can earn as much as 30% more by selling FAQ instead of Kiboko after hulling and even higher when the coffee beans are graded.

### 2.2.5 Ineffective extension approaches

Current extension delivery approaches based on face to face contact is unsustainable in light of inadequate human and financing resources. Leveraging new and innovative approaches and technologies especially ICT is pivotal for greater coverage, effectiveness and efficiency.

# 2.2.6 Inadequate budgetary allocation and scheduling

The ability of extension staff to visit targeted communities on a regular basis is hampered severely by the limited availability of transportation, fuel, and maintenance of the transport vehicles. Frequency of visits to demonstrate technologies and best practices requires visits pre-season, within the season, and post season in order to provide comprehensive educational services. Thus, it is essential to provide non-wage resources for efficient implementation of agricultural extension demonstrations, conducting field days, working with enterprises on value addition, training local traders or input suppliers on extension messages should be tied to the agricultural calendar in each district. Non-wage resources must be allocated and distributed according to a well-informed agricultural schedule or the potential impact of planned activities will be diminished.

# 2.2.7 Limited capital and access to affordable credit

Increases in agricultural productivity, enterprise performance, and input supply efficiency are directly affected by the ability of value chain actors to access finance. It will be very important for extension service staff to explore various options to facilitate access to finance where possible and with different actors in the targeted value chains.

#### 2.3 Opportunities

Despite the many challenges and constraints hampering agricultural extension in Uganda, several opportunities and advantages exist that can be exploited to established an effective and efficient agricultural extension service.

### 2.3.1 Availability of numerous Non State Actors

Agricultural extension in no longer the preserve of government. Several non-state actors are now actively involved in agricultural extension provision. These include private sector firms and umbrella organizations, cooperatives, Non-Governmental organization, Development partner projects, training and research institutions. This presents opportunities to expand coverage, share experiences and create greater overall impact.

### 2.3.2 Technological Advancement

Advancement in technology, especially information communications technology (ICT) has created a huge opportunity in extension service delivery. Globally and in Uganda, the application of ICT in agricultural extension also known as e-extension is expanding rapidly. This will be exploited to the greatest extent during the implementation of this strategy.

# 2.3.3 Potential for improved food security, productivity and incomes

One of the drivers of increased uptake of new technologies is the value that accrues to the beneficiaries in terms of improved food security, productivity and household incomes. Evidence from various studies indicate that yield gaps in Uganda between research and farm level for most enterprises is well over 50% and in some cased up to 80%. With increased productively, food security will improve and higher level of surplus will remain for sale combined with dedicated cash crops, household incomes will be enhanced. This is an opportunity and rationale for this Strategy, which provides the knowledge base for those outcomes.

# 2.3.4 The need to operationalize other sub-sector policies and strategies

The operationalization of a number of agriculture sub-sector policies and strategies are heavily reliant on effective extension system. Examples include the National Fertilizer Policy and Strategy, the National Seed Policy and Strategy, the National Coffee Policy and Strategy, the National Fisheries Plocy, the National Animal Feeds Policy and Zoning Strategy. NAES therefore presents a golden opportunity to operationalize these sub-sector policies and strategies to achieve higher level goals and objectives of the sector.

# 3. Strategic Direction

### 3.1 Development Problem

Ineffective agricultural extension service delivery limits the wide-scale adoption of appropriate and sustainable agricultural technologies that are essential for increasing production, productivity, incomes, exports, and food security.

### 3.2 New Strategic Direction

The new strategic direction is to transform extension from a system of parallel institutionally fragmented public and non-state actors to a well-coordinated, harmonized, regulated pluralistic service with multiple providers addressing diverse needs. The second dimension of the new direction is to address the extension needs along the entire value chain (as opposed to the previous focus on mainly primary production) and synergistic integration with other agricultural support services for optimum return on investment.

# 3.3 Vision, Mission, Goal and Guiding Principles

**Strategic Vision:** Development of a competitive commercial agriculture sector by transforming it from a predominant subsistence base.

**Strategic Mission:** Promote application of appropriate information, knowledge, and technological innovations for commercialization of agriculture.

**Strategic Goal:** To establish and strengthen a sustainable farmer-centred agricultural extension system for increased productivity, household incomes and exports.

It builds on lessons learned from previous extension approaches including NAADS and incorporates many of the fundamental ideas and practices required by the extension services to deliver quality and timely information, share knowledge and build linkages across key-commodity value chains.

Objective 1: To establish a well-coordinated, harmonized pluralistic agricultural extension delivery system for increased efficiency and effectiveness.

- **Specific objective 1.1:** Establishment of an effective organizational and institutional framework for pluralistic agricultural extension services
- **Specific objective 1.2:** Human Resource Management and Capacity Development
- **Specific objective 1.3:** Regulation and quality assurance of extension services

Objective 2: 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

- **Specific objective 2.1:** Farmer organizations and empowerment
- **Specific objective 2.2:** Targeting youth, gender and other vulnerable groups

Objective 3: To develop a sustainable mechanism for packaging and disseminating appropriate technologies to all categories of farmers and other beneficiaries in the agricultural sector

- **Specific objective 3.1:** Technology Development, Packaging and Dissemination
- **Specific objective 3.2:** Agribusiness Development Services and Market Linkages
- **Specific objective 3.3:** Agricultural Knowledge Management and Information System

Objective 4: To build institutional capacity for effective delivery of agricultural extension services.

- **Specific objective 4.1:** Human resources management and capacity development
- **Specific objective 4.2:** To strengthen agricultural education and training

### **Guiding Principles**

To realize the foregoing objectives and specific objectives, implementation of this strategy will be guided by the following principles:

**Decentralization:** Provision of agricultural extension shall continue to be a decentralized function with MAAIF providing technical support and backstopping in line with the decentralization policy. However, the officer responsible for coordinating extension services at district level shall report directly to the MAAIF Directorate of Agricultural Extension Services for technical guidance.

**Supply of inputs:** MAAIF through the respective regulatory departments crops, animal and fisheries sub-sectors shall play a regulatory function in the distribution of farm inputs. Extension personnel shall not be directly involved in distribution of farm inputs. The supply of agro-inputs shall remain a function of the private sector including farmers' groups.

Empowerment and inclusive participation: The concept of farmer empowerment shall be continued and treated as one of the core pillars of agricultural extension services. Farmers' organizations shall be empowered to serve as active partners of the extension service in planning, implementation and monitoring and evaluation of activities. This principal also includes mainstreaming of gender and youth issues into the policy framework and integration of gender and youth concerns into implementation plans.

Partnerships: Agricultural extension is part of a broad agricultural system and shall not be treated as an isolated component. Consequently, there shall be enhancement of existing and creation of new partnerships and linkages between the public extension service and other agricultural service providers as well as with others partners in the agricultural innovation system such as agricultural research, entrepreneurs (farms & firms), financial and infrastructure services and market actors, including consumers.

**Quality assurance:** Farming is one and should continue to receive the same message irrespective of

the source. Agricultural extension service providers shall be regulated to ensure that farmers are protected from unqualified extension agents. Monitoring and Evaluation of extension shall be a permanent feature during Strategy implementation. Career growth and in-service training for extension personnel shall be an embedded value in the extension system. A code of practice with norms, standards, registration and accreditation shall be developed for agricultural extension agents.

**Pluralistic:** A multiple service provider system. Public agricultural extension shall define the agricultural extension policies at national level and provide overall leadership in coordination of agricultural extension in general throughout the country including agricultural extension services by the private sector, farmers and civil society organizations, and any other agencies.

Demand-led, market orientation: Understanding, identification and addressing farmers' technological needs, especially in response to the domestic and external market shall constitute a major driver of the extension service. This will require the participation of both state and NSAs using a well-coordinated multi-pronged approach. Strategic engagement with NSAs especially the private sector and civil society organizations to deliver harmonized extension service shall be prioritized. At farmers' level interventions shall include mindset change to enhance productivity and increase collective action for value addition, manufacturing and marketing.

Resource mobilization: Provision of agricultural extension services to smallholder resource poor farmers shall continue to be regarded as public good and appropriately resourced. Emphasis will be on promotion of multi-institutional networking and collaboration to leveraging existing technical capacities and additional resources for deepening extension in scope and geographical coverage.

**Farmer categorization:** Interventions shall consider the different categories of farmers in terms of degree of commercialization and market orientation and resource endowments.

# 4. Objectives, Strategies, and Activities

This National Agricultural Extension Strategy is a five year plan for extension service development that began in FY 2016/2017 and continuing until FY 2020/2021.

This strategy details a set of 4 objectives, 10 specific objectives and 50 explicit strategies to support the objectives to make the National Agricultural Extension System more effective and more efficient in the delivery of information, best practices and other technologies to an array of beneficiaries.

The objectives and strategies developed in this document follow the policy areas and strategies included in NAEP document.

Objective 1: To establish a well-coordinated, harmonized pluralistic agricultural extension delivery system for increased efficiency and effectiveness.

Agricultural extension service delivery system is fragmented, uncoordinated, lack functional linkages, have no clear guidelines, is unregulated and not gender responsive; making it ineffective and inefficient. To address these challenges, Government established the Directorate of agricultural extension service to coordinate extension services countrywide including public and Non-State providers. In line with the principle of pluralism, Not-State extension providers will be recognized and their work coordinated and supported in order to reach out to various categories and larger number of beneficiaries including farmers and other actors along commodity value chains. Examples of Non-State actors include private service providers, vertically integrated companies with outgrowers schemes, cooperatives, NGOs, farmers/ producer organizations, inputs dealers, processing and marketing companies. Most of these actors are already providing agricultural extension services.

**Specific Objective 1.1** Establishment of an effective organizational and institutional framework for pluralistic agricultural extension services.

**Strategy 1.1.1.** Develop and formalize functional linkages with key actors in the agricultural extension system at national and local government levels to facilitate coordination and collaboration.

#### **Activities:**

- Map and profile all relevant state and nonstate actors in the agricultural extension system including existing multi-stakeholder platforms/ networks.
- 2. Identify partners and collaborators at national and district levels; develop and sign specific work agreements that specify roles and responsibilities, operational plans, M&E and financing arrangements.
- 3. Establish a zonal multi-sectoral forum comprised of representatives from Districts, NSA, Research and other actors for joint planning, review and harmonization of activities.

**Strategy 1.1.2.** Review and update existing DAES, District, Sub-county and Agencies organizational structures and implement recommended changes to ensure adequate coverage at oversight, technical and implementation levels country-wide.

- 1. Review and adjust job specifications and descriptions for all personnel of DAES and relevant departments in local governments so as to align with the NAEP requirements and provide for the functions of nutrition and home economics, agribusiness and enterprise development, data and information management and coordination.
- 2. Recruit staff to fill the new positions in the District Production and Marketing Office.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Updated job specifications/descriptions for all extension personnel at national and local government levels.</li> <li>Adjusted DAES organizational structure.</li> <li>The 3 new positions established at district level are filled</li> </ul>	Year 2017/18– Q1 & Q2

**Strategy 1.1.3.** Establish operational procedures and decentralized planning guidelines for the various functions of the agricultural extension service.

### **Activities:**

- 1. Develop a gender responsive agricultural extension services operational guidelines and manuals for all extension personnel.
- 2. Orient and sensitize all District and Sub-county extension staff, NSAs, and the general public on the new NAEP and NAES and the operational guidelines and manuals.
- 3. Conduct semi- annual and annual joint meetings at national, district and sub-county levels to plan, budget and review extension activities for representatives of key stakeholders from district production and marketing office, private sector, NGO/CSOs, and partners and DAES.
- 4. Harmonize plans, activities and budgets across districts.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>District planning &amp; budget workshops (2/yr.)</li> <li>Procedures defined and documented</li> <li>Approved extension services operations manual.</li> <li>Sensitization materials on the NAEP and NAES developed and disseminated</li> </ul>	Year 2017/18– Mostly Q1& Q2; some Q3 & Q4

Strategy 1.1.4. Set up mechanisms for collaboration with all actors in the agricultural extension service delivery system with clear definition of roles and responsibilities.

#### **Activities:**

1. 1. Develop standardized protocols, templates for MOUs, agreements; and the inventory of entities and partnerships.

- 2. Develop a comprehensive M&E framework to track implementation of collaboration and coordination arrangements.
- 3. Establish and operationalize reporting and feedback mechanisms on all linkages and partnerships at all levels.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Director & Commissioners	<ul> <li>Standardized protocols and templates developed and disseminated</li> <li>M&amp;E framework developed</li> <li>Feedback mechanisms established and operationalized</li> </ul>	Year 2017/18– Q1 & Q2

**Strategy 1.1.5.** Review, develop and update legal instruments related to the policy and strategy implementation.

- 2. Develop statutory instruments for regulation of agricultural extension services
- 3. Review of the Universities and Other Tertiary Institutions Act (2001)

#### **Activities:**

1. Enact a new law (National Agricultural Extension Act) to support the implementation of NAEP.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Director & Commissioners	<ul> <li>The National Agricultural Extension Act enacted</li> <li>Statutory instruments for regulation of agricultural extension services developed</li> <li>The Universities and Other Tertiary Institutions Act (2001) revised</li> </ul>	Year 2017/18– Q1 & Q2

**Specific Objective 1.2** Regulation and quality assurance of extension services

**Strategy 2.2.1.** Develop and enforce regulations and standards, guidelines and a code of ethics for extension service providers; knowledge, information and other extension products and processes; in line with relevant regional and international standards.

#### **Activities:**

1. Bench mark and develop good practices in regulation and quality assurance of extension services in other countries.

- 2. Set code of ethics and performance standards for extension providers, extension products and processes.
- 3. Conduct validation workshops for the ethics and standards.
- 4. Publish a handbook of ethics and standards for agricultural extension.
- 5. Disseminate the guidelines, code of ethics and standards for extension through workshops, media, and wide distribution of the hand book using electronic and other channels.
- 6. Enforcement of quality assurance standards.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Director & Commissioners	<ul> <li>Learning visits conducted</li> <li>Code of ethics and standards written and validated</li> <li>Dissemination sessions held and handbook on standards and ethics published</li> <li>Enforcement undertaken</li> </ul>	Year 2017/18– Q2& Q3

**Strategy 2.2.2** MAAIF will establish mechanisms for registration and accreditation of extension service providers.

- 1. Establish a multidisciplinary agriculture extension registration committee.
- 2. Generate a list of requirements for registration & accreditation of service providers.
- 3. Develop registration & accreditation documents e.g. certificates.
- 4. Establish and support a mechanism for vetting applicants for registration.
- 5. Mobilization and sensitization of all stakeholders.
- 6. Registration of service providers and establishment of a data base.
- 7. Continuous updating of the database.
- 8. Publication and dissemination of data base.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Committee established and functional</li> <li>Registration and accreditation procedures defined and approved</li> <li>Sensitization of stakeholders undertaken</li> <li>Registration of service providers initiated and updated</li> <li>Database established</li> </ul>	Year 2017/18– Q3 & Q4 & On-going

Objective 2: To empower farmers and other value chain actors (including youth, women and other vulnerable groups) to effectively participate and benefit equitably from agricultural extension processes and demand for services

As noted earlier, coercive and supply driven extension services are not sustainable. Beneficiaries must appreciate, understand and contribute to the design and delivery of agricultural extension services. Accordingly, NAES provides for the active participation of farmers and other value chain actors in the identification of the needs and problems as well as prioritization of solutions to address them. This will be achieved through a participatory planning

**Specific Objective 2.1.** To support farmer institutional development to effectively participate in agricultural extension processes and demand for services

**Strategy 2.1.1** Development of capacity of farmers and other value chain actors in production, agribusiness skills, value addition and post-harvest management through systematic training programs as a way of professionalising the farming community.

process that starts at the grassroots facilitated by frontline extension workers for various providers. For the public extension system, farmers priorities identified through planning process will be developed at Sub-county and consolidated at district level using the already well documented planning processes for Lower and Higher level local governments. Another important way of empowering farmers will be achieved through farmer leadership and entrepreneurial skills development. Farmers' leadership will be trained in the new extension system. These trainings will be conducted at the existing training institutions such as the Kapingiriza Farmer Leadership Training Centre and District Agricultural Training and Information Centres (DATICs).

- 1. Conduct studies for farmer profiling and capacity needs assessment along the entire value chain (from production to consumption).
- 2. Implement farmer capacity development activities tailored to needs of the respective farmer categories.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Assessments conducted</li> <li>Capacity development activities implemented</li> </ul>	Year 2017/18– Q1 & Q2 On-going

Strategy 2.2 Strengthen farmer organizations.

#### **Activities:**

- 1. Profile existing farmer organizations and create a database for all farmer groups/organizations in the country.
- 2. Review existing farmer institution development guidelines and update them to address identified gaps.
- 3. Mobilize farmers to form viable groups/ organizations.
- 4. Build capacity/train groups leaders and sensitize farmers.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Existing farmer organizations profiled</li> <li>Guidelines developed</li> <li>New farmer organizations formed</li> <li>Trainings conducted</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.3** Establish a mechanism of building the capacity of farmers to be able to demand for agricultural programmes and services.

#### **Activities:**

1. Sensitize and create awareness about available agricultural services.

- 2. Promote multi-media messages aimed at farmer mindset change towards attaching value to extension advice and willingness to pay.
- 3. Establish a system for farmers to provide feedback about performance of extension services and hold service providers accountable.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Farmers sensitized</li> <li>Multi-media messages for mindset change developed and widely disseminated</li> <li>Farmer feedback and accountability systems established</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.4** Provide targeted support and guidance to promote good governance in farmers' collectives/ groups such as associations and cooperatives.

### **Activities:**

1. Establish standards and guidelines for good governance.

- 2. Perform regular auditing of the farmer organizations using the guidelines.
- 3. Sensitize farmers on the roles and responsibilities of group members in ensuring good governance.
- 4. Train farmer group leaders in good governance.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Standards and guidelines developed</li> <li>Audits conducted</li> <li>Farmers sensitized</li> <li>Group leaders trained</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.5** Transform farmers' organizations into farmer owned commercial entities well integrated into value chains for better markets linkages (at local, regional, and international levels), and access to other support services.

#### **Activities:**

1. Sensitize and promote sustainable production of area specific commodities/enterprises.

- 2. Equip the members of farmer organizations with entrepreneurship skills.
- 3. Strengthen the linkage of existing farmers' organizations to markets and financial services.
- 4. Support the integration of farmers' organizations into profitable value chains.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Farmer organizations trained</li> <li>Market linkages developed</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Specific Objective 2.3** Targeting gender, youth, and other vulnerable groups in extension service delivery.

Women and youth are unique groups in agricultural extension in Uganda. Women provide 70% of the labour force in agriculture and youth account for 65% of the population in rural areas of Uganda. This strategy therefore provides for special attention to their needs. The planning, implementation and monitoring processes will disaggregate their participation, needs and benefits. Interventions in enterprise selection and value chain development will be tailored to their unique needs and challenges.

**Strategy 2.3.1** MAAIF will develop operational guidelines, procedures and M&E of the extension system that are gender responsive.

#### **Activities:**

- 1. Review and adapt guidelines on integration of gender, youth and vulnerable groups into extension services.
- 2. Disseminate the guidelines and operational procedures on gender.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Guidelines developed and adopted</li> <li>Guidelines disseminated to all actors</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.3.2** MAAIF will prioritize capacity development on gender responsiveness for all staff at national and local government levels.

- 1. Conduct training needs assessment for all staff at national and local levels.
- 2. Conduct training of extension personnel.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Training needs assessments conducted</li> <li>Training activities implemented</li> </ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.3.3** MAAIF will promote special targeting of poor men, women and vulnerable groups through affirmative actions, and guiding NSAs to reach out to under-served areas.

#### **Activities:**

1. Assess the needs of the poor and vulnerable groups.

- 2. Integrate the identified needs into the agriculture extension plans.
- 3. Develop guidelines/affirmative actions to target vulnerable groups.
- 4. Disseminate the guidelines.
- 5. Monitor and evaluate the implementation of the guidelines.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul><li>Assessments completed</li><li>Guidelines developed and disseminated</li><li>Activities monitored</li></ul>	Year 2017/18– Q1 & Q2 On-going

**Strategy 2.3.4** Promote youth involvement through capacity building and linkage to service providers.

#### **Activities:**

- 1. Mobilize the youth into interest groups.
- 2. Identify and assess the unique youth technology and capacity needs.
- 3. Develop and implement initiatives that address identified priority needs.
- 4. Promote experiential learning through visits to the piloted technologies.
- 5. Develop work plans and budget to roll-out the technologies to youth groups.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Youth interest groups formed</li> <li>Technologies and capacity needs assessed</li> <li>Experiential learning activities implemented</li> </ul>	Year 2017/18– Q1 & Q2 On-going

# Objective 3: To develop a sustainable mechanism for packaging and disseminating appropriate technologies to all categories of farmers and other beneficiaries in the agricultural sector

Most of the current extension content contains blanket recommendations that are not tailored to variations arising from agro-ecological zones and diversity of farmers' based on their differing resource levels and objectives. As a result such content are sometimes inappropriate for some locations and categories of farmers. Additionally, because of multiple providers who are not coordinated and do not operate under any known standards and ethics, there is no guarantee that extension beneficiaries are receiving appropriate messages and information. Under this strategy, a Standard Operating Procedure (SOP) will be developed that brings together sources of technologies e.g. research institutions, and channels of delivery (extension providers) and users

of technologies (farmers' representatives) to package appropriate content for deliveries to beneficiaries. Given that NARO is currently the main source of technologies and is also responsible for coordinating the National Agricultural Research System, MAAIF/ DAES will interface with NARO research and strengthen the model that was established under NAADS and passed onto the new Directorate of Agricultural Extension Services. Zonal Agricultural Research and Development Institutes (ZARDIs) will also have a role in generating, adapting and testing technologies in collaboration with the districts. The district subject matter specialists (District Adaptive Research Support Teams – DARSTs) will play a role in testing and adapting technologies to their respective locations and providing feedback of performance for further improvements. The Multi-Stakeholders Innovations Platforms (MSIPs) that are in place will play a role in review and validating extension content.

**Specific objective 3.1:** To develop, package and disseminate appropriate technologies.

**Strategy 3.1.1** MAAIF will develop standard operating procedures for development, sourcing, packaging, testing and dissemination of extension materials.

#### **Activities:**

- 1. Constitute a technical team from MAAIF and agencies, LGs, NARO, Academia, farmers' organizations, and NSAs to develop the Standard Operating Procedures (SoPs).
- 2. Review and harmonize available procedures for development, sourcing, repackaging, testing and dissemination of extension materials.
- 3. Carry out national and regional consultative meeting on SOPs with stakeholders.
- 4. Carryout validation of the SOPs by stakeholders.
- 5. Popularize and disseminate the SOPs.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Technical team formed and operational</li> <li>Procedures reviewed and harmonized</li> <li>SOPs developed and approved</li> <li>SOPs disseminated</li> </ul>	Year 2017/18- Q1 & Q2

**Strategy 3.1.2** MAAIF will strengthen a formal working relationship with NARO and other research organizations/institutions to ensure participation of the extension services and farmers in identification, testing, evaluation and up-scaling of technological solutions including indigenous knowledge.

- 1. Establish formal agreements (MOUs) with research organizations/institutions defining joint activities, roles, responsibilities, plans and budgets.
- 2. Undertake regular participatory rural appraisals, technical analyses, and convene multi-stakeholder

- workshops for identifying priority research areas.
- 3. Disseminate the identified research priority areas to research institutions to influence the research agenda.
- 4. Develop guidelines for identification, testing and evaluation and up-scaling of technological solutions.
- 5. Develop and strengthen Multi-Stakeholder Innovation Platform (MSIPS) at different level s (National, Zonal, District, Sub counties).
- 6. Hold joint annual review workshops (National, Zonal &District) on research/extension results and forward planning.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Director & Commissioners	<ul> <li>Joint workshops conducted</li> <li>Formal agreements signed</li> <li>Guidelines developed and approved</li> <li>Multi-stakeholder workshops conducted</li> <li>National agricultural research agenda developed, disseminated and regularly updated</li> </ul>	Year 2017/18– Q1 & Q2 Yearly updates

**Strategy 3.1.3** MAAIF will establish technical content validation committees (suited to the diverse technical areas) managed by DAES and mandated to review and validate technical content and extension materials intended for delivery to beneficiaries. These committees will include members from MAAIF agencies, academic institutions and partners as appropriate.

#### **Activities:**

1. Constitute and orient the members of the technical content validation committees on their roles and responsibilities.

- 2. Support committee activities to validate and disseminate technical content and extension materials.
- 3. Develop, package, and disseminate technical guidelines/manuals on agricultural extension and advisory services in livestock, crops, fisheries, entomology, agribusiness value chains and other areas.
- 4. Collect and register feedback from stakeholders on disseminated technical content and extension materials.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Committee established, oriented and functional</li> <li>Extension technical manuals on key areas developed and regularly updated</li> <li>Feedback collected</li> </ul>	Year 2017/18– Q1 & Q2 Yearly updates

Strategy 3.1.4 Review/develop, test, utilize, and promote approaches and methods (including e-extension) that are cost effective, suited to the respective technical content, ensure wide coverage, and timely access to all categories of beneficiaries (e.g. youth, women; small-scale and large scale commercial farmers; other value chain actors). The existing approaches that are in used that should be review and recommended to extension providers include; participatory learning extension, community based extension approaches, farmer to farmer extension, multi-stakeholder innovations platforms, farmer field schools and e-Extension.

- 1. Conduct a scoping study and assessment of extension approaches and methods (including e-extension, gender and nutrition sensitive, youth targeting, and market oriented) to identify good practices.
- 2. Benchmark good practices in e-extension; gender responsive, nutrition sensitive, pro-poor, and market oriented extension approaches by visiting selected countries.
- 3. Develop promising extension approaches and methods.
- 4. Pilot test the approaches and methods, evaluate and refine.
- 5. Promote cost effective and efficient approaches and methods.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners Consultants	<ul> <li>Scoping study report</li> <li>Benchmarking visits conducted and good practices documented</li> <li>Delivery approaches designed, piloted, evaluated and refined.</li> <li>Promising delivery approaches disseminated</li> </ul>	Year 2017/18– Q2 & Q3

**Strategy 3.1.5.** MAAIF will review global and regional market trends and develop appropriate extension content.

#### **Activities:**

1. DAES in collaboration with the Department of Agricultural Policy and Planning, and Ministry of Trade Industry and Cooperatives will conduct regular Global/Regional/domestic market surveys to establish trends in the market (Preferred commodities, required standards, required volumes, Prices etc.)

- 2. Constitute a technical team comprised of members from MAAIF, MTIC, NARO, Universities, UNBS, Export Promotion Board) to develop appropriate extension approaches and content based on the Global/Regional/domestic market trends.
- 3. Develop, validate, and publish extension materials and content to cater for Global/Regional market interests.
- 4. Train selected DAES Trainers on use of the extension materials
- 5. Periodically review and update the market trends and extension delivery and technical materials/approaches.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Global/regional/domestic markets analysis conducted</li> <li>Technical information packages developedand disseminated</li> <li>Trainings conducted</li> <li>Market Information disseminated</li> </ul>	Year 2017/18– Q3 & Q4 On-going research

**Strategy 3.1.6.** MAAIF and agencies shall document and validate innovations, best practices and proven appropriate technologies for promotion in the field as well as guiding the development of national standards.

#### **Activities:**

1. Develop Terms of Reference for documentation of innovations, best practices, and proven technologies.

- 2. Constitute a multidisciplinary team to profile and document innovations, best practices, proven technologies.
- 3. Validate documented innovations, best practices, proven technologies.
- 4. Publication and dissemination of the documented innovations, best practices, proven technologies.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & Consultants	<ul> <li>TORs developed and teams formed</li> <li>Innovations documented and validated</li> <li>Innovations and best practices disseminated</li> </ul>	Year 2017/18- Q1 & Q2 Initiation (ongoing)

**Strategy 3.1.7** MAAIF shall promote the integration of technical services and other software activities under irrigated agriculture, livestock watering, farm power and machinery, farm planning systems, soil and water management, postharvest handling and agro-food processing into field extension services.

#### **Activities:**

 Develop guidelines for integration of water for production, farm power & machinery, farm planning systems, Soil and Water management, post-harvest handling, food processing into the field extension services.

- 2. Develop relevant extension content/materials.
- 3. Train selected trainers from LGs and NSAs on the guidelines and extension content who would in turn train other LG staff and NSAs.
- 4. Conduct training for Local Government Production and Marketing staff in all districts.
- 5. Establish demonstrations in the Districts and provide demonstration packages/kits.
- 6. Technical backstopping by MAAIF Subject Matter Specialists.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Guidelines and extension materials developed</li> <li>Technical services integrated across all disciplines</li> <li>Trainings conducted</li> <li>Backstopping conducted</li> </ul>	Year 2017/18– Q3 & Q4 On-going

**Strategy 3.1.8.** MAAIF in partnership with relevant MDAs, climate change units, local governments and non-state actors shall develop, package, and disseminate climate change adaptation and mitigation technologies and information to ensure resilient and sustainable cropping, fisheries, and animal systems.

#### **Activities:**

- 1. Review/develop/identify and package appropriate climate change adaptation technologies in collaboration with research organizations.
- 2. Disseminate vetted and tested climate change adaptation technologies.
- 3. Carry out regular coordination meetings with NSAs, other Ministries Departments and Agencies through existing institutions and stakeholder

- platforms to harness and guide initiatives on climate change and environmental management issues.
- 4. Carry out joint monitoring with NSAs, other Ministries Departments and agencies through existing institutions and stakeholder platforms to harness and guide initiatives on climate change and environmental management issues.
- 5. Conduct capacity building trainings for staff from NSAs, other Ministries Departments and agencies through existing institutions and stakeholder platforms to harness and guide initiatives on climate change and environmental management issues.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Technologies identified, developed, tested, and disseminated</li> <li>Technologies monitored and evaluated</li> <li>Coordination meetings conducted</li> <li>Training programs conducted</li> </ul>	Year 2017/18– Q3 & Q4 On-going

**Specific objective 3.2** Agricultural Knowledge Management and Information System

**Strategy 3.2.1.** DEAS will establish a decentralized one-stop-center for agriculture extension knowledge and information that is comprehensive and meets the needs of the users. The centre will be serviced by an integrated national backend ICT enabled knowledge and information systems for agriculture.

#### **Activities:**

1. Build the capacity building of staff in MAAIF and Local Governments to enable them establish and manage one-stop centers for comprehensive

- Agricultural extension information and knowledge.
- 2. Establish and manage the one-stop centres at national and district levels.
- 3. Develop Standard Operating Procedure for the centres.
- 4. Set up a web-based technology to make the system available within the region.
- 5. Establish a farmer call center to get quick information
- 6. Training of farmers and Extension Workers in the use of ICT.
- 7. To established a functional system for technology transfer from research to farmers

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul><li>One-stop-centers designed and established</li><li>Staff trained to manage the centres</li></ul>	Year 2017/18- Q3 & Q4

**Strategy 3.2.2.** Establish an integrated and dynamic system for the sub-sector statistics in collaboration with other actors and sources to improve access and use of information generated.

# 5.3.2 Acquire hardware and software and establish data base management system/packages for the sector statistics at MAAIF and in the Local Governments.

5.3.3 Support DAES personnel and LGs workers to collect, analyze and disseminate agricultural statistics and information routinely.

### **Activities:**

5.3.1 Build the capacity building of staff in MAAIF and the Local Governments to establish and manage the system.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & Planning Department/Statistics Office	<ul> <li>MAAIF and District trainings conducted</li> <li>Equipment and software procured</li> <li>Agreements formalized and signed</li> <li>Data collected, processed, and disseminated routinely</li> </ul>	Year 2017/18– Q3 & Q4 On-going

**Strategy 3.2.3.** Promote the sharing of agricultural knowledge and information through value added information products in print, electronic and web mode for all categories of users including beneficiaries and service providers. The system will also have an inbuilt mechanism for soliciting feedback from users.

- 1. Organize periodic stakeholders meetings to share value added Agricultural knowledge and information.
- 2. Produce and distribute extension newsletters, magazines, leaflets, brochures and other information products to stakeholders.

- 3. Upload research findings, agricultural statistics, success stories, weather predictions and other information products on the Ministry's website.
- 4. Publicize the Ministry / Directorate's website in the print, electronic and other media and update it regularly.
- 5. Develop radio spot messages and conduct radio talk shows on value added agricultural knowledge and information.
- 6. Put in place mechanism/system integrated with various channels such as social media, phone and email to share and exchange information in real time.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Stakeholder meetings conducted</li> <li>Extension materials and radio spot messages developed and distributed</li> <li>Information archived and posted on website</li> </ul>	

**Strategy 3.2.4.** Build the capacity of MAAIF and other actors in agricultural knowledge management and communication.

#### **Activities:**

- 1. Train MAAIF and Local Government staff and other actors in Agricultural knowledge management and communication.
- 2. Acquire hardware and software for Agricultural knowledge management and communication at MAAIF and in the Local Governments.
- 3. Provide backstopping on implementation of Agricultural knowledge management and communication.
- 4. Ensure operation and maintenance of the Agricultural knowledge management and communication hardware and software.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul><li>Trainings conducted</li><li>Hardware and software procured</li><li>Backstopping conducted</li></ul>	Year 2018/18– Q3 & Q4 Yearly Updates

**Specific objective 3.3** Agribusiness development services and market linkages established

**Strategy 3.3.1.** MAAIF shall profile and map public and NSAs involved in agribusiness and market linkages and establish mechanisms for collaboration with them.

### **Activities:**

- 1. Profile and map public and NSAs involved in agribusiness & markets.
- 2. Establish and operationalize a Multi-Stakeholder Platforms (MSPs) at national, regional & district levels to engage and strengthen collaborative networks with all actors.
- 3. Conduct periodic joint workshops with MSP actors to design joint activities, and formalize MOUs.

**Strategy 3.3.2.** MAAIF will strengthen agribusiness services to ensure farmers and other value **cha**in actors make informed investment decisions.

- 1. Conduct capacity needs assessments to identify knowledge and skills gaps amongst farmers & other value chain actors in agribusiness, value addition, and post-harvest management.
- 2. Design and conduct tailor made training courses (skills improvement) for farmers & other value chain actors.
- 3. Establish field demonstrations and organize, and support exchange visits/study tours and other capacity building activities for farmers & value chain actors.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Assessments conducted</li> <li>Training courses designed and conducted</li> <li>Demonstrations and other delivery mechanism organized and conducted</li> </ul>	Year 2017/18– Q3& Q4 On-going

**Strategy 3.3.3** Establish a system for collecting, regular updating and sharing of profitability, gross margins and cost-benefit analyses of priority enterprises.

#### **Activities:**

1. Design economic and market data collection tools to be used by extension workers to collect, collate, and distribute data and information on economic conditions of various enterprise.

- 2. Set up economic and market data collection & reporting system from sub-county, district levels to MAAIF/(DAES).
- 3. Promote record keeping at farmer's level & other value chain actors.
- 4. Disseminate information on profitability of enterprises to farmers and other actors.
- 5. Create a database for agribusiness information and knowledge sharing on the various enterprises

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Economic data collection tools and methodology developed and approved</li> <li>Record keeping trainings conducted</li> <li>Economic information packaged and disseminated.</li> <li>Database on agribusiness established</li> </ul>	Year 2017/18– Q3 & Q4 On-going

**Strategy 3.3.4.** Establish a system for linking farmers and other value chain actors to support services including input suppliers, markets outlets, aggregators (local, regional, international) and financial services.

#### **Activities:**

1. Conduct joint workshops to assess support service needs of farmers and other value chain actors,

- and establish collaborative activities, budgets, and formalize agreements with relevant private sector actors.
- 2. Develop platforms through which farmers and other value chain actors interact with inputs suppliers, financial institutions, etc.
- 3. Design information sharing/dissemination channels to farmers on agro-inputs, markets and financial services.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Joint workshops conducted</li> <li>Platforms established and operationalized</li> <li>Information sharing channels designed and operationalized</li> </ul>	Year 2017/18– Q3& Q4 On-going

**Strategy 3.3.5.** Promote demonstrations/incubation centres for product development, value addition and agro processing.

### **Activities:**

1. Identify products to be promoted and demonstrated in demonstration/incubation

- centres.
- 2. Design and implement demonstration/incubation centres through public private partnerships focused on strategic enterprises.
- 3. Document and disseminate results/lessons of demonstrations/incubation centres.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Incubation centres set up</li> <li>Products for promotion identified</li> <li>Incubation centers evaluated and lessons disseminated</li> </ul>	Year 2017/18– Q3& Q4 On-going

**Strategy 3.3.6.** Identify and support successful farmers and private organizations to develop into hubs for farmer training and innovation sharing through public private partnerships(PPP).

#### **Activities:**

1. Conduct scoping studies to identify, profile,

- and map successful farmers and other actors producing priority strategic commodities.
- 2. Designate successful farms and other enterprises as centers of excellence & learning
- 3. Establish PPP for promoting sharing and exchange of innovations and learning at local level.
- 4. Undertake exchange/learning visits.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners & District Production and Marketing Coordinator	<ul> <li>Successful farmers and other enterprises identified and profiled</li> <li>Model farms/enterprises designated centres of excellence</li> <li>PPP arrangements formalized</li> <li>Learning and information exchange activities conducted</li> </ul>	Year 2017/18– Q3& Q4 On-going

# Objective 4: To build institutional capacity for effective delivery of agricultural extension services.

During the formulation of this strategy, the percentage of approved extension positions filled was 35% giving extension worker to farm family of 1:5,000 compared to the recommended standard of 1:500. Hence, not only are numbers significantly low, but those in place lack the tools to do their work and up-to-date knowledge and information to pass on to farmers. Moreover, the programs available at the institutions that train extension workers are in need of a major overhaul to align them with the needs of the farmers and other value chain actors. NAES have made provision to address these issues through the specific objectives and strategies presented below.

**Specific objective 4.1:** Human resources management and capacity development

**Strategy 4.1.1** Recruit and retain a pool of highly motivated and appropriately qualified cadre of staff in all relevant disciplines at national and local government levels.

- 1. Review the extension services human resource needs/requirements (job descriptions) to align with development needs.
- 2. Recruit all the required personnel.
- 3. Organize orientation courses for new staff.
- 4. Equip and facilitate the staff to carry out their tasks.
- 5. Harmonize/ match job specifications/descriptions of NSAs with those of Government and ensure the former hire appropriately qualified staff.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Director & Commissioners, District Service Commission in LG/ Public Service Commission and Ministry of Finance	<ul> <li>100% DAES staffed by end of year 1</li> <li>30% District staffed by end of year 1</li> <li>60% District staffed by end of year 2</li> <li>100% District staff by end of year 5</li> <li>36% Sub-county staff by end of year 3</li> <li>80% Sub-county staff by end of year 4</li> <li>100% Sub-county staff by end of year 5</li> <li>Wage and non-wage resourced for staff fully released in a timely manner.</li> <li>Harmonized NSA Job Description and specifications with Government</li> <li>Staff orientation programs defined, funded, and implemented.</li> </ul>	District: Year 2016/17 Sub-County: 2016/17; 2017/18; 2018/2019

**Strategy 4.1.2** Operationalise the sanctions and reward system including setting performance standard, to motivate agricultural extension personnel to achieve the highest quality of service delivery;

#### **Activities:**

- 1. Develop performance standards for extension personnel.
- 2. Monitor, evaluate, supervise and mentor extension personnel regularly and provide feedback.
- 3. Apply standardized rewards/incentive system and sanctions procedures according to the standing orders and guidelines.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners and Local governments	<ul><li>Standards developed and approved.</li><li>Incentive resources available</li><li>Sanctions enforced.</li></ul>	Year 2017/18– Q1, Q2, & Q3

**Strategy 4.1.3.** MAAIF and Non State Actors shall design and implement relevant capacity building programs for extension service practitioners.

#### **Activities:**

1. Identify extension worker capacity needs (gaps in fulfilling their roles).

- 2. Plan, budget for, and conduct refresher training courses and other capacity building activities for all extension workers to deliver the required services
- 3. Conduct Workshops to establish MOUs and PPP arrangements to implement the capacity building plan.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Identified extension worker capacity gaps</li> <li>MOU and PPP Workshops conducted</li> <li>Capacity development plans designed, approved, and funded.</li> <li>Capacity plans implemented</li> </ul>	Yearly in 1st Quarter

**Strategy 4.1.4.** MAAIF will collaborate with academic institutions to periodically reorient the curriculla and delivery methods at universities, vocational institutes and agricultural training institutions to focus on the practical and strategic needs of the agricultural sector extension services.

- 1. Conduct regular review of training curriculum to assess their relevance to extension delivery needs.
- 2. In collaboration with the Ministry of Education, other MDAs, and relevant training institutions, revise/update the various agricultural training programs offered in order to address the current demand in the sector.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners Leaders of Academic Institutions	<ul><li>Curricula assessment reports</li><li>Updated curriculum</li></ul>	Yearly before start of academic year

**Strategy 4.1.5.** MAAIF in collaboration with Ministry of Education, Science, Technology and Sports will support internship and other skilling programs at national and district levels for students of universities and other tertiary institutions in all agricultural disciplines (including nutrition, agricultural engineering and agribusiness).

### **Activities:**

- 1. Conduct a feasibility assessment for a comprehensive systematic professional development and skilling program for fresh graduates from universities and other training institutions.
- 2. Establish and support graduate and postgraduate internship and other skilling programs for agriculture graduates in collaboration with reputable universities, agricultural colleges and relevant MDAs.

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Program proposal for skilling agriculture graduates developed and approved</li> <li>Internship and skilling programs designed, funded and implemented</li> </ul>	Year 2017/18– Q3 & Q4 On-going

**Specific objective 4.2:** To strengthen agricultural education and training

**Strategy 4.2.1** Restructure Bukalasa Agricultural College, Veterinary and the Fisheries Training Institutes to support knowledge and skill flow in the agricultural extension system.

# directorates and Ministry of Public Service to restructure the training institutes to ensure that they are well integrated in the extension service delivery system.

2. Establish and support formal linkages between research, training institutions and local governments for continued knowledge and skills updating

#### **Activities:**

1. DAES will closely work with Bukalasa Agricultural College, Fisheries Training Institute, technical

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul><li>Training Institutions restructred</li><li>Knowledge and Skill flow in extension system enhanced</li></ul>	Year 2017/18– Q2, Q3 & Q4 On-going

**Strategy 4.2.2** Re-introduce specialized skills training in agricultural mechanization and value addition as part of the restructuring agenda following the conversion of Busitema Agricultural Mechanization College into a University.

#### **Activities:**

1. DAES will closely work with the Department of Agricultural Infrastructure and Water for Agricultural Production and other relevant authorities to covert Namalere Mechanization Unit into an agricultural mechanization and value addition training institution.

2. Establish and support formal linkages between the training institution, research, local governments and private sector for continued knowledge and skills updating

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Mechanization and value addition Training Institution established</li> <li>Knowledge and Skill flow in extension system enhanced</li> </ul>	Year 2018/19- Q1, Q2, Q3 & Q4 On-going

**Strategy 4.2.3** Invest in infrastructure development to facilitate increase in number of intake of students in order to build a critical mass of artisanal skills necessary for agricultural sector transformation.

#### **Activities:**

- 1. DAES will closely work with the training institutions to develop a comprehensive rehabilitation program to upgrade the infrastructure and facilities.
- 2. DAES in close collaboration with the training institutes and other relevant stakeholders will advocate for funding of the infrastructure and facilities.
- 3. DAES will support efforts by the training institutions to increase student intake

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>Mechanization and value addition Training Institution established</li> <li>Knowledge and Skill flow in extension system enhanced</li> </ul>	Year 2018/19- Q1, Q2, Q3 & Q4 On-going

**Strategy 4.2.4** Amend the Structure of MAAIF to integrate Agricultural training and ensure strong linkages with the respective technical departments for relevant skills development.

- 1. DAES will closely work with Ministry of Public Service to ensure that the restructured training institutions are integrated in the structure of the DAES.
- 2. Establish and support formal linkages between training institutions and technical directorates in MAAIF

Key responsible person	Expected strategy output(s)	Time frame
DAES/Commissioners	<ul> <li>DAES Structure reengineered</li> <li>Strong linkages with technical directorates established</li> </ul>	Year 2017/18– Q2, Q3 & Q4 On-going

# 5. Institutional Arrangements for Implementation

For effective implementation of NAES, it is essential that institutional mandates, roles, responsibilities, structures, linkages, coordination and legal framework and defined, operationalize and enforced. This section elaborates this important components of the strategy.

### 5.1 Mandates, Roles and Responsibilities

# **5.1.1.** Ministry of Agriculture, Animal Industry and Fisheries

# The mandate of MAAIF in the context of agricultural extension are to:

- 1. Formulate policy, regulations, standards, strategy and work plans for single spine extension;
- 2. Provide technical guidance for formulation, review and implementation of policies, legislation, standards, plans and strategies in the areas of agricultural extension services;
- 3. Strengthen coordination of Local Government Production Departments, Universities and other Training Institutions, Farmers and Farmer Organizations, NGOs and Private Sector in provision of agricultural extension services;
- 4. Provide technical advice and quality assurance on agricultural extension and advisory services;
- 5. Provide information and communication services to Local Governments;
- 6. Strengthen inter-institutional linkages among research, educational and farmer institutions;
- 7. Promote agribusiness services, enterprise development and agricultural value chain development in close collaboration with the private sector;
- 8. Support skilling, manpower development and farmer institutional development in the agricultural sector;
- 9. Receive district reports, analyze them and provide feedback;
- 10. Conduct M&E of Agriculture Extension Services; and provide policy reports and updates to Cabinet, District Local Government headquarters level

The following decentralized functions will be undertaken by District Production and Marketing Departments of local governments:lll

- 1. Planning for the agricultural sector within the National Policy Framework;
- 2. Providing technical backup and support supervision to staff in Sub-counties on production, farm development and sustainable utilization of natural resources (soil fertility, water harvesting, pasture improvement, mechanization, fishing in the water bodies);
- 3. Advising District Councils on matters related to the agricultural sector;
- 4. Collating and analyzing statistical data related to the agricultural sector including production, processing and marketing of crops, livestock, fisheries and their products;
- 5. Generating and disseminating information on the agricultural sector;
- 6. Collaborating with the National Agricultural Research Systems on matters pertaining to agricultural research;
- 7. Monitoring and evaluating performance of the agricultural programs and projects;
- Coordinating all stakeholders in production, processing and marketing of agricultural products;
- 9. Delivery out agricultural extension services;
- 10. Providing quality assurance of agricultural services;
- 11. Providing quality assurance of agricultural service providers;
- 12. Rendering entomological services such as Apiculture, sericulture, tsetse control;
- 13. Setting and supervising the construction and operation of abattoirs, slaughter houses/slabs and livestock markets; and
- 14. Spearhead the development of Aquaculture.

### **Sub-county level**

### The following functions will be carried out:

- 1. Extension service delivery;
- 2. Disease, vector and pest control;
- 3. Collect agricultural statistics; and
- 4. Provide regulatory services and agricultural planning.

#### Institutional Framework at the National Level

At the national level, the technical functions of agricultural extension will be a shared responsibility of the respective technical Directorates of Animal Resources, Crop Resources and Fisheries Resources and related Commodity Agencies. The core mandate for agricultural extension service is with the Directorate of Agricultural Extension Services (DAES) in MAAIF which will manage and coordinate the public and private extension delivery systems at national and lower levels.

### Organizational structure of DAES.

The Directorate is led by the Director of Agricultural Extension Services with a clear mandate to implement the National Agricultural Extension Strategy (NAES) that conforms to and supports the National Agricultural Extension Policy (NAEP). The Director will manage and lead two Commissioners who manage their respective Departments, and in turn, five Divisions, as follows:

# A. Department of Extension and Skills Management

- 1. Division of Information Communication
- 2. Division of Skills Management
- 3. Division of Agricultural Extension Coordination
- 4. Department of Agricultural Investment and Enterprise Development
- 5. Division of Agribusiness Services
- 6. Division of Primary Processing and Value Addition

The five Divisions are managed by Assistant Commissioners and, in turn, supervise five offices staffed with a cadre of technical staff.

### **Key Functions of the DAES**

- 1. Policy formulation and reviews of matters related to agricultural extension.
- 2. Strengthen coordination between local government Production and marketing departments, with NGOs and private sector in provision of agricultural extension services.
- 3. Provide technical advice on agricultural extension and advisory services.
- 4. Setting standards for service delivery by local governments and NSAs.
- 5. Quality assurance of agricultural extension services.
- 6. Support agricultural enterprise development.
- 7. Provide information and communication services to MAAIF and local governments.
- 8. Strengthen inter-institutional linkages between research, educational and farmer institutions.
- 9. Promote agribusiness services and agricultural value chain development in close collaboration with the private sector.
- 10. Support farmer institutional development through capacity building programs.
- 11. Support skilling and manpower development in the agricultural sector.
- 12. Identify investment opportunities in the agricultural sector.

### Department of Extension and Skills management

- 1. Main Objectives of the Department of Extension and Skills management:
- 2. To promote food security, nutrition and household incomes through increased productivity and market oriented farming.
- 3. To empower all farmers to access and utilize agricultural extension services
- 4. To promote farmer groups and high level farmer organizations to develop capacity to manage farming enterprises.
- 5. To support the private sector to develop capacity for delivery of agricultural extension services.

# Key functions of the Department of Extension and Skills management:

- 1. Support the provision of advice and information services to farmers
- 2. Support technology development and linkages with markets
- 3. Support private sector and farmer institutional development
- 4. Ensure that the research and extension needs of farmers are identified and answered by the extension agents
- 5. Strengthen linkages with agricultural educational institutions to ensure relevant manpower development for the agricultural sector.

# Department of Agricultural Investment and Enterprise Development

# Main Objectives of the Department of Agricultural Enterprise Development:

- 1. To support agribusiness development and management in the agricultural sector.
- 2. To support agricultural enterprise development through promotion of value addition and primary processing of agricultural produce.

# **Key Functions of the Department of Agricultural Enterprise Development:**

- 1. Formulate, review and implement policies, legislation, standards, plans, designs, strategies and regulations for agribusiness and agricultural enterprise development.
- 2. Provide technical advice on agribusiness and enterprise development in the sector.
- 3. Generate, analyze and disseminate information on agribusiness in the sector.
- 4. Build the capacity of LGs and other stakeholders in agribusiness and agro enterprise development in the agricultural sector.
- 5. Establish and operationalize collaborative mechanisms with national, regional and international organizations in agribusiness and agro enterprise development.
- 6. Formulate, review and implement plans and strategies for commodity value chain analysis.
- 7. Establish and operationalize commodity stakeholder platforms and frameworks to manage

implementation of commodity value chain analysis recommendations.

### 5.1.2 Roles and responsibility of key Officials

# Role of the Director of Agricultural Extension Services.

At the national level, the Director will ensure that the NAES adheres to the NAEP and other relevant agricultural policy issues / organize and chair meetings with national organizations and entities, coordinates work with fellow Directors, represent the interests of extension services in public forums, and provide leadership within the directorate.

At the District and Sub-County levels the Director will ensure extension workers are: adequately supported and funded, conducting work planning and budgeting according to a common methodology, monitored for service delivery, evaluated for performance, and trained in new approaches and techniques. This will be accomplished by managing the Directorate staff and liaising with local governments.

# Role of Commissioners and Assistant Commissioners.

The Commissioners and Assistant Commissioners are responsible for supervising the implementation of the National Agricultural Extension Strategy. They will ensure: extension service delivery system is following developed and approved guidelines; activities are implemented according to plan; linkages (coordination and/or collaboration) with partner organizations, departments, agencies, and research organizations are formalized and functioning; data and information collection, analysis, and dissemination protocols are followed, and Directorate staff are motivated, supported, and provided with training opportunities.

### DAES role in ensuring quality control.

• Measuring individual extension worker performance. The DAES will develop additional relevant indicators for performance-based extension services, as part of the existing "Public Service Performance Agreement form" made by the Ministry of Public Service.

- Measuring the efficiency of the extension delivery system. The DAES will ensure efficiency indicators, such as, timely development of work plans, adherence to work plan schedule, resource usage, regular data collection, etc. will be measured and recorded on a timely basis.
- Measuring sustainable outcomes from extension service delivery. The DAES will ensure that both internal and third party impact assessments are conducted at mid-strategy and end-of- strategy. Further, the NAES M&E Plan when fully implemented will generate the data and information to be tracking outputs, outcomes, and economic data used to evaluate impact on an on-going basis, and for informing yearly work plan development.

### 5.1.3 Linkages with Other Technical Directorates,

# Research and Training Institutions, Technical Directorate and Agencies

The three technical Directorates in MAAIF i.e. Animal Resources, Crop Resources and Fisheries Resources and commodity Agencies namely; Uganda Coffee Development Authority, Cotton Development Authority, Dairy Development Authority will play a technical supportive role to DAES. They will be responsible for generating technical information that will be professionally organized by the Directorate of Agricultural Extension Services for dissemination to extension service providers and farmers.

The extension service will regularly update the technical Directorates on the technical requirements by farmers in field, local governments and other stakeholders and jointly prepare relevant technical materials update that address their needs.

The technical Directorates and commodity Agencies will also participate in capacity building programs organized by the DAES by providing technical resource persons. They will also jointly participate in packaging of research technologies into materials for dessemination to beneficiaries. Development of commodity value chains is a responsibility of the technical directorates. They will therefore, define the kind of extension services required along the different value chains; and work with DAES to ensure that actors along the value chains get relevant extension services.

The DAES will monitor supplies of agricultural inputs to farmers and other value chain actors and advise the technical directorates on the regulatory requirements.

### **Research Organizations**

Strengthened linkages between research, extension and farmer institutions are essential for effective agricultural extension service delivery. The extension system will provide a platform to identify farmer and other stakeholders' needs along the value chain. Joint stakeholder planning, review and priority setting meetings will be regularly conducted both at national and zonal levels. The Zonal Agricultural Research and Development Institutes (ZARDIs) shall work closely with the District Production and marketing Departments to ensure that the research needs of the farmers and other value actors are captured and planned in the national research agenda. Universities and other tertiary institutions as well as private researchers will be facilitated by the extension system to access relevant topics that needs inquiry. The research system will also support community innovations by capturing, documenting and upgrading indigenous knowledge (Tacit Knowledge). In this way a problem identification and problem solving mechanism will be established.

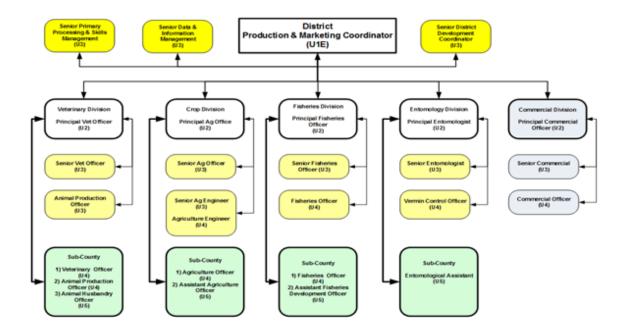
### **Training Institutions**

Universities, Agricultural Colleges and other tertiary training institutions play a critical role in research and manpower development for the agricultural sector. Building strong institutional linkages between the MAAIF and educational institutions is central to the new policy agenda and implementation strategy. The Agricultural Training institutions have been returned from Ministry of Education and Sports to MAAIF and will be technically guided by the Directorate of Agricultural Extension Services. Deliberate efforts to establish collaboration between the Ministry and all public agricultural educational institutions will be undertaken to ensure relevant manpower development for the agricultural sector. This will be done through joint curriculum reviews, establishing strong student internship programs, accredited certificate course in agricultural extension, refresher training courses for agricultural extension staff, Para-professional courses and supporting postgraduate training for extension officers.

# **5.1.4** Relationship with District and Sub-county Extension Services

MAAIF/DAES will establish effective and productive working relationship with local governments related to decentralize agricultural functions. Efforts will be made to improve understanding of the respective roles of the key players on each of their functions, considering that the Ministry still retains responsibilities over these decentralized functions as stipulated in the constitution of 1995 and Local

Governments Act 1998. Measures will be put in place to ensure institutional compliance regarding feedback and feed-forward mechanisms. Deliberate administrative measures will be instituted to ensure that communication channels are established between the technical departments at MAAIF and local governments. The structure of the Local government structure is shown below.



### District level

The District Production and Marketing Officer's role has been strengthened and he/she will be technically and administratively responsible for all agricultural programs in the district. He/she will be supported by the District Agricultural Officer, District Veterinary Officer, District Entomologist officer and District Fisheries Officer, all at a rank of Principal Officer. Each of these officers will be supported by subject matter specialists at senior level. Field Officers from commodity agencies such as Coffee, Cotton and Dairy who are posted at regional/district level will also be part of the pool of subject matter specialists. To strengthen the relationship between DAES and the district, the District Production and Marketing Officer will technically report to the Director of Agricultural Extension Services in MAAIF, but will remain administratively responsible to the Chief Administrative Officer under the decentralized arrangement.

Since agricultural extension will remain pluralistic and inclusive, all the other actors/stakeholders involved in providing extension services e.g. NGOs, Private Service Providers, Civil Society Organizations are required to register and be certified by the District Production and Marketing Officer. A register of all service providers in the district will be maintained at the District Production Department at all times and regularly updated. MAAIF will provide guidelines for certification of Agricultural Service Providers.

All actors involved in service delivery are required to submit quarterly reports on their activities to the District Productio n and marketingDepartment. The Ministry will issue a Certificate of Practice to all registered service providers and the District Production and Marketing Officer will have delegated authority to issue certificate of practice to all certified service providers in the district. The Ministry will also develop and institutionalize a professional certificate course which will be a requirement for anybody to provide extension services. The course is aimed at equipping extension workers with practical skills needed to offer extension services in the country.

### **Sub county Level**

Government will employ two types of extension staff at the local government level; those with a broad set of skills that enable them to provide advice to mixed farmers producing a range of enterprises, and specialists to provide technical backstopping to producers and actors on specific nodes of the value chains. The first category of extension staff will be hired on permanent and pensionable terms of service to provide continued support to farmers while specialists under the second category will be drawn from the private sector, universities, research institutions, and other organizations and hired on short term contracts to meet identified needs.

At Sub county level, three technical staff will be recruited for the start in the areas of Livestock, Crops and Fisheries on permanent and pensionable terms for agricultural extension service delivery to farmers. The most senior staff will head the technical team at that level. The technical staff, in addition to providing public extension services, will also supervise and quality assures private service providers, Community Based Facilitators, NGOs and other NSAs involved in agricultural extension service delivery. The technical staff will work closely with the other actors in a collaborative and complementary manner for efficient extension service delivery to farmers. They shall facilitate knowledge sharing among value chain actors.

While it's indicated that the Production Officer and Marketing Officer/ Commercial officer's roles have been strengthened and supported by other officers at the district level, the marketing/ Commercial Officer still reports to the Ministry of Trade, Industry and Cooperatives. The District Environment Officer, District Forest Officer and District Lands Officer are under the District Natural Resources Department report to Ministry of Lands, Water and Environment. The District Water Officer who is under the Works department at the District level reports to the Ministry of Lands and Environment. This still makes implementation and coordination of Agricultural Extension activities at local level challenging since different officials are accountable to different departments and Ministries.

# 5.2 Managing coordination and collaboration linkages.

### Methodology

Relationships amongst the various actors in a dynamic agricultural extension system must be defined as accurately as possible. To that end, the DAES will recognize both formal and informal relationships, where formal relationship agreements must be made in the form of a Memorandum of Understanding (MOU), and informal relationships may be made under an MOU. All collaborative efforts amongst actors, where the various parties to the agreement define their respective roles and responsibilities, must be formalized in an MOU.

Lastly, coordination activities may or may not be formalized in an MOU and this decision is made mutually by all actors involved in the proposed coordination efforts.

### Ensuring institutional linkages.

The DAES Commissioners will assigned positions for the various officers under their supervision to link with the desk officers in each of the Ministries, Departments, and Agencies (MDAs), and Research, with clear mandate, resources, and work plans. There

### 5.3 Roles of other stakeholders

The roles and responsibilities of extension service

must be an assigned person to interact on a regular basis with all these government institutions.

Likewise, at the national level, the DAES Commissioners will assign staff to establish linkages with national level private sector entities, NGO/CSOs, donor funded projects, and donor representatives in order to collect and share information; and agree on how to partner at the national and district levels on important development activities.

### Partnership building.

Meetings and workshops are the primary forum to bring extension service personnel together with private sector, NGO/CSOs, and other potential partners to collaborate on specific development activities. These joint workshops should be designed to be constructive with a given agenda, stated objectives, and fixed deliverables. The DAES Commissioners will work with their staff to develop workshop operating procedures that will be included in the overall DAES Operations Manual to be developed during FY 2016/2017. The budget provides for joint workshops at the national (Directorate), district, and sub-county levels, with many being implemented in FY 2016/2017 in order to establish formal partnerships as soon as possible.

actors outside MAAIF and LGs are summarized in the table below.

Stakeholder	Roles and Responsibilities
Ministry of Trade, Industry and Cooperatives (MTIC)	<ul> <li>Issue guidelines for harmonizing Public-Private Partnerships for promoting private sector investments in the agricultural sector</li> <li>Provide technical support in development of agricultural cooperatives societies</li> <li>Promote Marketing of agricultural products</li> <li>Provide Market information and identification of new markets for agriculture products.</li> <li>Support agricultural industrial development</li> </ul>
Ministry of Finance, Planning and Economic Development	<ul> <li>Mobilization and provision of financial resources for agricultural extension services</li> <li>Monitoring and Evaluation of the agricultural sector performance</li> <li>Guide the collection and collating of agricultural Statistics through Uganda Bureau of Statistics (UBOS)</li> <li>Identify and promote investment opportunities through Uganda Investment Authority</li> <li>Provide enabling environment for acquisition and provision of agricultural credits</li> </ul>

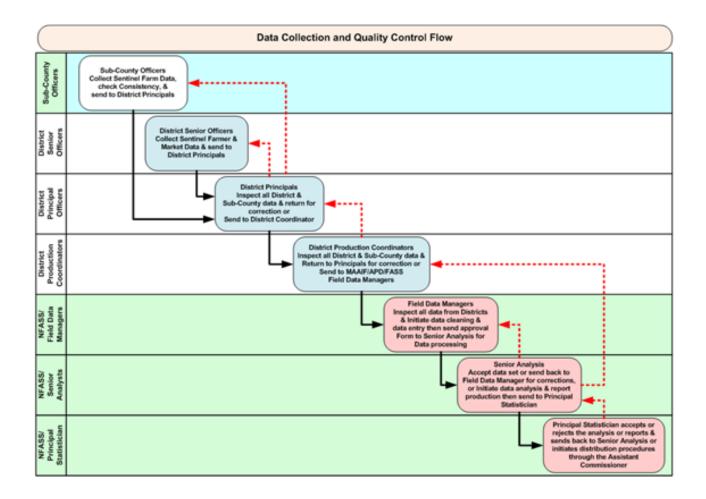
Stakeholder	Roles and Responsibilities
Ministry of Local Government	<ul> <li>Administration and Coordination of District Local Governments</li> <li>Monitoring performance of District Local Governments</li> <li>Policy and Advocacy support for District Local Governments</li> <li>Supervision of District Local Government Activities</li> </ul>
Ministry of Public Service	<ul> <li>Review and approval of the establishment structures</li> <li>Provide policy guidance on human resource management and development</li> <li>Provide technical guidance during recruitment exercise, retirement and pension</li> </ul>
Ministry of Information, Communications and Technology	<ul> <li>Provide policy oversight on ICTs</li> <li>Promote use of transferable appropriate information technologies</li> <li>Contribute to the strengthening and setting up of information laboratories</li> </ul>
Ministry of Water and Environment (MWE)	<ul> <li>Provide policy oversight on gender and youth</li> <li>Mobilization and sensitization of gender and youth</li> <li>Community mobilization for uptake of extension services</li> <li>Participation in farmer group formation and sustainability</li> <li>Mainstreaming gender issues in extension programs</li> </ul>
Ministry of Gender, Labour and Social Development (MGLSD)	<ul> <li>Curriculum development</li> <li>Training and development of agricultural extension service providers</li> <li>Review and develop relevant curricular to suit current extension demands</li> <li>Accredit training courses and private training institutions</li> </ul>
Ministry of Education and Sports (MoES)	<ul> <li>Provide Nutrition information for extension services</li> <li>Provide information on food safety and standards at household level</li> <li>Develop and package information on zoonotic diseases</li> <li>Provide Animal Drugs regulation services</li> </ul>
Academia (Universities, Colleges and training institutions)	<ul> <li>Curriculum development for agricultural extension</li> <li>Training and development of agricultural extension service providers</li> <li>Participate in certification of service providers</li> <li>Offer specialized training for professionals and para professionals</li> <li>Partner with MAAIF to develop appropriate and practical internship programs</li> <li>Provide research services for agricultural extension programs</li> </ul>
Research institutions	<ul> <li>Generation of research priorities in consultation with farmers, extension agents and other stakeholders</li> <li>Formulate and implement research projects and programs</li> <li>Participate in setting and reviewing the policy document</li> <li>Provide technical support and training of stakeholders</li> <li>Established mother garden</li> <li>Promote adaptation and use of appropriate technologies</li> </ul>

Stakeholder	Roles and Responsibilities
Non-State Actors (NGOs, CSOs, PSO)	<ul> <li>Policy advocacy for extension services at all levels</li> <li>Resource mobilization for agricultural extension services</li> <li>Private extension service provision</li> <li>Supply of quality agricultural inputs</li> <li>Support postharvest handling, storage, value addition and processing</li> <li>Provide services in transport, trade and marketing</li> <li>Mobilize farmers into groups</li> <li>Sensitization and training of farmers</li> <li>Support vulnerable groups</li> <li>Support capacity building in extension services</li> <li>Promote delivery of quality services</li> </ul>
Development Partners	<ul> <li>Provide policy and advocacy support for extension</li> <li>Provide technical Assistance to agricultural extension</li> <li>Mobilize financial resources for agricultural Extension</li> </ul>
Farmers/ Farmers Organizations and other value chain actors	<ul> <li>Udopt of agricultural technologies to improve production and productivity</li> <li>Undertake to farmer to farmer extension services</li> <li>Multiply seeds, planting materials and stocks</li> <li>Mobilization of farmers and resources</li> <li>Carry out farmer institutional development</li> <li>Facilitate community based support services for agricultural extension</li> <li>Undertake Self-regulation and quality assurance of services</li> <li>Participate monitoring and evaluation</li> <li>Record keeping and provision of agricultural statistics</li> <li>Innovations using indigenous knowledge</li> <li>Engage in policy dialogue and facilitating business</li> <li>Provide extension at their respective segments of the value chains</li> </ul>

# 5.4 Ensuring effective data and information management.

The MAAIF Department of Planning, Division of Statistics has the mandate to collect, analyze, and disseminate agricultural information. However, the primary data collection resource is the staff of the extension services. The DAES and the Statistics division will therefore enter into a formal joint agreement that defines the data collection tools to be used by the extension staff, training of the extension

staff on the use of these tools, a system of quality control of the data from the sub-county level on up to the district level (see chart below). The district level staff assigned the role of agricultural statistics will also be trained on data entry using an approved format, and the transmittal of this data to a central database at MAAIF.



### 5.5. Creating an enabling legal framework

In order to effectively implement NAEP, a conducive legal framework is essential to regulate the actions of the various stakeholders. Accordingly, under the strategy, MAAIF will take a number of actions including repealing the NAADS Act and replacing it with legislation that supports the extension services. Furthermore, the Ministry will develop appropriate regulatory/statutory instruments to regulate the extension service providers.

The specific actions include;

- 1. Enacting a new law (National Agricultural Extension Act) to support the implementation of NAEP.
- 2. Reviewing NAADS Act (2001)
- 3. Developing statutory instruments for regulation of agricultural extension services
- 4. Reviewing the Universities and Tertiary Institutions Act 2001

# 6. Planning and Financing Framework for the Extension Service

### 6.1 Objective and Strategies

The objective of the planning and financing strategy is to develop and establish an effective agricultural extension planning and financing methodology that conforms to Ministry of Finance, Planning and Economic Development guidelines and Local Government work planning and budgeting procedures.

# Strategies to meet the planning and financing objective:

- 1. MAAIF personnel will work closely with local government Production and marketing department technical staff and with beneficiaries' representatives and other stakeholders to develop yearly agricultural extension plans and budgets and associated plans and budget for each district and associated sub counties.
- 2. MAAIF shall establish formal work agreements with public and NSAs extension service partners on work planning and budgeting activities to ensure realistic, harmonized and coordinated plans.
- 3. MAAIF will work closely with District Planning and Statistics units on the collection, analysis, and distribution of agricultural data/information on a bi-monthly basis to facilitate planning.
- 4. Government will provide adequate funding to cover wage and non-wage recurrent and development costs.
- 5. The funding for implementation of this strategy will be through the normal government funding of the Ministry of Agriculture Animal Industry and Fisheries.
- 6. MAAIF will work with other Ministries for implementation of agricultural activities to identify, harmonize and coordinate the deployment of financial resources for agricultural extension in order to avoid and/or reduce duplications and efficiently use the available resources.
- 7. MAAIF shall explore other avenues of funding and resource mobilization to supplement government funding including co-financing with NSAs and beneficiaries.

8. Government support will largely be directed to the public functions as outlined in this strategy and will be complimented by the private sector which has over time developed capacity to finance its own initiatives.

# 6.2 Structure of publicly financed extension budget.

Directorate, District, and Sub-County budgets contain three components: 1) Fixed Costs, 2) Operational Costs, and 3) Technical Development Costs. Further, each component is then divided into major budget areas such as, office, transport, equipment, logistic support, workshops, demonstrations, technical activities, and capacity development. These areas are then further subdivided by specific items.

In addition to DAES, District and Sub-county budgets, MAAIF Agencies with extension function including UCDA, CDO and DDA have their budgets incorporated in the summary below.

### 6.3 Summary of NAES Budget

The tables below present the summary of the strategy budget. Further details are at Annex 2.

### WAGE COST SUMMARY (Uganda Shillings)

Budget Item	Year 1 (2015/2016)	Year 2 (2016/2017)	Year 3 (2017/2018)	Year 4 (2018/2019)	Year 5 (2019/2020)
Directorate		874,940,772	875,487,747	876,363,563	877,240,255
District		13,393,018,512	21,800,811,003	23,220,760,193	25,321,704,802
Sub-county		32,287,960,848	35,317,136,863	54,660,692,672	85,019,610,379
TOTALS		46,555,920,132	57,993,435,613	78,757,816,427	111,218,555,436

### **NON - WAGE COST SUMMARY**

Budget Item	Year 1 (2015 /2016)	Year 2 (2016/2017)	Year 3 (2017/2018)	Year 4 (2018/2019)	Year 5 (2019/2020)
Districts:					
Fixed Costs		18,183,000,000			870,000,000
Operating Costs		12,307,600,000	12,307,600,000	12,586,000,000	12,511,760,000
District:		10,097,800,000	10,097,800,000	10,097,800,000	10,097,800,000
Technical Development					
Costs					
Sub-Total		40,588,400,000	22,405,400,000	22,683,800,000	23,479,560,000
Sub-County					
Fixed Costs		17,328,000,000	9,120,000,000	4,560,000,000	1,915,200,000
Operating Costs		26,258,000,000	41,460,000,000	46,988,000,000	46,988,000,000
Technical Development		32,072,000,000	50,640,000,000	57,392,000,000	57,392,000,000
Costs					
Sub-Total		75,658,000,000	101,220,000,000	108,940,000,000	106,295,200,000
Directorate					
Fixed Costs		3,650,800,000			
Operating Costs		508,800,000	508,800,000	508,800,000	508,800,000
Technical Development		6,496,000,000	6,496,000,000	6,496,000,000	6,496,000,000
Costs				7,004,800,000	7,004,800,000
Sub-Total		10,655,600,000	7,004,800,000		
				10,410,000,000	12,050,000,000
UCDA Extension		6,410,000,000	6,410,000,000		
CDO Extension		5,000,000,000	5,000,000,000	6,500,000,000	8,750,000,000
TOTALS		138,312,000,000	142,040,200,000	155,538,600,000	157,579,560,000
GRAND TOTAL (WAGE + NON WAGE)		184,867,920,132	200,033,635,613	234,296,416,427	268,798,115,436
5 YEAR COST		Wage			294,525,727,609
SUMMARY		Non-wage			593,470,360,000
		Overall			887,996,087,609

## 7. Monitoring, Evaluation and Framework

A separate detailed agricultural extension Monitoring and Evaluation Plan has been developed to guide the tracking of the implementation process and results for of NAES. The NAES M&E plan describes the approach that the Directorate will follow to create and operate an effective M&E sub-system as an integral part of the Sector M&E framework and M&E strategy and to produce credible and accurate information on an ongoing basis that gets used to improve service delivery.

The purpose of M&E in the implementation of NAES is to facilitate the use of timely, relevant and comprehensive information for decision making at policy, program management and implementation levels. Hence, the objective of this M&E plan is to build the necessary capacity to effectively monitor and evaluate the implementation of NAES. When this is achieved, the ability of DAES, LGs and Non-State

Actors to implement NAES will have been enhanced for effective contribution to the development objectives of NAES.

The M&E plan has been developed to target the different stakeholders involved in the NAES implementation at national and sub-national/district and sub-county levels.

It has impact indicators at national level that DAES will contribute to, impact, outcome, and output indicators for the strategy and plans for data collection, analysis, reporting and feedback. In addition it has aspects of performance assessment for extension workers that will need to be included in the public service performance agreement forms. The following table captures the outcome level indicators that correspond to specific objectives.

### Strategy outcome indicators for routine reporting on specific objectives

Level	Specific Objective	Outcome Indicators
Objective 1. To establish a well-coordinated, harmonized pluralistic agricultural extension delivery system for increased efficiency and effectiveness.	1.1: Establishment of an effective organizational and institutional framework for pluralistic agricultural extension services	<ul> <li>Farmer/extension worker ratio</li> <li>Percent of districts delivering pluralistic agricultural extension services</li> <li>Percent of farmers' organizations supported at least six times a year by extension workers</li> <li>Percent of processors supported at least six times a year by extension workers</li> <li>Percent of marketers and distributors supported at least six times a year by extension workers</li> <li>Percent of districts that received support supervision visits from DAES at least four times a year (once a quarter)</li> <li>Percentage of budget released by MoFPED for agricultural extension services as percentage of MAAIF Budget</li> </ul>

Level	Specific Objective	Outcome Indicators
	1.2 Regulation and quality assurance of extension services	<ul> <li>Percent of district plans and budgets for extension services fully funded</li> <li>Percent of extension services practitioners / actors operating according to set quality standards</li> </ul>
2. 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	2.1 Farmer organizations and empowerment	<ul> <li>Percent of beneficiary farmer organizations and groups that aggregated into viable commercial entities or cooperatives</li> <li>Proportion of men and women perceiving that their voice has been taken into account in decision making and planning for extension services through their farmers organizations and groups</li> </ul>
	2.2 Targeting youth, gender and other vulnerable groups	<ul> <li>Percent of gender and vulnerable groups integrated into extension services</li> <li>Percent of beneficiaries that are from poor and vulnerable households participating in extension processes</li> <li>Percent of poor households and vulnerable groups reached with extension services</li> </ul>
3.To develop a sustainable mechanism for packaging and disseminating appropriate technologies to all categories of farmers and other beneficiaries in the agricultural sector	3.1 Technology Development, Packaging and Dissemination	<ul> <li>Percentage of targeted beneficiaries who are satisfied with advisory services (by gender)</li> <li>Percentage of targeted beneficiaries using improved technologies (by enterprise): Crop, Livestock, Fisheries, SLM technologies         <ul> <li>a)Crop</li> <li>b)Livestock</li> <li>c)Fishery</li> <li>d)Sustainable land use management (SLM)</li> </ul> </li> <li>Percentage increase in the number of technological innovations packaged and disseminated</li> <li>Percent of districts with effective control mechanisms for crop pests and diseases</li> <li>Percent of targeted districts with effective control mechanism for livestock diseases and vectors</li> <li>Percent of successful artificial inseminations in target districts</li> </ul>

Level	Specific Objective	Outcome Indicators
	3.2 Agricultural Knowledge Management and Information System	<ul> <li>Percent of beneficiary farmer organizations and groups that aggregated into viable commercial entities or cooperatives</li> <li>Percent of beneficiaries practicing acquired knowledge and skills</li> </ul>
	3.3 Agribusiness Development Services and Market Linkages	<ul> <li>Percentage of output of strategic commodities that is marketed</li> <li>Percentage increase in agricultural income of participating households</li> <li>Value of agricultural exports as a percentage of the value of total exports</li> <li>Value of commercial loans for agriculture</li> <li>Percent of farming households with access to agricultural and rural finance and credit services</li> </ul>
4. To build institutional capacity for effective delivery of agricultural extension services.	4.1 Human resources management and capacity development	Percent of districts with adequate human capacity to deliver agricultural extension services
	4.2. To strengthen agricultural education and training	Percentage of stakeholders and graduate that say training programs are practical and relevant.

# **Annex 1: Public Extension Staffing Plan**

### 1. Directorate staffing plan

The Directorate, located in Entebbe, will be fully staffed by the end of year 2.

Staff	Year 1 (2016/2017)	Year 2 (2017/2018)	Year 3 (2018/2019)	Year 4 (2019/2020)	Year 5 (2020/2021
Director	1				
Commissioners	2				
Assistant	5				
Commissioners					
Principals		15			
Seniors		15			
Support staff		17			
TOTALS	8	47			

### 2. District staffing plan

The current number of Districts is 116, where maximum district level staffing could reach 1,508 (13 staff \* 116 Districts). Thus, year 1 staffing is at a 26% and year 2 staffing will add 22% and year 3 staffing will add 30% for a projected staffing of 78% by the end of year 3. Additional staffing is subject to additional funding. If funding is available, an additional 173 staff can be hired in year 4 and 150 more in year 5 for a total of 1,508 staff to achieve 100% capacity.

Staff	Year 1 (2016/2017)	Year 2 (2017/2018)	Year 3 (2018/2019)	Year 4 (2019/2020)	Year 5 (2021/2021)
1. Production & Marketing	52	64			
Coordinators (U1E)	33	23	64		
2. Veterinary/Principals (U2)	22	50	44		
3. Crops/Principals (U2)	19	10	87		
4. Fisheries/Principles (U2)	4	16	96		
5. Entomology/Principals (U2)	75	21	20		
6. Veterinary/Seniors (U3)	77	39			
7. Crops/Seniors (U3)	12	44	60		
8. Crops/Senior Agriculture	45	32	39		
Engineer (U3)	30	36	50		
9. Fisheries/Seniors (U3)	11				
10. Entomology/Seniors (U3)	10				
11. Animal Production Officer	4				
(U4)					
12. Fisheries/Officers (U4)				73	50
13.Vermin Control Officer				50	50
(U4)				50	50
Totals	394	335	456	173	150

### 3. Sub-County staffing plan.

The current number of Sub-Counties is 1,364, where a maximum Sub-County staffing could reach 9,548 (7 positions \* 1,364 sub-counties). Thus, year 1 staffing is 16% of the potential total, year 2 staffing will add 17.4% more staff, and year 3 will add 2.6% more staff for a total of 36% staffed by the end of year 3. Additional staffing is subject to additional funding. If funding becomes available an additional 3,100 staff could be hired in year 3 and 3,022 in year 4 for a total of 9,548 staff at 100% capacity.

Staff	Year 1 (2016/2017)	Year 2 (2017/2018)	Year 3 (2018/2019)	Year 4 (2019/2020)	Year 5 (2021/2021)
1. Veterinary Officer (U4)	186	210	100	450	450
2. Agriculture Officer (U4)	452	180	80	700	622
3, Fisheries Officer (U4)	71	175	50	350	350
4. Assistant Animal Husbandry (U5)	368	345		450	450
5. Assistant Agriculture Officer (U5)	267	415		600	600
6. Assistant Fisheries Officer (U5)	128	275		350	350
7. Entomologist Assistant (U7)	62	62		200	200
Totals	1,534	1,662	230	3,100	3,022

# Annex 2: Public Extension Services Budget - 2016/17 - 2020/21

Extension Staffing Plan (2016/17 - 2020/21)						
Program Period		Y1 16-17	Y1 17-18	Y1 18-19	Y1 19-20	Y1 20-21
District Extension Personnel	200	-	***			
	116	N N	23	. 909		
	116	22 23	20	44		
4 District Fisheries - Principles (U2)	116	19	10	87		
5 District Entomology - Principles (U2)	116	4	16	96		
6 District Veterinary - Seniors (U3)	116	75	21	20	i i	í
7 District Crop - Seniors (U3)	116	77	39	-		-
8 District Crop - Senior Agriculture Engineer (U3)	116	12	44	09		
9 District Fisheries - Seniors (U3)	116	45	32	39		Ē
10 District Entomology - Seniors (U3)	116	30	36	20		į.
11 District Animal Production Officer (U4)	134	111		i	73	20
12 District Fisheries - Officers (U4)	110	10		-	20	50
13 District Vermin Control Officer (U4)	104	4	65		20	20
Sub-total - District Extension Personnel	1,508	394	335	456	173	150
Cumulative Totals		394	729	1,185	1,358	1,508
Sub-county Personnel						
1 Sub-county - Veterinary Officer (U4)	1,396	186	210	100	450	450
	2,034	452	180	80	200	622
	966	7.1	175	20	350	350
4 Sub-county - Assistant Animal Husbandry (US)	1,613	368	345	i.	450	450
	1,882	267	415	i	9009	900
6 Sub-county - Assistant Fisheries Officer (U5)	1,103	128	275	Ü	350	320
Sub-county - Entomologist Assistant (U7)	524	62	62		200	200
Sub-total - Sub-county exteension Personnel	9,548	1,534	7,002	230	3,100	3,022
Compliative lotals		1,334	3,130	3,420	076'0	7,340
MAAIF/DAES Personnel						
1 Director	1	1	10	-	1	T
2 Commissioner - Dept. Extension & Skills management	1	1	10	T	Ť	Ť
3 Assistant Commissioner - Information/Communication	1	1	10	Ť	í	Ē
4 Assistant Commissioner - Skills management	1	1	10	ř	í	Ē
5 Assistant Commissioner - Coordination	1	1	Т	1	ī	1
6 Commissioner - Dept. Ag Investment & Enterprise Dev	1	1	T	1	i	1
7 Assistant Commissioner - Agribusiness Services	1	1	ī	1		
8 Assistant Commissioner - Primary Processing & Value	1	1	T	F	ī	i
9 Principals (U2) (e.g., M&E, GIS, etc.)	15	S	10	P	1	1
10 Seniors (U3)	15	4	111	-	1	
13 Administrative Assistants/drivers (U7)	17		17			
Sub-total - DAES/MAAIF Personnel	52	17	300	1	î	ı
Cumulative Totals		17	55	55	55	55
Total Extension Personnel:	111,111	1,945	2,035	989	3,273	3,172
		1000	0000			

Program Period		Y1 16-17	Y1 17-18	Y1 18-19	Y1 19-20	Y1 20-21
1 Existing U1E - Total Number		52	208	208	208	208
2 Ugandan Shillings (UGX)	Existing RATE/Yr.	27,946,200	27,946,200	27,963,671	27,991,645	28,019,647
3 Total Existing - Ugandan Shillings (UGX)	6,183,201,060	363,300,600	1,453,202,400	1,454,110,879	1,455,565,535	1,457,021,646
4 U1E - New number	64					
6 Ugandan Shillings (USH)	New RATE/Yr	27,001,944	27,001,944	27,018,824	27,045,853	27,072,909
7 Total New - Ugandan Shillings (UGX)	6,920,929,998					
8 Total - U1E Ugandan Shillings (UGX)	13,104,131,058	363,300,600	3,181,326,816	3,183,315,642	3,186,500,152	3,189,687,847
The secondary secondary						
1 Existing U2- Total Number		78	312	312	312	312
2 Ugandan Shillings (USH)	Existing RATE/Yr.	24,169,344	24,169,344	24,184,454	24,208,647	24,232,865
3 Total Existing - Ugandan Shillings (USH)	8,021,336,359	471,302,208	1,885,208,832	1,886,387,382	1,888,274,477	1,890,163,460
A 112 - Mour animbor	300					
	200		396	15/1/	1 544	1 5/1/
6 Ugandan Shillings (UGX)	New RATE/Yr	20.738.244	20.738.244	20.751.209	20.771.968	20.792.747
7 Total New - Ugandan Shillings (USH)	26,107,032,693		2,053,086,156	8,009,966,536	8,017,979,507	8,026,000,494
8 Total - Ugandan Shillings (USH)	34,128,369,052	471,302,208	3,938,294,988	9,896,353,918	9,906,253,984	9,916,163,954
1 Existing U3 - Total Number		239	926	926	926	926
2 Ugandan Shillings (USH)	Existing RATE/Yr.	15,789,180	15,789,180	15,799,051	15,814,856	15,830,676
3 Total Existing - Ugandan Shillings (USH)	16,056,272,827	943,403,505	3,773,614,020	3,775,973,118	3,779,750,508	3,783,531,676
4 U3 - New number	341					
5 U3 - Total Number		1	688	1,364	1,364	1,364
6 Ugandan Shillings (USH)	New RATE/Yr	14,451,456	14,451,456	14,460,490	14,474,956	14,489,437
7 Total New - Ugandan Shillings (USH)	17,293,535,695	-	2,485,650,432	4,931,027,233	4,935,960,109	4,940,897,921
8 Total - Ugandan Shillings (USH)	33,349,808,522	943,403,505	6,259,264,452	8,707,000,351	8,715,710,617	8,724,429,597
Existing U4- Total Number		25	100	100	100	100
Ugandan Shillings (UGX)	Existing RATE/Yr.	14,132,256	14,132,256	14,141,091	14,155,237	14,169,398
Total Existing - Ugandan Shillings (UGX)	1,503,276,149	88,326,600	353,306,400	353,527,272	353,880,932	354,234,945
U4 - New number	323					
U4 - Total Number		ī	ı		427	1,061
Ugandan Shillings (UGX)	New RATE/Yr	13,074,396	13,074,396	13,082,570	13,095,657	13,108,758
Total New - Ugandan Shillings (UGX)	4,875,394,209	-		1	1,398,140,202	3,477,254,007
Total - Ugandan Shillings (UGX)	5,020,318,791	88,326,600	14,132,256	14,141,091	1,412,295,439	3,491,423,404
TOTAL DISTRIC STAFF - Ugandan Shillings (USH)	85,602,627,422	1,866,332,913	13,393,018,512	21,800,811,003	23,220,760,193	25,321,704,802
Cumulative (USH)	85.602.627.422	1.866.332.913	33.482.546.280	54.495.215.605	57 329 292 219	729 CM CTA CA

Sub-county Salary Structure						
Program Period		Y1 16-17	Y1 17-18	Y1 18-19	Y1 19-20	Y1 20-21
Existing U4- Total Number		709	2,836	2,836	2,836	2,836
Ugandan Shillings (UGX)	Existing RATE/Yr.	14,132,256	14,132,256	14,141,091	14,155,237	14,169,398
Total Existing - Ugandan Shillings (UGX)	42,632,911,572	2,504,942,376	10,019,769,504	10,026,033,426	10,036,063,220	10,046,103,047
114 - New number	3.717					
U4 - Total Number		,	2,260	3,180	6,926	12,728
Ugandan Shillings (UGX)	New RATE/Yr	13,074,396	13,074,396	13,082,570	13,095,657	13,108,758
Ugandan Shillings (UGX)	82,177,867,547	•	7,387,033,740	10,400,642,785	22,676,666,217	41,713,524,805
Total Existing - Ugandan Shillings (UGX)	124,810,779,119	2,504,942,376	17,406,803,244	20,426,676,211	32,712,729,437	51,759,627,852
Existing US- Total Number		263	3.052	3.052	3.052	3.052
Ugandan Shillings (UGX)	Existing RATE/Yr.	8,681,	8,681,568	8,686,995	8,695,686	8,704,385
Total Existing - Ugandan Shillings (UGX)	28,184,476,429	1,65	6,624,036,384	6,628,177,442	6,634,808,105	6,641,445,402
U5 - New number	3,835					
U5 - Total Number		1	4,140	4,140	7,636	13,236
Ugandan Shillings (UGX)	New RATE/Yr	7,500,804	7,500,804	7,505,493	7,513,001	7,520,517
Total New - Ugandan Shillings (UGX)	54,760,875,124	1	7,763,332,140	7,768,185,436	14,343,142,402	24,886,215,147
Total - Ugandan Shillings (UGX)	82,945,351,553	1,656,009,096	14,387,368,524	14,396,362,878	20,977,950,507	31,527,660,549
Existing U7- Total Number		62	248	248	248	248
Ugandan Shillings (UGX)	Existing RATE/Yr.	4,167,624	4,167,624	4,170,229	4,174,401	4,178,577
Total Existing - Ugandan Shillings (UGX)	1,099,429,744	64,598,172	258,392,688	258,554,224	258,812,875	259,071,785
U7 - New number	462					
U7- Total Number		3	248	248	748	1,548
Ugandan Shillings (UGX)	New RATE/Yr	3,796,716	3,796,716	3,799,090	3,802,890	3,806,694
Total New - Ugandan Shillings (UGX)	2,655,389,991		235,396,392	235,543,552	711,199,853	1,473,250,194
Total - Ugandan Shillings (UGX)	3,754,819,734	64,598,172	493,789,080	494,097,775	970,012,728	1,732,321,979
TOTAL Sub-County STAFF - Ugandan Shillings (UGX)	211,510,950,407	4,225,549,644	32,287,960,848	35,317,136,863	54,660,692,672	85,019,610,379
Cumulative (USH)		4,225,549,644	36,513,510,492	71,830,647,355	126,491,340,027	211,510,950,407
Total Local Governmnet Wage Budget by Year						
GRAND TOTAL - Ugandan Shillings (UGX)	297,113,577,829	6,091,882,557	45,680,979,360	57,117,947,866	77,881,452,864	110,341,315,181
Cumulative (USH)	297,113,577,829	6,091,882,557	51,772,861,917	108,890,809,783	186,772,262,648	297,113,577,829

Program Period		Y1 16-17	Y1 17-18	V1 18-19	V1 19-20	Y1 20-21
Director - U1SE	1		I			¥
Director - Total Number		1	1	1	1	1
Ugandan Shillings (UGX)	RATE/Yr.	28,431,600	28,431,600	28,449,374	28,477,834	28,506,323
Ugandan Shillings (UGX)	120,973,031	7,107,900	28,431,600	28,449,374	28,477,834	28,506,323
Commissioner - U1SE	2	2			ı	
Commissioners - Total Number	2	2	2	2	2	2
Ugandan Shillings (UGX)	RATE/Yr.	28,444,812	28,444,812	28,462,594	28,491,068	28,519,569
Ugandan Shillings (UGX)	242,058,493	14,222,406	56,889,624	56,925,189	56,982,135	57,039,139
Assistant Commissioner - U1E	5	5	C	E	t	1
Assistant Commissioner - Total Number		5	5	5	S	5
Ugandan Shillings (USH)	RATE/Yr.	27,946,200	27,946,200	27,963,671	27,991,645	28,019,647
Ugandan Shillings (USH)	594,538,563	34,932,750	139,731,000	139,818,354	139,958,225	140,098,235
DAES-Principals - U2	15	2	10	c	L	
Assistant Commissioner - Total Number		5	10	15	15	15
Ugandan Shillings (UGX)	RATE/Yr.	24,169,344	24,169,344	24,184,454	24,208,647	24,232,865
Ugandan Shillings (UGX)	1,482,141,324	30,211,680	362,540,160	362,766,804	363,129,707	363,492,973
DAEC Conjust 112	r		11			
Accietant Commissioner, Total Number	3	-	11	7	15	15
Handan Shillings (LIGX)	RATE/vr	15 789 180	15 789 180	15 799 051	15 814 856	15 830 676
Ugandan Shillings (UGX)	964,295,623	15,789,180	236,837,700	236,985,761	237,222,835	237,460,147
Administrative Assistance/Technical cadre	17	1	17	<b></b>		
Assistants- Total Number		10	=	17	17	17
Ugandan Shillings (UGX)	RATE/Yr.	4,643,664	4,643,664	4,646,567	4,651,215	4,655,868
Ugandan Shillings (UGX)	316,154,349	1	78,942,288	78,991,639	79,070,661	79,149,761
TOTAL DIRECTORATE STAFF - Ugandan Shillings (USH)	3,599,188,353	95,156,016	874,940,772	875,487,747	876,363,563	877,240,255
Cumulative (USH)	3,599,188,353	95,156,016	970,096,788	1,845,584,535	2,721,948,098	3,599,188,353
;						
Total Wage Budget by Year						
GRAND TOTAL - Heandan Shillings (HSH)	20A 575 777 609		AE EEE 070 122	200 200 200	100 700 171 01	200 777 000 000

Time Period	Unit	No.	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
District: Fixed costs	Cost (USH)	#					
		1		*			
OTTICE				110	i	,	1
1 Printers	T,000,000		ı	116,000,000			
Copiers	1,500,000		1	1/4,000,000	0	1	j.
3 Smart phone	200,000			28,000,000	î:	E	•
4 Computers and accessories	7,000,000	1	1	812,000,000		1	1
5 Furniture/meeting room	3,000,000	1	£	348,000,000	Î	E	
			3	1	1		
Transport				116	-		116
Vehicle	120,000,000	1	7	13,920,000,000	7	7	77
4 Motorcycles	7,500,000	2	ľ	1,740,000,000	î	E	870,000,000
			1			=	7
Equipment			1	116	Ê	E	
1 GPS	000,000	1	1	69,600,000		=	
2 Camera	750,000	1	1	87,000,000	-	-	
3 Lab equipment	5,000,000	1	1	580,000,000			3
4 Plant clinic equipment	2,000,000	1	ı	232,000,000	ï	E	Ľ
5 Soil testing	400,000	1	7	46,400,000		11	
District: Fixed Costs				18,183,000,000		t	870,000,000
Cumulative Sub-total by Year			31	18,183,000,000	18,183,000,000	18,183,000,000	19,053,000,000
			£	r	ì	Е	Įį.
	Unit	No.	1	21	1	1	
District: Operating costs	Cost (USH)	#:	£	r	Î	E	E
			1	7.1	3	1	
Office Supplies				116	116	116	116
Paper products	150,000	4	1	69,600,000	69,600,000	69,600,000	69,600,000
Toner cartridges	300,000	4	F	139,200,000	139,200,000	139,200,000	139,200,000
3 Writing supplies	125,000	4	1	58,000,000	58,000,000	58,000,000	58,000,000
Communications air time	250,000	4	1	116,000,000	116,000,000	116,000,000	116,000,000
			1	31	3	1	3
Transport			£	116	116	116	116
1 Fuel	12,000,000	4	7	5,568,000,000	5,568,000,000	5,568,000,000	5,568,000,000
Transport rent	1,000,000	4	ï	464,000,000	464,000,000	464,000,000	464,000,000
3 Transport repair	1,000,000	4	1	464,000,000	464,000,000	464,000,000	464,000,000
Transport maintenance	4,000,000	4	ř	1,856,000,000	1,856,000,000	1,856,000,000	1,856,000,000
			1		1		
Logistic Support			I	116	116	116	116
Safari Day Allowance	2,000,000	4	1	928,000,000	928,000,000	1,067,200,000	1,030,080,000
Perdiem outside district	2,000,000	4	ı	928,000,000	928,000,000	1,067,200,000	1,030,080,000
3 Radio communications	1,500,000	4	1	696,000,000	696,000,000	000'000'969	696,000,000
4 Paper Media	700,000	4	ı	324,800,000	324,800,000	324,800,000	324,800,000
5 Data collection and dissemination	1,500,000	4	1	000'000'969	000'000'969	000'000'969	000'000'969
District: Operating Costs				12,307,600,000	12,307,600,000	12,586,000,000	12,511,760,000

Time Period	Unit	No.	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
District: Fixed costs	Cost (USH)	#					
Office		116	1	116	1	1	
1 Printers	1,000,000	1		116,000,000	į.	1	E
2 Copiers	1,500,000	1	1	174,000,000	1		3
3 Smart phone	200,000	1	L	58,000,000	T.		E
4 Computers and accessories	7,000,000	1	3)	812,000,000	0		01
5 Furniture/meeting room	3,000,000	1		348,000,000	į.	1	Е
			1				0
Transport			.0	116	E	1	116
1 Vehicle	120,000,000	1	7	13,920,000,000			
4 Motorcycles	7,500,000	2		1,740,000,000	£	1	870,000,000
			31		1	1	
Equipment			-	116	T.		1
GPS	900,000	1	1	69,600,000			7
Camera	750,000	1	-	87,000,000			15
3 Lab equipment	2,000,000	1	1	580,000,000		-	71
4 Plant clinic equipment	2,000,000	1	1	232,000,000	E	1	16
5 Soil testing	400,000	1	71	46,400,000			71
District: Fixed Costs			l.	18,183,000,000			870,000,000
Cumulative Sub-total by Year			7	18,183,000,000	18,183,000,000	18,183,000,000	19,053,000,000
			10	i	į.	1	E
	Unit	No.	3	9	Q	7	
District: Operating costs	Cost (USH)	#		Ĭ.	£	T.	L
			3	9	Ŋ	7	
Office Supplies				116	116	5 116	116
1 Paper products	150,000	4	3	000'009'69	69,600,000	000'009'69	69,600,000
2 Toner cartridges	300,000	4	10	139,200,000	139,200,000	139,200,000	139,200,000
3 Writing supplies	125,000	4	31	58,000,000	58,000,000	28,000,000	58,000,000
4 Communications air time	250,000	4		116,000,000	116,000,000	116,000,000	116,000,000
			3	3	ŋ	1	1
Transport				116	116	116	116
1 Fuel	12,000,000	4	3	5,568,000,000	5,568,000,000	5,568,000,000	5,568,000,000
2 Transport rent	1,000,000	4	10	464,000,000	464,000,000	464,000,000	464,000,000
3 Transport repair	1,000,000	4	I	464,000,000	464,000,000	464,000,000	464,000,000
Transport maintenance	4,000,000	4	1	1,856,000,000	1,856,000,000	1,856,000,000	1,856,000,000
			71	-			71
Logistic Support			-	116	116	5 116	116
Safari Day Allowance	2,000,000	4	31	928,000,000	928,000,000	1,067,200,000	1,030,080,000
2 Perdiem outside district	2,000,000	4		928,000,000	928,000,000	1,067,200,000	1,030,080,000
3 Radio communications	1,500,000	4	3	696,000,000	696,000,000	000,000,000	696,000,000
4 Paper Media	700,000	4	10	324,800,000	324,800,000	324,800,000	324,800,000
Data collection and dissemination	1,500,000	4	3	696,000,000	696,000,000	000'000'969	696,000,000
District: Operating Costs				12.307.600.000	12.307.600.000	12 596 000 000	12 511 760 000
					and and inches		

District: Technical Development	Unit	No.	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
	Cost (USH)	#	e.	10		0.5	
				-			-
Workshops		116		116	116	116	116
1 Work planning and budget workshops (2 times)	2,500,000	2	•	580,000,000	280,000,000	580,000,000	580,000,000
2 Private sector joint workshops	1,000,000	2	•	232,000,000	232,000,000	232,000,000	232,000,000
3 NGO/CSO joint workshops	1,000,000	3		348,000,000	348,000,000	348,000,000	348,000,000
4 Innovation platform (multi stakeholder) meetings	1,000,000	4		464,000,000	464,000,000	464,000,000	464,000,000
5 Capacity building for Sub-county staff	2,500,000	4		1,160,000,000	1,160,000,000	1,160,000,000	1,160,000,000
				r	=	•	T.
Demonstrations				116	116	116	116
1 Crop demonstrations	2,000,000	4	,	928,000,000	928,000,000	928,000,000	928,000,000
2 Livestock demonstrations	2,000,000	4		928,000,000	928,000,000	928,000,000	928,000,000
3 Fisheries demonstrations	1,500,000	4	1	696,000,000	000'000'969	696,000,000	696,000,000
4 Model farms - adapted to district conditions	2,000,000	2		464,000,000	464,000,000	464,000,000	464,000,000
5 Nursery develeopment	2,000,000	2	ı	464,000,000	464,000,000	464,000,000	464,000,000
6 Enterpsie developemnt	2,000,000	2	r	464,000,000	464,000,000	464,000,000	464,000,000
7 Entomology control demonstrations	2,000,000	3	•	696,000,000	696,000,000	696,000,000	696,000,000
			1	3		1	
Technical Capacity Development			1	116	116	116	116
1 Crop field days	1,000,000	7		812,000,000	812,000,000	812,000,000	812,000,000
2 Livestock field days	1,000,000	7	-	812,000,000	812,000,000	812,000,000	812,000,000
3 Fisheries field days	750,000	7	E	609,000,000	000'000'609	609,000,000	000'000'609
4 Exchange visits	900,000	2		208,800,000	208,800,000	208,800,000	208,800,000
5 Exchange tours	1,000,000	2	1	232,000,000	232,000,000	232,000,000	232,000,000
			•	3			
			3	9		132	1
District: Technical Development Costs			•	10,097,800,000	10,097,800,000	10,097,800,000	10,097,800,000
Cumulative Sub-total by Year				10,097,800,000	20,195,600,000	30,293,400,000	40,391,200,000
Total District Non-Wage Costs:			r	40,588,400,000	22,405,400,000	22,683,800,000	23,479,560,000
Cumulative Totals (USH):			1	40,588,400,000	62,993,800,000	85,677,600,000	109,157,160,000

Sub-County: Fixed costs  Office  1 Printers 2 Copiers 3 Smart phone 4 Computers and accessories 5 Furniture/meeting room	Cost (USH)						
Office  1 Printers 2 Copiers 3 Smart phone 4 Computers and accessories 5 Furniture/meeting room		#	Ú	1	Ξ.	-	1
Office  1 Printers 2 Copiers 3 Smart phone 4 Computers and accessories 5 Furniture/meeting room	3		•	•		•	
1 Printers 2 Copiers 3 Smart phone 4 Computers and accessories 5 Furniture/meeting room	1,360	2520	1	760	400	200	84
2 Copiers 3 Smart phone 4 Computers and accessories 5 Furniture/meeting room	1,000,000	1	0	760,000,000	400,000,000	200,000,000	84,000,000
3 Smart phone 4 Computers and accessories 5 Furniture/meeting room	1,500,000	1	1	1,140,000,000	600,000,000	300,000,000	126,000,000
4 Computers and accessories 5 Furniture/meeting room	200,000	1	200	380,000,000	200,000,000	100,000,000	42,000,000
5 Furniture/meeting room	2,500,000	1	ï	1,900,000,000	1,000,000,000	200,000,000	210,000,000
	1,500,000	1	E	1,140,000,000	000'000'009	300,000,000	126,000,000
			1	-	71	-	3
Transport			Ŗ	760	400	200	84
1 Motorcycles	7,000,000	2	1	10,640,000,000	5,600,000,000	2,800,000,000	1,176,000,000
2 Bicycles	250,000	4	£	760,000,000	400,000,000	200,000,000	84,000,000
			1	31	21	i	a
Equipment			ľ	2007	400	200	84
1 GPS	000'009	1	9	456,000,000	240,000,000	120,000,000	50,400,000
2 Insect traps	100,000	2	r	152,000,000	80,000,000	40,000,000	16,800,000
3 Sampling equipment	100,000		9	76,000,000	40,000,000	20,000,000	8,400,000
			£	E	15	ı	10
			9	31	51		1
Sub-County: Fixed Costs			1	17,328,000,000	9,120,000,000	4,560,000,000	1,915,200,000
Cumulative Sub-total by Year			ä	17,328,000,000	26,448,000,000	31,008,000,000	32,923,200,000
			ť			r	ı
	Unit	No.	ð		531	0	
Sub-County: Operating costs	Cost (USH)	#	ï	E	Е	£	L
			6	2	120		
Office Supplies			1	760	1,200	1,360	1,360
1 Paper products	150,000	4	6	456,000,000	720,000,000	816,000,000	816,000,000
2 Toner cartridges	300,000	4	1	912,000,000	1,440,000,000	1,632,000,000	1,632,000,000
3 Writing supplies	125,000	4	0	380,000,000	000'000'009	680,000,000	680,000,000
4 Communications air time	125,000	4	1	380,000,000	600,000,000	680,000,000	680,000,000
			C		G		L
Travel			1	760	1,200	1,360	1,360
1 Fuel	3,000,000	4	E	9,120,000,000	14,400,000,000	16,320,000,000	16,320,000,000
2 Transport rent	250,000	4	1	760,000,000	1,200,000,000	1,360,000,000	1,360,000,000
3 Transport repair	750,000	4	į.	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
4 Transport maintenance	750,000	4	1	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
			£	E	r		D
Logistic Support			1	760	1,200	1,360	1,360
1 Perdiem in sub-county	000,009	4	£	1,824,000,000	2,880,000,000	3,264,000,000	3,264,000,000
2 Perdiem outside outside sub-county	700,000	4	ã	2,128,000,000	3,360,000,000	3,808,000,000	3,808,000,000
3 Radio communications	250,000	4	ľ	760,000,000	1,200,000,000	1,360,000,000	1,360,000,000
4 Data collection and dissemination	700,000	4	9	2,128,000,000	3,360,000,000	3,808,000,000	3,808,000,000
5 Community coordinator	225,000	10	Ţ	1,710,000,000	2,700,000,000	3,060,000,000	3,060,000,000
6 Supervision of demonstrations	125,000	12	0	1,140,000,000	1,800,000,000	2,040,000,000	2,040,000,000
			ï	ī	r	Ī	
			0	a .	81		
Sub-County: Operating Costs			1	26,258,000,000	41,460,000,000	46,988,000,000	46,988,000,000
Cumulative Sub-total by Year			į.	26,258,000,000	67,718,000,000	114,706,000,000	161,694,000,000

Sub-County: Technical Development	Unit	No.	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
			1	1			-
Workshops				290	1,200	1,360	1,360
1 Work planning and budget workshops (2 times)	1,000,000	2	i.	1,520,000,000	2,400,000,000	2,720,000,000	2,720,000,000
2 Private sector joint workshops	750,000	2		1,140,000,000	1,800,000,000	2,040,000,000	2,040,000,000
3 NGO/CSO joint workshops	750,000	2		1,140,000,000	1,800,000,000	2,040,000,000	2,040,000,000
4 Innovation platform (multi stakeholder) meetings	750,000	9		3,420,000,000	5,400,000,000	6,120,000,000	6,120,000,000
5 Capacity building for parish staff	1,000,000	4	ì	3,040,000,000	4,800,000,000	5,440,000,000	5,440,000,000
			č			= =	-
Demonstrations			ï	092	1,200	1,360	1,360
1 Crop demonstrations	750,000	4	i	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
2 Livestock demonstrations	220,000	4	*	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
3 Fisheries demonstrations	750,000	4		2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
4 Model farms - adapted to district conditions	800,000	2	·	1,216,000,000	1,920,000,000	2,176,000,000	2,176,000,000
5 Nursery develeopment	000'059	4	ï	1,976,000,000	3,120,000,000	3,536,000,000	3,536,000,000
6 Enterpsie developemnt	750,000	4	ī	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
7 Entomology control demonstrations	750,000	2	,	1,140,000,000	1,800,000,000	2,040,000,000	2,040,000,000
			9	9	100	3	-
Technical Capacity Development			c	092	1,200	1,360	1,360
1 Crop field days/schools	750,000	4	i.	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
2 Livestock field days/schools	750,000	4		2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
3 Fisheries field days/schools	750,000	4	1	2,280,000,000	3,600,000,000	4,080,000,000	4,080,000,000
4 Exchange visits	500,000	2	9	760,000,000	1,200,000,000	1,360,000,000	1,360,000,000
5 Exchange tours	200,000	2		760,000,000	1,200,000,000	1,360,000,000	1,360,000,000
			r	T.	(5)	5	E
			ī	1	-	-	1
Sub-Counrty: Technical Development Costs				32,072,000,000	50,640,000,000	57,392,000,000	57,392,000,000
Cumulative Sub-total by Year			ā	32,072,000,000	82,712,000,000	140,104,000,000	197,496,000,000
			1	ī	-		•
			i	T.	-		
Total Sub-County Non-Wage Costs:			ï	75,658,000,000	101,220,000,000	108,940,000,000	106,295,200,000
Cumulative Totals (USH):			,	75,658,000,000	176,878,000,000	285,818,000,000	392,113,200,000

Directorate Costs	Unit	No.	FY 16-17	FY 17-18	FY 18-19	FY 19-20	FY 20-21
Directorate: Fixed costs	Cost (USH)	#		4			
			1		1		
Office			3	20			
1 Printers	1,000,000	0 2	1	40,000,000			
2 Copiers	1,500,000		5	30,000,000	9	3	
3 Smart phone	200,000	0 1	1	10,000,000	1	1	
4 Computers and accessories	7,000,000		,	280,000,000	,	1	
5 Furniture/meeting room	10,000,000		ì	200,000,000	1		,
			Č	-			
Transport			,	25			
Vehicle	120,000,000	0 1	Č	3,000,000,000			
			1	3	1	1	
Equipment			ř	4	i.	12	
GPS	000'009	0 2	3	4,800,000	1	a	
2 Camera/video	750,000		î	12,000,000	1		
3 Tablets	2,500,000		7	20,000,000	1	1	
4 Plotter	6,000,000	0 1	1	24,000,000	1	E	
			9	9	9	31	31
				ī			
Directorate: Fixed Costs			3	3,650,800,000	30		
Cumulative Sub-total by Year				3,650,800,000	î		
			1	,		1	
	Unit	No.	)	ĵ.	1	1	
Directorate: Operating costs	Cost (USH)	#		Č			
			3	3.	Ĭ	a	1
Office Supplies			Ē	8		8	8
Paper products	200,000	0 1	3	4,000,000	4,000,000	0 4,000,000	4,000,000
Toner cartridges	300,000	0 2	ï	4,800,000	4,800,000	0 4,800,000	4,800,000
3 Writing supplies	200,000	0 1	3	4,000,000	4,000,000	0 4,000,000	4,000,000
4 Communications air time	200,000	0 1	ï	4,000,000	4,000,000	0 4,000,000	4,000,000
			ī	3			•
Transport			ï	8		8	
1 Fuel	12,000,000	0	)	96,000,000	6	6	6
2 Transport rent	1,000,000		ï	8,000,000	8,000,000		
3 Transport repair	1,000,000	0 1	1	8,000,000	8,000,000	8,000,000	8,000,000
Transport and equipment maintenance	15,000,000	0 1	1	120,000,000	120,000,000	120,000,000	120,000,000
			-		(2)	ь.	
Logistic Support			ì	80		8	8
Perdiem to district	2,000,000	0 1	Ü	16,000,000	16,000,000	0 16,000,000	16,000,000
2 Perdiem to Kampala	2,000,000	0	1	16,000,000			
3 Radio & TV communications	1,500,000	0 3	ř	36,000,000	36,000,000	36,000,000	36,000,000
4 Publicity in Media	3,000,000	0 1	1	24,000,000	24,000,000	24,000,000	24,000,000
4 Manuals and printing costs	2,500,000	0 1	ř	44,000,000	44,000,000	0 44,000,000	44,000,000
5 Conultant servcies	12,000,000	0 1	1	96,000,000	96,000,000		96,000,000
6 Data collection and dissemination	3,500,000	0 1		28,000,000	28,000,000	28,000,000	28,000,000
		- 7	5	3			
			ž	î			
Directorate: Operating Costs			1	508,800,000			
				000 000 001	1 017 500 000		

orkshops (2 times) 1 s akeholder) meetings 1 enior Staff 1 edevelopment 2 ement 1 service 1	110,000,000 80,000,000 80,000,000			1			,
	000,000					•	•
	000,000		•	4	4	4	4
	000,000	2	•	880,000,000	880,000,000	880,000,000	880,000,000
	000,000	2		000'000'019	640,000,000	640,000,000	640,000,000
		2		640,000,000	640,000,000	640,000,000	640,000,000
Staff 1  Jopment 1	80,000,000	2	ī	640,000,000	640,000,000	640,000,000	640,000,000
lopment 1	110,000,000	2	9	880,000,000	880,000,000	880,000,000	880,000,000
lopment 1	<u> </u>		,		1	1	
lopment 1			9	4	4	4	4
lopment 1	000,000,000	1	•	240,000,000	240,000,000	240,000,000	240,000,000
lopment	000'000'09	1		240,000,000	240,000,000	240,000,000	240,000,000
	80,000,000	1	1	320,000,000	320,000,000	320,000,000	320,000,000
.e	70,000,000	1		280,000,000	280,000,000	280,000,000	280,000,000
	10,000,000	1	3	440,000,000	440,000,000	440,000,000	440,000,000
	65,000,000	1	•	260,000,000	260,000,000	260,000,000	260,000,000
7 Quality assurance of services 65,00	65,000,000	1		260,000,000	260,000,000	260,000,000	260,000,000
8 School garden programs 80,00	80,000,000	1	•	320,000,000	320,000,000	320,000,000	320,000,000
					r	ī	ī
Technical Capacity Development			T.	4	4	4	4
1 Study tours 15,00	15,000,000	1		000'000'09	000'000'09	000'000'09	60,000,000
	12,500,000	1		20,000,000	50,000,000	20,000,000	50,000,000
3 Gender and youth capacity development 14,00	14,000,000	1	-	26,000,000	26,000,000	26,000,000	26,000,000
	12,500,000	1		20,000,000	50,000,000	50,000,000	50,000,000
5 Markets and marketing staff training 60,00	000,000,00	1		240,000,000	240,000,000	240,000,000	240,000,000
					1	ï	
					E	1	ì
Directorate: Technical Development Costs			-	6,496,000,000	6,496,000,000	6,496,000,000	6,496,000,000
Cumulative Sub-total by Year			870	6,496,000,000	12,992,000,000	19,488,000,000	25,984,000,000
				-	-	1	,
Total Directorate Non-Wage Costs:				10,655,600,000	7,004,800,000	7,004,800,000	7,004,800,000
Cumulative Totals (USH):			·	10,655,600,000	17,660,400,000	24,665,200,000	31,670,000,000
			•		-	ĭ	1
			-		-	-	1
			-			1	T.
Total Extension Non-Wage Costs:			-	126,902,000,000	130,630,200,000	138,628,600,000	136,779,560,000
Cumulative Totals (USH):				126,902,000,000	257,532,200,000	396,160,800,000	532,940,360,000
					5		3
Uganda Coffee Development Authority Extension Costs			-	6,410,000,000	6,410,000,000	10,410,000,000	12,050,000,000
Cotton Development Authority Extension Costs			•	5,000,000,000	5,000,000,000	6,500,000,000	8,750,000,000
Total Sector Non-Wage Extension Costs				138,312,000,000	142,040,200,000	155,538,600,000	157,579,560,000
Cumulative Sector Non-Wage Extension Costs				138,312,000,000	280,352,200,000	435,890,800,000	593,470,360,000

