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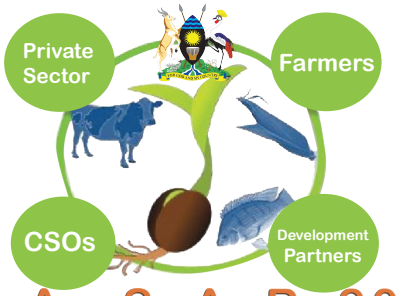

J A S A R 2017

Joint Agricultural Sector Annual Review

Accelerating Agricultural Transformation from Subsistence Farming to Commercial Agriculture

NSA Statement

Civil Society Perspective on Agriculture Sector Performance During FY 2016 / 17; Opportunities, Challenges and Recommendations

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NSA Statement
Civil Society Perspective On Agriculture Sector Performance During FY 2016/17 Opportunities Challenges and Recommendations

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Acknowledgements

The process of generation, preparation and development of this NSA sector Assessment for the FY 2016/17, and the participation of NSAs in the preparation and conducting JASAR activities at regional (northern Uganda) and National level has be made possible by financial support from NSAs and Finding partners such as the Dutch government through OXFAM under its Right to Food Project and Trust Africa Foundation under the programme on Building of a vibrant and inclusive Non State Actors Movement for Mutual Accountability Engagement on policy and Investment in Agriculture in Uganda

The authors thank the Government of Uganda through its Ministry of Agriculture Animal Industry and Fisheries (MAAIF) for organizing this annual Joint Sector Review as obliged by the CAADP Malabo commitment. We further appreciate the space provided to NSAs to take active participation in organizing the JASAR events as well as contributing to the development of the sector.

Much appreciation is extended to different Non State Actors and their individual staff for taking part in the analysis, drafting of this position paper and actual participation in the preparation of the JASAR events. They include: ESAFF-U (Andrew Adem), OXFAM in Uganda (Charles Opiyo, Jackson Muhindo, and Joseph Olweny), CAPCA (Allan Ssebulime & Bukenya Joseph), FRA (Jude Ssebuliba, Agnes Kirabo & Regina Kayoyo), PELUM-U (Marilyn Kabalere), SEATINI (Jane Nalunga), COPACSO (Benjamin Mutambukah), UAA (Steve Hodges), CSBAG (Sophie Nampewo), VEDCO (Crespo Mubalya), UFCVP- CARITAS Uganda (Betty Agutti)

Further appreciation goes to all NSAs mentioned at the back of this booklet whose work in various parts of the country provided inspirations that informed the process of writing this document

In a special way, we appreciate organizations that supported the Regional JASAR events including; Trocaire, Oxfam, PELUM Uganda, ESAFF Uganda, CSBAG and FRA plus those that have supported side events during the national JASAR including; SEATINI for supporting a side event on, “Markets, Primary Processing and Public Private

Producer Partnerships" CSBAG and FRA for supporting a side event on, "Addressing critical farm inputs" ESAFF, VEDCO and Caritas-Ug for supporting a side event on, "Strengthening Agricultural Extension Delivery and Research and Development."

List of Acronyms/Abbreviations

ASSP	Agricultural sector strategic plan
NDP II	National Development Plan II
MAAIF	Ministry of agriculture Animal Industry and Fisheries
MDAs	Ministries Departments and Agencies
NSAs	Non State Actors
CSOs	Civil Society Organizations
CAADP	Comprehensive African Agricultural Development Programme
NAADS	National Agricultural Advisory Services
SLM	Sustainable Land Management
DDA	Dairy Development Agency
EU	European Union
AU	African Union
RAIP	Regional Agricultural Investment Plan
NAIP	National agricultural Investment Plan
UNFCCC	United Nations Framework Convention on Climate Change
GoU	Government of Uganda
ACF	Agricultural Credit Facility
WTO	World Trade Organisation
EPA	Economic Partnership Agreement
CFTA	Continental Free Trade Area
TFTA	Tripartite Free Trade Area
EAC	East African Commission
COMESA	Common Market for Eastern and Southern Africa
SADC	Southern African Development Cooperation
MAAIF TPM	Ministry of Agriculture Animal Industry and Fisheries – Top Policy Management

1.0 Introduction

The FY 2016/17 marks the successful second year of Implementation of the NDP II and the ASSP 2015/15 - 2019/20. Uganda's VISION 2040, the NDPII and the ASSP all aspire to transform Uganda's peasant agriculture into modern commercialized and a prosperous sector. The country broadly sets to strengthen competitiveness of the small-scale producers, create wealth and employment to realize inclusive growth. Despite of this aspiration, impeding factors such as; production and productivity, the enabling environment and climate change have remained sound on stock.

The agricultural sector guided by the ASSP, sought during the year under review to continue focusing on medium term priorities of improving agriculture production and productivity, increase access to critical farm inputs, increase access to market and value addition and strengthen the quality of agricultural commodities and strengthen agricultural services institutions. During the year, the agriculture sector under the stewardship of MAAIF contributed to the national development and budgeting framework theme of "Enhanced Productivity for Job Creation," we therefore commend Government of Uganda and Development Partners that provided financial and technical support to the sector through the ministry and other MDAs to make a contribution towards this national inspiration despite numerous environmental, economic and catastrophic challenges experienced during the year. We also recognize the contributions of other Non-State Actors (NSAs) including the farming communities, CSOs, NGOS, Private sector, academia, Faith Based Organizations, Religious Institutions and the Media for their incredible contribution to the sector during the year.

This sector performance assessment for the FY 2016/17 is undertaken by the NSAs focusing on available official statistics and information obtained from Government documents, research studies conducted by accredited research institutions in the country, practical experiences from the grassroots generated by practioners as well as analytical submissions as a result from analyses of various data sets.

The assessment further, reviews the year 2016/17 in comparison with the previous year 2015/16 and the current year 2017/18.

Well as NSAs operations are spread across the entire sector, this assessment only focused on; budget performance; land and land use; production, inputs and research; climate change adaptation in agriculture; agricultural extension; value addition and markets; pests, diseases and vector control; and Food and Nutrition.

The NSA Working Group has undertaken this assessment as partners and active stakeholders in the sector with a view of reflecting on the progress the sector is making in the realization of the national development goals in the context of the continental and global transformation frameworks. Findings and recommendations are aimed at steering the sector to greater achievement and aiding the players to add value as well as making every single resource spent in the sector create value. This assessment will be used as a tool to guide investment in the sector.

2.0 Background

Heads of African states, Uganda inclusive renewed their commitment under the Malabo declaration aiming at ending hunger and having poverty reduced through agricultural growth and transformation with sustained actions by 2025. A results framework was designed to facilitate monitoring the implementation of these commitments as a basis of review and tracking progress and foster mutual learning and accountability. In this arrangement all stakeholders in the sector including State and NSAs commit to being accountable, contribute evidence, track and report progress through Joint Sector Reviews.

For the last six years, the Government of Uganda (GoU) through MAAIF, have been conducting these sector assessments and progressively fostering active participation of all stakeholders in the preparation and actual conducting of the reviews. The 7th Joint Agricultural Sector Annual Review (JASAR), marks the 3rd review process where NSAs have been on equal footing with the state in undertaking this process. This assessment is focused on specific goals under the seven (7) CAADP commitments on; Recommitment to the principle and values of CAADP process, recommitment to enhance investment finance in agriculture, commitment to end hunger by 2025, commitment to halving poverty by 2025 through inclusive agriculture growth and transformation, commitment to boost intra African trade in agriculture commodities and services, commitment to enhancing resilience in livelihood and production systems to climate viability and other shocks, commitment to mutual accountability to actions and results.

To this day, the Government of Uganda, through its overarching planning frameworks, i.e. NDP II and the VISION 2040, prioritizes the agriculture sector as number one in propelling the country to a middle income status by 2020. As NSAs, we duly support the government in the prioritization of the sector given its significant role of providing livelihoods to the largest proportion of the population, guaranteeing national and household food security, supporting the growing industrial sector and exhibiting the potential of creating backward and forward linkages in the social, economic and political transformation. We reaffirm our commitment to working with government and constructively contribute to this desired inclusive transformation, thus this sector assessment.

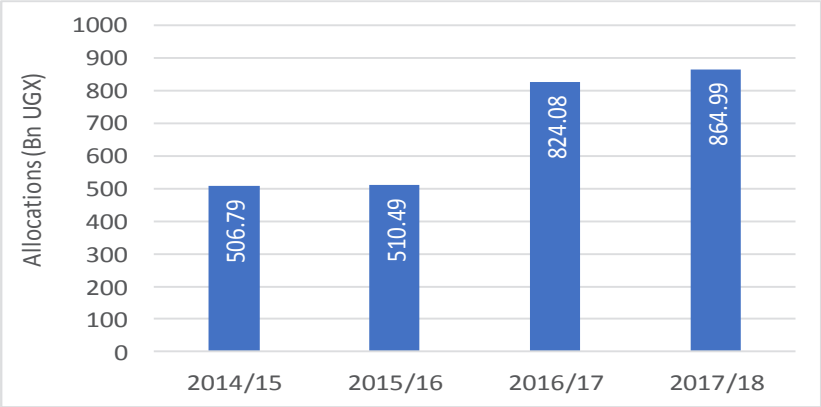
3.0 Sector Assessment

3.1 Investment Finance in Agriculture and Budget Performance

The assessment under this section, is in line with theme performance area 2 of Investment finance for agriculture under the Malabo examining public expenditure to the agriculture sector, foreign private sector investment in agriculture, access to financing especially by small scale farmers.

The agricultural sector for the last three FYs 2014/15, 2015/16, 2016/17, has experienced consistent increase in budget allocation. Further Increase has been witnessed in the current FY 2017/18 with an increase of UGX 23.3bn leading to an approved budget of UGX 854.47bn including appropriations in aid as shown in the figure below.

Graph I: Agriculture sector allocations



Source: Author's compilation from Approved Budget Estimates

Out of the above budget, UGX 391.98bn (45.9%) was Government of Uganda funds while the UGX 221.75bn (26%) was donor (external financing), we therefore commend the government of Uganda for this exhibited commitment as government contribution to the sector budget superseded that

from development partners. The composition of the budget by expenditure category in FY 2016/17 was as follows; Wage constituted UGX 72.77bn, Non-Wage Recurrent was UGX 136.93bn, GoU and Donor Development was UGX 613.72bn.

Table 1: Budget allocation and sector growth Vs CAADP

	2014/15	2015/16	2016/17	2017/18
Total National Budget	14.8tr	23.9tr	26.3tr	29.tr
Estimate Agriculture Population	27.2m	28.0m	28.9m	29.8m
Allocation to agric. Sector	506.7bn	510.5bn	823.4bn	846.7bn
CAADP projected allocation	1.5tr	2.4tr	2.6tr	2.9tr
Percentage allocation	3.4	2.1	3.1	2.9
Variance	973.2bn	1.9bn	1.8tr	2.1tr
Population Vs Budget	18,631	18,186	28,451	28,402
Sector growth rate	2.3	2.8	1.3	

Source: NSA analysis

Although there's consistent growth in actual volume of resources allocated to the Agriculture Sector from 506.7Bn in FY 14/15 to 846.7Bn in FY17/18, the percentage increase does not commensurate to the CAADP commitment of 10%. Similarly, the growth in volume of money allocated is not consistent to the instead declining growth rate in the sector of 2.3% in FY 14/15 to 1.3% in FY 16/17 staggered way below the CAADP growth rate of 6%. There's therefore need to interrogate the inherent factors that are causing this inconsistency in growth regardless of increment in the budget allocation.

Table 2: NDP costing targets versus actual approved budget (Bn UGX)

Financial Year	2016/17		2017/18	
	NDP target	Actual	NDP target	Actual
Wage	172	72.77	90	74.47
Non-wage	201	136.93	152	123.65
Recurrent	372	210.36	242	198.51
Development	428	613.72	614	666.48
Total	**801**	**824.08**	**876**	**864.99**

Source: Compilations from the NDP II and Appr oved Budget Estimates for FY 2016/17 and 2017/18

Whereas the allocations to the sector are above the NDP II costing targets overall, we are concerned about the low operational budget allocations to wage and non-wage which culminate in low budget absorptions and performance against outcomes.

Table 3. Comparison of budget allocations among votes

VOTE	MDA	2016/17			2017/18
		Approved	Released	Spent	Budget
10	MAAIF	248.20	164.85	153.8	316.61
121	DDA	6.62	6.11	6.6	5.9
122	KCCA	6.36	8.39	8.35	6.36
125	NAGRI-DB	12.14	11.9	12.06	11.21
142	NARO	107.86	90.1	89.15	84.18
152	NAADS	318.61	318.94	317.69	315.70
155	UCDO	5.30	6.97	7.05	6.24
160	UCDA	67.91	87.72	68.82	67.09
510 - 850	Local Governments	51.08	50.35	50.28	51.62
	Grand Total	**824.08**	**745.33**	**713.8**	**864.99**

Source: Author's compilation from Approved Budget Estimates for FY 2016/17 and FY 2017/18 and Draft Budget Performance Report 2016/17 for releases and expenditure

Although the budget allocation to Local Governments over the subsequent years as reflected above has been consistent, it should be noted that services that aim at revamping the agricultural sector are accessed through local governments, the table above however, indicates the insignificant budget allocation to the base where the fundamentals of the sector on production and productivity, marketing and value addition and gross interaction between the Ministry and farmers among others are undertaken. Efforts should be geared towards tilting this imbalance.

Due to increased drought and hunger experienced in FY 2016/17, the sector received a supplementary budget of UGX 15bn through the Office of the Prime Minister to provide emergency food for people in hunger stricken areas Western, Northern and some parts of Central Region and UGX 16bn for the

emergency control of bird flu.

Whereas we commend government's response to these challenges and others experienced by the sector. We're concerned that government through MAAIF has continued not allocating enough resources for disease, pests and vector control, pursues a cash crop agenda under NAADS (the biggest investment vote) as well as no attempts to build national food reserves.

We commend the government of Uganda of the 84.6% budget release of the total sector budget approved of UGX 845.467Bn in the FY 16/17. We further commend MAAIF, for the consistent positive performance in term of budget absorption recorded a 98.5% budget absorption on the total 712.769Bn budget that was released.

Table 4: Budget performance against release during the FY 2016/17[1]

UGX Bn	Approved Budget	Released by End Jun	Spent by End Jun	% Budget Released	% Budget Spent	% Releases Spent
Wage	72.771	54.352	54.360	74.7%	74.7%	100.0%
Non-Wage	136.928	121.728	122.780	88.9%	89.7%	100.9%
Devt GoU	391.979	388.486	388.233	99.1%	99.0%	99.9%
Devt Ext.	221.745	133.017	120.860	60.0%	54.5%	90.9%
Total GoU	601.678	564.566	565.373	93.8%	94.0%	100.1%
GoU + Ext	823.424	697.583	686.232	84.7%	83.3%	98.4%
Arrears	0.657	0.657	0.657	100%	99.7%	99.7%
AiA	30.387	25.046	25.882	82.4%	85.2%	103.3%
Grand Total	854.467	723.285	712.769	84.6%	83.4%	98.5%

The sector's budget performance in the FY 2016/17 Certificate of Compliance to NDP II was low at 47% mainly attributed to; i) low budget to realize ambitious targets, ii) delays in project approvals, commencement and implementation, and; iii) delayed implementation of the single spine extension system. Only UCDA had an approved and aligned development plan to the NDP II, DDA, CDO and NARO had plans but they were not approved, while NAGRIC and NAADS had draft plans that were not aligned to the NDP II. We therefore **recommend** that MAAIF expedites the alignment of the ASSP to Malabo and seek final approval of the sector plan. In

[1]MoFPED,2017, Draft Annual Budget Performance Report FY 2016/17

the same regard, MAAIF agencies should seek completion during the current FY of aligning their development plans to NDP II.

In addition to the above, the sector's performance is still greatly challenged by: during the year ending to the agriculture sector grew lower in average by 9.7% compared to growth of 16.5% in the previous year[2].

Access to finance:

Agricultural financing in Uganda is still a challenge, because it is mainly focused on credit provision, tied to cash and majorly expected to be provided by the private sector. Government has made efforts to provide financing through Agricultural Credit Facility (ACF) provided by commercial and micro deposit taking institutions. Much as this is a great intervention that increases opportunities for financing, the largest proportion of farmers in need of this financing i.e. the smallholder farmers are unable to access it. This is mainly because they are unable to meet the criteria set to access this credit including the minimum amount, collateral required and have limited ability to provide a clear payback plan.

The commercial banks through which this financing is channeled have not publicized these services which has in turn reduced their accessibility. Many farmers are not sensitized/ informed of their availability and the criterion for access.

Agriculture Insurance:

During the JASAR 2016, NSAs observed that during the FY2015/16, Government has allocated UGX 5 Billion to boost the uptake of the agricultural insurance by farmers. Further overserved that insurance players were reluctant to develop innovative agriculture insurance products and only nine out of the 26 licensed insurances offered agriculture insurances in areas of livestock, crop and weather indexed.

NSAs recommended that the Agriculture Insurance Bill be passed by Parliament. And further recommended that the sector needed at least UGX 50 Billion to considerably subsidize insurance industry to uptake agriculture.

During the year under review, 2016/17, information on investment and performance of this scheme is

[2]Bank of Uganda, 2917

largely unavailable. In addition, no developments have been advanced on the agriculture insurance bill.

In line with agricultural financing, the adoption of agribusiness insurance and packages for agricultural produce should also be promoted to increase mitigation of the risks within the sector. This is currently being done by a Public/ Private committee led by the Uganda Insurance Association and they include insurance companies, NGOs, Ministry of Finance Planning and Economic Development, Bank of Uganda and Uganda Insurance Regulatory Authority.
We recommend that performance on this particular function should be maintained and information be made readily available to stakeholders. **We further recommend that Government expedites the processes of passing the Agriculture insurance Bill**.

Ministry of Agriculture's limited participation in the discussions for the agriculture financing policy and strategy: The Ministry of Finance in 2017 put in place a committee to discuss and pave a way forward on agriculture financing issues bringing together participation of different stakeholders. This is a docket that applies directly to the Ministry of Agriculture, however, we're concerned about the inconsistent non-participation of MAAIF in the steering committee meetings despite communication and invitations.

We therefore **recommend** that this FY, MAAIF Top Policy Managemnt (TPM) designates specific officials to represent the Ministry on the committee and steer discussions of the committee to the wide sector.

Development of a single Agricultural financing facility: Government has attempted to address the problem of agriculture financing through several programmes such as; the Youth Livelihoods Programme (UGX 67bn), Uganda Women's Empowerment Programme (UGX 40.6bn) and the Agriculture Credit Facility (UGX 50bn), among others. Much as these are well thought interventions, they are spread across commercial banks and district offices to avail them to beneficiaries.

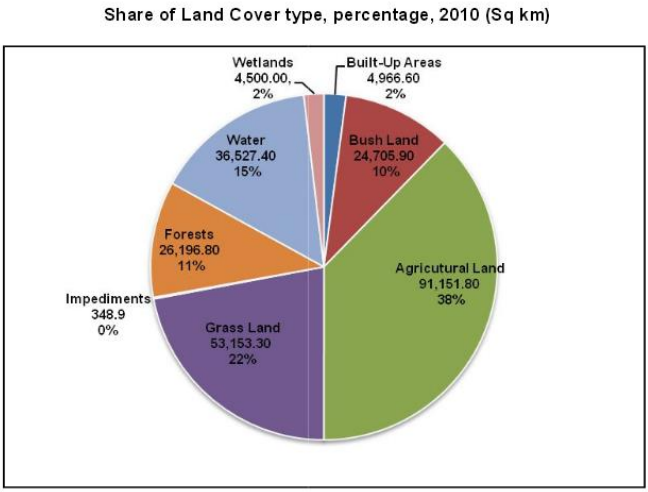
However, evidence indicates that a bulk of this money is invested in agriculture, therefore Government should put these funds together in a facility responsive to the agricultural needs to provide finances in form of credit. The bank would in addition provide financial literacy and business

skills development to farmers and other agriculturalists to ensure prudent utilization of the finances. The interest rates charged by this facility should be competitive to revamp the sector and its actors as well as creating competition among other service providers. The Bank of Uganda (BOU), however will need to develop specific monitoring and management guidelines for the facility.

3.2 Land and Land use

Land under the Malabo commitments is under theme 3 performance area on ending hunger, specifically under performance category 3.1 of access to agriculture inputs and technologies. Whereas, Malabo measures the proportion of farm households with ownership of secured land rights, the issues of land use in Uganda have remained of profound importance to the promotion, utilisation of cost effective and quality agriculture Inputs in order to realise increased production and productivity. In terms of planning at the national level, MAAIF ought to provide leadership and seek support from the lands ministry to develop and operationalize national land use maps. The assessment under this section therefore, combines land use and land tenure security issues in the context of agriculture transformation and resilient livelihoods.

The fertility and productivity of agricultural land in Uganda continues to decline . Arable land has reduced from 99,703 sq kms in 2005 to 91,152 sq kms in 2010 . Continued increasing urbanization, at an annual rate of 5.4 %, and increasing residential and commercial construction which treats land as a mere factor and not as a productive resource, continues to lead to shrinking farm sizes, raising land prices and increasing conflict in many parts of Uganda. Land tenure insecurity continues for most farmers and other agricultural land users.



Source: UBOS, 2014

Yet land use priorities in NDPII are not captured in the Budget Framework. As a result, inadequate land use plan development and implementation will continue to allow this loss of agricultural land.

During the previous sector review, NSAs noted with concern the total reduction in annual productivity rate of 1.3% for the last 20 years coupled with the non-sustainable use of land and loss of agriculture productivity. As NSAs we are concerned that Uganda continues to produce at 30% of its potential. In the coffee sub sector, despite the president's target of Producing 20m bags by 2020, the current subsector average productivity was at 600kg/ha compared to 3000kg/ha in Vietnam, one of Uganda's competitor on the world market.

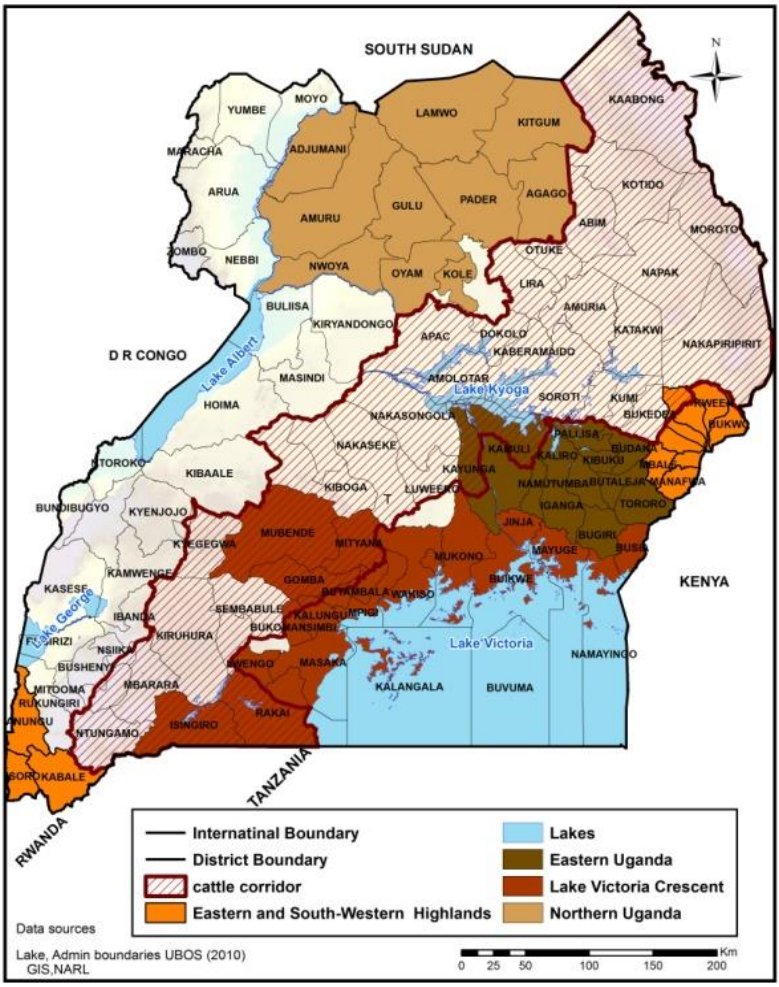
In terms of land degradation, about 36% of Uganda is affected by severe land degradation and about 10% very severely. The cost of natural resource degradation in the country is estimated at 17% of the GDP per year, the effects are reflected in declining yields, rural poverty, food insecurity among other vulnerabilities. Degraded areas are prone to the vagaries of climate change. If agriculture is to propel the country to the middle income status, productivity must be prioritised through proper land use planning, zoning, management and coordination of the growing and competing land uses, such

as urbanisation and associated infrastructure.

In addition, NSAs noted the numerous conflicts emerging from pressures on land and subdivision of land which reduces productivity.

We are in total agreement with the World Bank's argument that proper land management and strengthening of land tenure has potential to increase land and agricultural productivity by 5.1%.

Map of Uganda showing land degradation hotspots



Source: UBOS, 2014

NSAs were further concerned that limited investment is set aside to undertake soil fertility mapping, and coming up with soil fertility maps. The previous year has seen the continuation of poor land use practices which increase deforestation and soil erosion; which reduce rather than maintain or increase soil fertility; which fails to intensify production.

3.2.1 Tenure Security and Agricultural productivity

During the last year the continued insecure tenure of farmed land continues to keep small holder farmers, and other agricultural based investors that can inclusively transform the sector, from investing in fertilizer , irrigation and other technologies which could improve productivity and sustainability of land use. One of many examples of this is Irish potato average yield which in Uganda is half that of Rwanda and a third of that of Kenya, but could be nearly doubled with proper fertilizer use, and nearly tripled if quality seed was added as well . Despite availability of some loan funds for increasing value addition which could increase their income from their crops, many farmers are constrained by the insecurity of not knowing whether they will retain control of the land on which they make these investments. Land disputes reduce agricultural productivity by 5 - 11% in the nation as a whole, and 25% on Mailo land in the central region .

3.2.2 Extension and land use

Inadequately extension service delivery system means that farmers are not sensitized to halt poor land practices, including the inappropriate and excessive use of chemicals. The slow implementation of the single spine system leaves a lot of spaces for NSAs, promotes non- commercial and un regulated methods of retaining and increasing land productivity. On the other hand, several other groups are promoting alternatives provided by the national land policy and law to increase tenure security such as the certificate of customary ownership by FAO and ZOA.

The newly rebuilt Agricultural Extension system needs greatly to increase sensitization on land use practices that differ soil erosion and that increase sustainable intensification without expanding farm lands.

We reaffirm our previous recommendations that MAAIF spearheads the process of updating land use maps to a scale of 1 to 500

or lower from the current 1: 5000. MAAIF Promotes sustainable land use management (SLM) this year, specific targets should be made to finalise the development of the rangelands and Pastoralist Management Policy and identify issues to be included in the financial budget 2018/19.

Further MAAIF through the Directorate of agriculture extension, needs to spearhead a productivity revolution among smallholders based on technological change that systematically integrate SLM. In addition, MAAIF should during the current year develop an atlas for the country incorporating soil testing within the extension system. We further reaffirm, that MAAIF should strengthen inter-ministerial collaboration with other government MDAS. The government of Uganda should up hold the commitments under strengthening investment framework 2020 with the purpose of up scaling SLM practices across the sectors, programmatically and to avoid duplication across stakeholders, tap into synergies across the sectors and promote monitoring and evaluation across the sectors.

3.3 Value Addition and Markets

This section, assessed the sector performance against agreed performance indicators within the Malabo framework on investment in value chains, post-harvest handling loss, intra African trade in agricultural commodities and services specifically on the ratio of agriculture exports to agriculture GDP, share of processed agriculture exports in total agriculture exports, trade facilitation index and domestic food price volatility index (create and enhance regional and continental policies and institutional conditions and support systems to simplify and formalise the current trade practice to permit the achievement of intra Africa trade targets including the promotion of African common position on agriculture related international trade negotiation and partnership agreements.

The government of Uganda, through Vision 2040 identifies manufacturing and value addition as a strategic sector in enabling development of an export led and internationally competitive economy capable of spurring growth and provide employment thus delivering the economy from peasant to modern and prosperous

country. In this regard, GOU targets manufactured and value added exports to increase from 4.2% (2013) to 50% by the year 2040. The Agriculture Sector Strategic Plan (ASSP) 2015/16-2019/20 which domesticated CAADP framework and operationalized as the NAIP, is therefore mandated to report on performance on key agreed indicators within the Malabo. Broadly, the NAIP identifies improved access to agricultural markets and value addition as key result areas to be achieved during the year 2016/2017.

During the previous sector assessments, NSAs have raised issues and recommendations that speak to the above listed indicators with an aim of guiding investment and performance in the sector using the CAADP indicators as a benchmark. In this section we present the assessment against these specific indicators while identifying underlying and inherent issues that enable or bar performance; investment in value chains, post-harvest handling loss, intra African trade in agricultural commodities and services specifically on the ratio of agriculture exports to agriculture GDP, share of processed agriculture exports in total agriculture exports, trade facilitation index and domestic food price volatility index.

3.3.1 Investment in value chains

MAAIF, operationalized this indicator under the ASSP setting out a broad performance area on improve agricultural markets and value addition for the 12 prioritized commodities, specifically, the sector committed to;

Promoting private sector investment in value addition through PPPs

- Building capacities of farmers, traders and processors in quality standards and market requirements of the priority and strategic commodities
- Operationalizing the commercialization fund
- Ensuring the development, maintenance and improvement of physical agricultural marketing infrastructure

During the year under review MAAIF and the agricultural sector at large, continued attracting private sector investment across the value chain. We note specific private sector engagement with the ministry and in the areas of multiplication and distribution of certified seeds, investment in value addition and processing and mega private public partnerships such as Oil palm.

We are however concerned about the decline in credit grow the for

the agricultural sector accessed by private sector. Similarly, the absence of a system to aggregate total private sector investment alongside sector outcomes in the ASSP curtails planning and management of performance in the sector.

3.3.1.1. Emerging issues, barriers and enablers

During this assessment, it's established that there exists inconsistence between performance outputs and collaboration among government departments within MAAIF that would have supported the development of these value chains, the aspects to note include the relationship between NAADS in inputs distributed e.g. Varieties of fruit trees distributed in Teso and other parts of Northern Uganda and the varieties needed by the fruit factory that is constructed and operating in the region. Another example is the relationship between breeds generated by NAGRIC, those that are distributed by OWC and the value addition investments of the abattoir launched last year.

Focus on mega value addition infrastructure than micro level post-harvest handling techniques priority has not been given to;
During the year under review, government continues to attract public and private investment in mega infrastructure but limited effort is being demonstrated to enhance capacity in primary processing especially for productive groups like women and youth to establish cottage processing facilities. The major challenge that needs to be addressed is facilitating the availability and accessibility or appropriate and safe value addition technologies.

The sector experienced a low performance under the Production and Marketing grant (PMG) with 52.56% due to constraints related highly to low disbursement of funds as a result of procurement processes and procedures.

3.3.2 Post-harvest loss handling

Under this performance area, AU states are obliged to invest and report performance on reduction rates of post-harvest loss for at least the five national commodity priorities. The GOU through MAAIF, prioritised Investment across the value chains focusing on 12 priority enterprises, namely Coffee, Tea, Fruits, Maize, Rice, Cassava, Beans, Bananas, Fish, Meat, Milk, and Vegetables; and in four strategic commodities, namely Cotton, Oil Palm, Oil Seed and Cocoa.

We commend the government of Uganda for the continued commitment to addressing post-harvest handling losses and associated challenges e.g. the PACA initiative , the ware house receipt system, PPP and private investments (e.g. The Soroti fruit factory, Egypt Uganda food security) to address challenges of storage, farmer education and infrastructure development. We are however concerned that post harvest handling losses remain high especially among the non-traditional cash crops compared to prioritised cash crop commodities that have designated institutional framework such as coffee. E.g. tubers still record losses ranging from 20 to 25% while legumes and grains report 5 to 15% and fruits reporting 35%.

We therefore recommend that MAAIF in the subsequent years sets targets on reducing post-harvest handling losses especially among the prioritised commodities and oblige agencies and departments to report performance.

In addition, the prioritised commodities continue being highly affected by Mycotoxins and other food based hazards such as iron bodies in processed foods due to poor graded food processing technologies, antibiotics in meat and dairy products and chemical residuals mainly in fruits and vegetables.

3.3.3 Aflatoxin Contamination in selected Foods in Uganda[3].

Food	Levels (ppb)	Comments
Maize	0 - 700	At farm level, storage up to 3 months (0-20 ppb); storage 4 months +, including traders (> 20 ppb)
Groundnuts	0 – 120	At farm level (storage in shells (0 – 15 ppb), at market level (> 20 ppb); Processed (unroasted) > 30 ppb.
Cassava chips	10 - 30	Preliminary results, analysis not comprehensive
Soybean	0 - 40	Preliminary results, analysis not comprehensive

It's more than critical today than never before that deliberate efforts are taken to addressing the Aflatoxin contamination situation in all our foods bearing the consequences of people's exposure to them and susceptibility to their outcomes in terms of acute illnesses and

[3]Archileo Kaya, management of Afflatoxins in cereals, legumes and tubers a training manual for AT Uganda Training of Trainers

deaths, cancers, immune system suppressions, nutrition related illnesses among others. Particular attention should also be paid to Mycotoxins in animal feed as there contaminations are directly consumed in animal products such as milk, meat, eggs among others. In addition, Mycotoxins impact on the productivity of the animal sector reducing performance, feed utilisation and efficiency, impaired fertility, skin lesions in piggery, reduced weight, decrease egg production in poultry and reduced milk yield, impaired infertility and mastitis in cattle.

The economic impacts associated with Mycotoxins are estimated above USD 760M per year in Africa, reducing labour productivity to 40% due to daily disease burden and reducing annual export estimated for Uganda at USD 37.56M. Reducing the value of agricultural export by USD 16.34Million, at household level disposable income follows by 0.33% (USD 79.3M).

3.3. 4 Intra African trade in agricultural commodities and services specifically on the ratio of agriculture exports to agriculture GDP

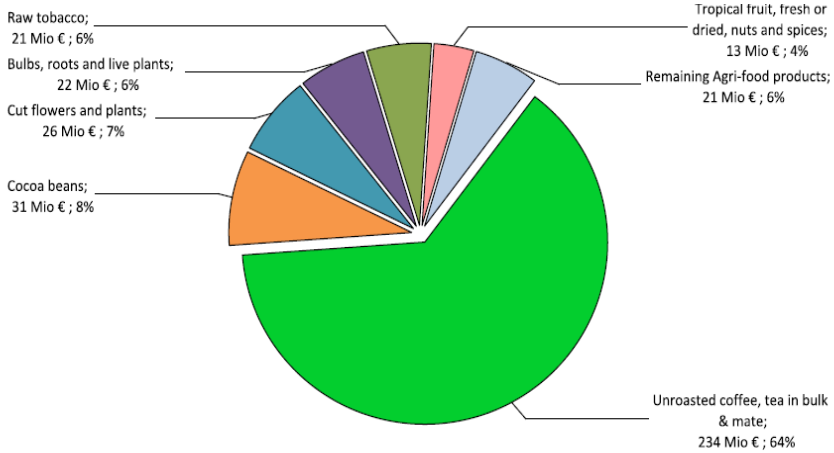
The Government of Uganda as a member state to the AU, further committed to promote intra African trade in agriculture commodities and services while reducing importation of those commodities from outside Continet. Specifically the government committed to annually track the ratio of agriculture exports to agriculture GDP and the share of agriculture Exports to total country's exports. During the year official statistics indicate that the share of Uganda's agriculture export to the EAC region in 2016 accounted for 67.5% of the total export valued at USD 2188.42 Million.

Uganda's Major Domestic Exports of EAC Countries 2016 (US$ million)

COMMODITY	VALUE IN USD
Coffee, tea, mate and spices	449.86
Natural/cultured pearls, prec stones & metals, coin etc.....	339.51
Fish , Crustacean, mollusc & other aquatic invertebrate	121.07
Cereals	77.87
Cocoa and cocoa preparations	75.00
Iron and steel	67.79
Edible vegetables and certain roots and tubers	67.66
Salt; sulphur; earth & stone; plastering mat; lime & cement	61.38
Tobacco and manufactured tobacco substitutes	60.69
Sugars and sugar confectionery	57.65
Dairy prod; birds' eggs; natural honey; edible prod nes	55.09
Live tree & other plant; bulb, root; cut flowers etc...	51.80
Raw hides and skins (other than furskins) and leather	51.37
Animal/veg fats & oils & their cleavage products; etc...	32.14
Cotton	31.70
Oil seed, oleagi fruits; miscell grain, seed, fruit etc....	29.76
Residues & waste from the food industry; prepr ani fodder	29.33
Prod mill industry; malt; starches; inulin; wheat gluten	27.93
Wood and articles of wood; wood charcoal	27.91
Soap, organic surface-active agents, washing prep, etc...	27.24
	0.00
Coffee; coffee husks and skins; coffee substitutes containing coffee	371.47
Gold, unwrought or in semi-manufactured forms, or in powder form	339.31
Fish fillets and other fish meat, fresh, chilled or frozen	79.24
Cocoa beans, whole or broken, raw or roasted	75.00
Tea	71.18
Cane or beet sugar and chemically pure sucrose, in solid form	57.02
Portland cement, aluminous cement, persulphate cement, etc	56.79
Maize(corn)	56.42
Unmanufactured tobacco; tobacco refuse	52.84
Other live plants, cuttings and slips, mushroom spawn	51.56
Dried leguminous vegetables, shelled	43.32
Fish, salted, dried...; smoked fish; fish meal fit for human consumption	38.57
Rolled iron or non-alloy steel, >=600mm wide, clad, plated or coated	36.51
Leather of bovine or equine animals, without hair on	30.94
Milk and cream, concentrated or sweetened	25.35
Soap; organic surface-active products in bars, etc; paper with soap, etc...	24.47
Cotton, carded or combed	23.18
Milk and cream, not concentrated or sweetened	22.74
Medicaments of mixed or unmixed products, for retail sale	22.05
Electrical energy	21.27

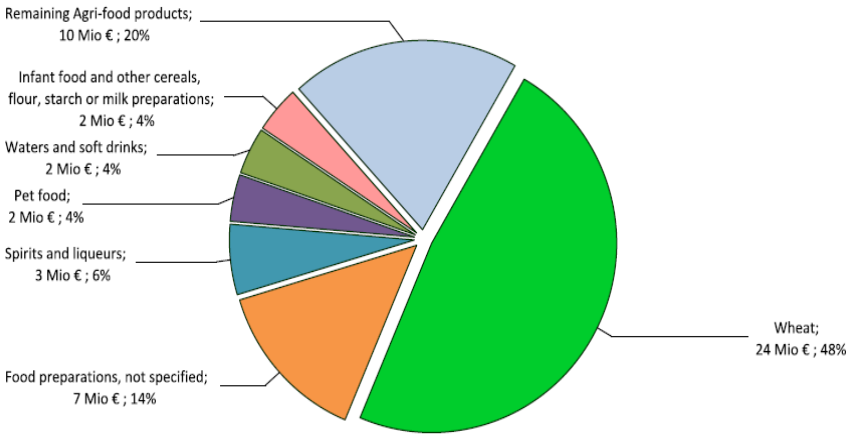
In regard to the share of Uganda's processed agriculture Exports, the country continues exportation of unprocessed products and importation of processed agro based products. For example in the case of European Union (EU) the country exports raw materials and imports processed products.

EU Agri-food IMPORTS from Uganda by product category



Agri-food trade statistical factsheet- European Union - Uganda

EU Agri-food EXPORTS to Uganda by product category



Agri-food trade statistical factsheet- European Union - Uganda

There's a steadily growing trend in Uganda's food imports at a range of 11.6% per year. This exposes the country's economy to food import driven inflation a form of inflation complex and difficult to manage by use of macroeconomic approaches.

The East African food import bills remains un considerably high in an economy where our trade balances are unfavorable operating with a weak currency against foreign exchange being used to import food.

Food Import Bills (2000-2010)

Country	Food import bills					
	Million US $ 2000	Million US $ 2010	% p.a. growth 2000-2010	Per capita US $ 2000	Per capita US $ 2010	% p.a. growth 2000-2010
Burundi	27	101.1	14.1	4.2	12.1	11.0
Kenya	384.6	1490.8	17.0	17.5	66.0	14.2
Rwanda	42.5	245.9	19.2	5.2	23.1	16.0
Tanzania	220.8	758.5	13.1	6.5	16.9	10.1
Uganda	176.6	530.6	11.6	7.3	15.9	8.1

Source: FAO Statistical Fact sheet 2012

3.3.5 Trade facilitation index and domestic food price volatility index

Upon renewal of our commitments to CAADP, the government of Uganda reaffirmed her commitment to creating and enhancing regional and continental policies and institutional conditions and support systems to simplify and formalise the current trade practice to permit the achievement of intra African trade targets including the promotion of African common position on agriculture related international trade negotiation and partnership agreements. Specifically, the partner state is expected to report her performance on trade facilitation index and domestic food price volatility index. During the year under review, Uganda's performance on these aspects is recorded as follows;

There are a number of Trade Processes and negotiations relating

to agriculture at Multilateral, Regional and Continental level that Uganda is engaged in. These include negotiations at the World Trade Organisation (WTO), EAC-EU Economic Partnership Agreement (EPA), the Continental Free Trade Area (CFTA) and the EAC-COMESA-SADC Tripartite Free Trade Area (TFTA).

At the WTO, members (Uganda inclusive) negotiating reforms in agricultural trade. During the most recently concluded 2015 Nairobi Ministerial Conference, members agreed on a historical decision one of the most important reform of international trade rules in agriculture since the WTO was established, to eliminate agricultural export subsidies. The agricultural sector in Uganda should note that developed countries have shifted these subsides that are believed to be trade distorting to production subsidies that are not legally believed to be trade distorting. In addition, negotiations are evolving on amending WTO rules in order to make it easier for developing countries to buy food at administered prices while building public food stocks or providing domestic food aid. The agricultural sector in Uganda should further note that without such a provision, it has continuously been impossible for LDCs like Uganda to undertake policies and measures aimed at promoting food and nutrition security, to the detriment of people's welfare.

At the continental level, CFTA negotiations are set to be conducted in two phases. Phase 1 covering concurrent negotiations on trade in goods and trade in services. Phase 2 covering negotiations on investment, intellectual property rights and competition policy. Negotiations of Agriculture are set to focus on liberalization of trade in agricultural products with exceptions on some products which are on a sensitive list. MAAIF, should take keen interest while developing the sensitive list in order to safeguard and where need be give concessions in regard to the strategic and priority commodities. It's also important to note that Agriculture provisions in the CFTA should are crafted in a way that recognizes inclusive transformation, household and national food security where the agricultural sector is at the base. Uganda should negotiate an agreement on agriculture that encourages backward and forward linkages between agriculture and industry.

The TFTA, being negotiated between EAC, COMESA and SADC, has not yet agreed common position Biotechnology and Biosafety by Member States. While Uganda, wishes to concurrently promote modern biotechnology, and organic agriculture should take keen interest in the TFTA negotiations, defining here own strategic positioning while leveraging its competitive and comparative advantage.

In regard to the EAC-EU EPA, liberalization and reciprocal market access is the agenda. Although there seem to be provision of protection of infant industry and products, harmonisation is necessary between the MAAIF strategic and priority commodities and the sensitive list of commodities that was negotiated. This is based on the fact that, there are contradictions in the schedules of liberalisations, e.g. EAC, protected maize (corn) flour (HS Code, 6 digits 110220) at a duty rate of 50% yet on the other hand, maize (corn) starch (HS Code, 6 digits 110812), which is a bi-product of maize flour has been liberalized. These contradictions equally apply to other products like cassava (manioc), Diary Albumin and potatoes. With such a liberalization and contradictions in schedule, promoting value addition through agro-processing will be very much constrained.

Malabo obliges GOU through MAAIF to report performance on the Trade facilitation index and food price index under the commitments of creating an enabling regional and continental policy and support system to achieve intra Africa trade. We therefore recommend that MAAIF TPM designates persons that should link up with external trade officials under the Ministry of trade especially on the negotiations on agriculture where throughout the negotiations this has remained on of the weakest areas.

3.4 Ending hunger, Increasing Production and Productivity

Under this section, NSAs are undertaking sector assessment against the performance area on ending hunger under the Malabo CAADP commitments, the assessment covers selected indicators under specific performance categories of; access to agricultural inputs and technologies (growth rate of the size of irrigatable areas form its value of the year, growth rates on the ratio of supplied agricultural. Inputs to the total national input requirements of the priority

commodities; proportion of farmers having access to agriculture advisory services; total agriculture research spending as a share of agriculture GDP), food and nutrition security (Proportion of the population that is undernourished, growth rate of the proportion of minimum dietary diversity and food import dependence ratio).

3.4.1 Access to agricultural inputs and technologies

Access to agriculture inputs and technologies (fertilizers, herbicides, seeds, pesticides, land opening, value addition and water for production technologies and access to agriculture extension services) have remained key enablers and barriers to performance under this performance category on access to agriculture inputs and technology and the subsequent performance indicators therein. Under this subsection, NSAs undertook assessment of performance on some selected indicators as follows;

Water for production.

The GOU, through the NDP II seeks to invest in water for production infrastructure to boost commercial agriculture and industrial activities with the emphasis on construction of small and large water irrigation systems, livestock and rural industries as well as increasing cumulative storage from 27.8 to 55 cubic metres. It's estimated that, only 2% of water is used for production with only a percent of the potential irrigable area, where 15000ha out of 33,0000ha is under formal irrigation. The country has an irrigation potential of 566,466ha of which only 14,420 (2.5%ha) is estimated to have equipped with formal irrigation and with 53000ha of informal irrigation being on managed wetlands. Water for production is estimated at 48.7% according to the development plan even when the country continues to be challenged by unexpected prolonged droughts and floods that predict the water stress by 2025[4].

In order to accelerate agriculture and industrial production in the country therefore, government sets to construct more water for production facilities across the country while ensuring that the available infrastructure is fully maintained.

During the year under review, farmers across the country

[4]National Irrigation master plan of Uganda report,2011

experienced unprecedented long dry spell and insufficient unevenly distributed rainfall to foster agriculture production and meet national and house hold food needs. MAAIF continued with the construction of infrastructures to support water for production, specifically four valley dams were constructed in Karamoja sub region. We commend government for the 70 valley tanks of 349,500 cubic metres that were constructed, we are however concerned about the lack of performance report given on the management and maintenance of existing water infrastructure in eastern. In Teso and Karamoja non-functioning structures out weigh the functioning ones retarding the growth rate of the size of irrigatable areas and coverage of facilities for water for production. In five districts of Teso (Soroti, Amuria, Ngora, Katakwi and Kumi) the study conducted by Action Aid in 2015 established that there were 75 water for production infrastructure of these 45 are functioning but require rehabilitation, 15 are not functioning[5].

We commend government for the 3 irrigation schemes that were constructed to support all year round crop irrigation, 10 irrigation demos that were constructed at district level. Whereas this progress is in the right direction, it's appropriate and customised irrigation facilities that are adaptable to farmers and therefore expenditure on such outputs need to be multiplied given the number of districts and the number of farming households (68% of the total population).

We commend government for finalising the bidding processes for the execution of works on the constriction of irrigation infrastructure in the districts of Nebbi, Oyam, Kasese, Butalejja and Kween. In addition, we recognise government's efforts in undertaking feasibility studies for the construction of irrigation schemes in Eastern Uganda and engineering designs for these schemes that continue to be reported upon as on going. We are concerned that no clear progress is reported upon to aid measurement of performance.

We commend government for constituting joint task force composed on MoWE and MAAIF that commenced the finalisation of the National Irrigation Policy

[5]ActionAid, 2015, Scarce amidst plenty the status of water in Teso sub region

and made a commitment to table it in July 2016. We are however concerned that to the present day the National Irrigation Policy has never been tabled and neither the irrigation master plan was tabled for discussion.

We therefore recommend that the above two processes be concluded in the next financial year and their implementation be reflected in the subsequent year.

Emerging issues (barriers and enablers)

Water resources are becoming scarce: All interventions on water for production are designed to increase exploitation of the water resources with an assumption that water is abundant in the country and the challenge is the utilisation. It should however be noted that, as the country strives to develop and become a middle income economy, water resources are at the centre of the competing water users, e.g. the government in the NDPII, seeks to increase access to safe water from 65% to 79%, increase the percentage of the population with access to electricity from 14% to 30%, increase manufactured exports as a percentage of total exports from 5.8 to 19% and increase total national paved road network from 3795Kms to 6000Kms by 2020. It should further be noted that Uganda's urban growth rate is 5.2% and the country's water resource based reduce at a rate of 3% per year consistent to the national population growth of 3.2% per year.

We therefore recommend that MAAIF designs interventions in an integrated management approach that fosters these multiple uses and sustainably manage the water resource for the yet to come generations.

3.4.2 Access to Agriculture inputs

The Malabo commitments under performance area of ending hunger within the category of access to agriculture inputs and technologies aiming at promoting utilisation of cost effective and quality agriculture inputs to boost agriculture productivity obliges Uganda to perform and report on the growth rates on the ratio of supplied agriculture inputs to the total national input requirements of the priority commodities.

Whereas the Malabo commitments requires Uganda to report on the growth rates of the ratio of supplied inputs to the total target of the national requirement, there seems to be no official figures that express

the total input requirement of the country and not even the most prioritised commodities to facilitate reporting against this indicator.

During the year under review, the total acreage established under crop by enterprises planted and reported at 321,078 against the target 750,000 which is only 48%. However, MAAIF recorded 81.6% as farmers supported with inputs during the year i.e. 1,223,975 against 1,500,000.

As for strategic commodities, MAAIF recorded an over performance of 263.6% over distributed and planted inputs and over performance of 270.8% of farmers that were supported.

We commend MAAIF, for this performance, we are however concerned about the survival rates of these inputs and actual performance in terms of yields for those that survived.

We observe the inconsistency in the target of inputs to be distributed realised during the year against the target of farmers that benefitted which is 81.6%, this partly explains the unrealistic quantities of inputs distributed to farming communities that can neither boost house hold food security nor income.

We commend government for responding to the farmers' outcry of timely delivery of agriculture inputs, during the financial year under review, quarterly cash flows in the output budgeting tool were aligned to the two planting seasons, where; releases for Q1 and Q2 were projected to cover agriculture input requirements for season two (October and November) especially for seeds and seedlings.

Provision of inputs by government is mainly implemented by OWC initiative exploiting the NAADS secretariat vote in the sector budget allocation, during the year the vote consumed approximately 37% of the total sector allocation. In addition, there's incredible unaggregated amount of inputs distributed to the farming communities by Non State Actors all over the country.

We are however concerned that there is a directive for the program interventions under OWC prioritises planting materials for mainly six strategic commodities of tea, citrus, mangoes, pineapples, apples and provision of artificial insemination kits and improved pasture. Whereas these strategic enterprises are central for farmers' income, the omission of staple food commodities costs these

investments as hunger bites deep among farming communities and they exchange these inputs for food items at unreasonable prices in order to buy food.

We are further concerned that the country agricultural sector continues to operate without a systematic quality and control systems of inputs distributed by state and non - state actors among these communities and all over the country without regulation. This anomaly explains the wide and fast spread of pests, diseases and vectors.

A case of coffee input distribution

Coffee as a priority commodity, Government set to spend an extra 40Bnshs on generating, distributing and planting of an additional 133million coffee seedlings in order to conform to the new target of the production level of two million 60 Kg bags by 2020.

We are concerned however, that the revised targets of seedling distribution and the financial resources provided alongside were not commensurate to other requirements to realise the full potential and value of this investments such as; extension services, farmer preparedness, tools and equipment among other inputs.

We therefore recommend a close institutionalised and systematic collaboration between the Directorate of Agricultural Extension, NARO, OWC and the Coffee Development Authority. We task MAAIF TPM to develop this mechanism and be presented before Cabinet for consideration.

Emerging issues

The failure to pass the seed and the Plant Genetic Resource for Food and Agriculture policies since 2004: This delay has denied the sector guidance in seed management and preservation/safety of Plant Genetic resources is at stake. Regulation by mandated authorities like Uganda National Bureau of Standards, MAAIF sanitary, phyto-sanitary department and Local Government in conjunction with private sector entities like UNADA and Uganda Seed Traders Association (USTA) has been weak.

Agricultural statistics: MAAIF should consolidate the data and statistics unit and make use of the scattered data generated within the Ministry Departments and among other stakeholders, such categories of data may include; the

farming population in the priority commodities by demographic information, input and other government benefits to be managed and processed under one roof. This should apply to all MAAIF Agencies. In addition, Government through MAAIF is obliged to report on specific indicators developed under the Malabo commitments, e.g. Total national input requirement and total input requirement per input priority commodity. These specific indicators require specific data and government MUST report on these indicators biannually.

3.4.3 Access to Agriculture Extension and Advisory Services

FY2016/17 marks the third year of implementation of the single spine agriculture extension system following the reforms in this function. During this year, MAAIF continued to prioritise strengthening extension services through continued implementation of the single spine extension system as one of the measures of increasing agricultural production and productivity, food security and enhancing exports as identified in the national export development strategy. The ministry, set to support the entire 116 districts in the recruitment of agriculture extension staff and 93 district local governments were supported to advertise vacancies in this regard.

It was anticipated therefore, that by the end of the FY under review, the recruitment of agricultural extension workers would have reached 68% of the total requirement, reducing the ratio of worker to farmer from 1:2,400 to 1:1,500.

We commend government for the additional 10.4BnShs allocation to the non-wage during the year, we are however concerned that despite the support from the DAES to all local governments in the recruitments, most local governments did not recruit or recruited way at the end of the year causing a redirection of the allocated resources for this function to the consolidated fund and consequently affecting the assumed farmer to extension ratio.

During the year, the DAES, is reporting performance on numerous capacity building initiatives and no performance report has ever been shared in regard to capacity profiling of the recruited extension workers, we therefore recommend that the DAES operationalize the capacity development profile in order to guide the on-going capacity building initiatives as well as reporting on their outcomes.

Despite the continued response by government to provide non-wage vote function for the recruited extension workers from UGX 10.4bn in 2016/17, to UGX 39bn in 2017/18 there seem not to be clear performance targets for the recruited extension workers. The absence of targets will affect performance monitoring and actual assessment of the value of money invested in this system.

We therefore recommend MAAIF through the DAES to expedite the development and operationalization of performance management system is collaboration with the ministry of local government and public service.

Aware that MAAIF initiated the process of developing guidelines on ethics and standards for agricultural extension service delivery, clarity is not yet provided on the capacity and institutional mandate of MAAIF and scope of administration of guidelines. Following the adoption of the single spine it's anticipated that MAAIF constitutes an Agency to handle regulation and certification procedures of agriculture extension service providers, both State and Non-State.

We commend government for strengthening the DAES in terms of staffing and establishment of a vote function in addition to the approval of the agricultural extension service policy and strategy, we are however concerned about the absence of performance targets as required by the programme based budgeting (PBB) in the planning and budgeting process. This frustrates efforts on negotiating for extra resources as well as measuring performance and value for the resources so far allocated.

We recommend therefore in the next FY the Directorate sets clear performance targets and program outcomes to be achieved under this function guided by the strategy and policy.

3.4.4 Research Spending and Development

Uganda is obliged under the Malabo performance area of ending hunger, performance category of access to agricultural Inputs and technologies to promote utilisation of cost effective and quality agriculture Inputs to boost agriculture productivity to specifically perform and report on the total agriculture research spending as a share of agricultural GDP.

Over the years, NARO budget has been inconsistent. The agency received UGX 157.47bn in the FY 2014/15, (29.10%), UGX 98.98bn

in FY 2015/16 (1.93%) and UGX 114.14bn in FY2016/17 (14%). The allocations are even projected to decrease further as reflected in the midterm projections of the next three FYs.

Despite Research function being left mainly to Government, public financing to research for the last 2-3 financial years has been decreasing both in percentage and nominal figures. As a result research priorities have been determined by external funders rather than National research needs. Thus national priorities like Mycotoxins, consumer food preferences, market prioritises within the region and sustaining the rich biodiversity have not been adequately researched to respond to these needs.

Limited research uptake: A lot of research information is generated but does not find its way to the farmers and market that need it. There is a wide gap between the research and extension system that is actually supposed to link farmers to research. Further still it's not clear how research links to other sub sectors including extension, fisheries, NAGRIC and NAADs.

We recommend that government increases investment in agriculture research to at least 12% of the agriculture budget. The research agenda such be set but all stakeholders including farmers and there should be linkage between the different subsectors in MAAIF.

3.4.5 Food and nutrition security

Member States under the African union committed to CAADP are obliged under the performance area on ending hunger, performance category of food nutrition and security to promote initiatives to improve nutrition, eliminate hunger and child nourishment in Africa by bringing down child underweight, stunting and nourishment and improving dietary diversity. Member States are further obliged to perform and report on a series of indicators. In the case of Uganda, during this year of review, NSAs set to assess performance on selected indicators as discussed below;

There's a general recognition of food and nutrition security as a key driver of transformation as reflected in the national overarching policy and planning frameworks as well as in sector specific investment plans such as the NAIP. However, National and household food security has continued to be elusively prioritised, planned and so attracted less investment. A review of the agricultural sector planning and budget frameworks

reflect the wording of food and nutrition security scattered all over the frameworks with no clear and practical performance indicators.

During the year under review, the country got stuck in the devastating food insecurity situation causing the ministry to apply for a supplementary budget to supply food to hunger stricken communities. According to the strategic review of SDG II in Uganda, on average, four out of every ten Ugandans are unable to meet the required dietary intake, most Ugandans consume inadequately both in terms of quantity (adequacy and availability) and quality (diversity and safety). According to the review finding, for the past seven years, Ugandans were consuming 1,860 kcal per day as opposed to the minimum required intake of 2,200 kcal per person per day.

Although stunting has reduced from 33 percent in 2009/10 to 27 percent by 2015/16, 16 percent of households being chronically undernourished and only four percent being food secure throughout the 2009/10-2015/16 period.

Uganda is currently shouldering the double burden on Malnutrition. Women are consistently becoming over weight higher than the past 20 years rising from 8 percent in 1995 to 19 percent in 2011 especially in urban areas.

Aware that food and nutrition security is a multisectoral function scattered among multiple government MDAs, physical hunger that cause immediate panic in the social, economic and political stability is immediately condemned on MAAIF and the agriculture Sector at large.

We therefore recommend, that MAAIF redefines her food and nutrition function, set clear objectives and outcomes as well as costed targets to be realised by the end of each financial year. MAAIF TPM should consider with immediate effect institutional organisation of this function to guide this performance and contribution to the broader national food and nutritional targets.

It is our desire that MAAIF spearheads the process of mobilising stakeholders to establish a hunger and malnutrition early warning system and produce annually a hunger and malnutrition performance and projection report to guide immediate, medium and long term investment.

3.5 Climate Change Adaptation in Agriculture

The Malabo commitment under the theme performance area of resilience to climate change, performance category on resilience to climate change related risks, obliges Member States to promote initiatives of building resilience of production systems to reduce vulnerabilities of the livelihoods of African population to climate variability and other related risks. In this regard, Uganda and other member states are obliged to perform and report on the share of agriculture land under sustainable land use management, proportion of the population covered by social assistance, social protection, social insurance and labour investment. In addition, member states under performance category on investment in resilient building are obliged to enhance investments for resilience building initiative to protect rural workers and social groups as well as vulnerable eco systems.

In this regard, Uganda and other Member States are mandated to perform and report on the existence of government budget spending lines to respond to spending needs on resilient building initiative.
In this section, we discuss and present the NSA assessment on these obligations and others at global level as well as response mechanisms of safe guarding the vulnerable agriculture sector to the vagaries of climate change.

The global average temperature has risen between 0.4 and 0.8 degrees C Global over the past 100 years (IPC report 2014) and are predicted to increase between 1.4 and 1.8 degrees Celsius. Global warming has far-reaching consequences on social and economic development and the entire global ecosystems. Indeed, global warming threatens to undo many years of development efforts and frustrate poverty eradication programmes in developing countries. Although all countries, rich and poor alike, are vulnerable to the adverse effects of climate change, the degree of damage varies from country to country. The poor countries with the least adaptive capacity are expected to suffer most from the impacts of adverse effects of climate change.

The economy of Uganda is highly depended on her natural resources, making the country vulnerable to the impacts of climate change. Uganda is experiencing significant impacts of climate change, which include changing weather

patterns, drop in water levels, and increased frequency of extreme weather events. The emissions of greenhouse gases resulting from human activities through insignificant drives climate change.

Uganda's agriculture is subsistence, rain-fed and, therefore, vulnerable to climate variability and change. Although it is predicted that climate change will lead to increased rainfall in Uganda, its distribution during a season is critical to agricultural production. Erratic rain seasons have been observed in the past few years. Floods lead to waterlogged fields or washing away of crops. Even long dry spells during the rainy season are sufficient to reduce agricultural production, thus seriously impacting on livelihoods of the rural communities. Poor agricultural production has direct negative effects on the: national economy; increases in food prices leading to an unstable macro economy and resulting into inflation, which discourages foreign investment; feeding, leading to frequent health breakdowns, thus affecting production; and incomes leading to poor health and decreased standard of living. The recent food crisis in most parts of country especially Karamoja, Teso, Isingiro and most parts of the Cattle Corridor were generally attributed to the effects of climate change.

Uganda's priority is to reduce the vulnerability of its population, environment and economy by implementing adaptation actions. Uganda also intends to "implement strategies, plans and actions for low greenhouse gas emission development" in the context of its development goals. These mitigation and adaptation intentions are based on the country's National Climate Change Policy (NCCP) (2015), which is derived from the Constitution of the Republic of Uganda (1995), as amended in 2005 and 2015) and reflects Uganda Vision 2040 (2012). The priorities in the National Climate Change Policy have been integrated in the Second National Development Plan (NDP II) 2015/16 - 2019/2020 (2015). In the long term, Uganda intends to follow a climate-resilient and low-carbon development path linked to green growth and broader sustainable development goals.

Being a signatory to the United Nations Framework Convention on Climate Change (UNFCCC), Uganda recognizes the importance of fulfilling the commitments under the respective articles of the Conventions on Climate Change, particularly the Principle of "common but differentiated

responsibilities and respective capacities and these actions are reflected in the Intended Nationally Determined Contribution (INDC) that were derived through a consultative process and reflect a national resolve to respond to the call by the global community to initiate domestic preparations for nationally determined contributions towards curbing temperature rise to below 2°C by the end of the century.

We commend the Ministry of Agriculture Animal Industry and Fisheries (MAAIF) for setting up priorities as a commitment to the implementation of the Nationally Determined Contributions which include: Expansion of agriculture extension services, Expansion of climate information and early warning systems, Expansion of Climate Smart Agriculture, Crop and livestock diversification, expansion of rangeland management and expansion of small scale water infrastructure for production.
However, absence of a long-term CSA costed implementation plan and limited Capacity at all levels of the sector to support implementation of climate smart agriculture coupled with limited bankable projects that can support implementation of nationally determined contributions and the annually unproportionate budgetary allocation to the agriculture sector will continue frustrating climate change adaptation in the agriculture sector. We further commend Government through MAAIF for the development of the National development plan during the year under review, we expect that this plan gets approved by MAAIF TPM during the current FY and its provisions are reflected in the planning and implementation framework in the FY 2018/19

3.6 Pests, Vectors and Disease Control

Actual economic losses from plant diseases are hard to find in Uganda and in many other African countries (PARM 2017). However the Agricultural Risk Assessment Study by PARM/IFAD (PARM 2016) concluded that crop pest and diseases have very high frequency and very high average and maximum severity. Crop pest and diseases have the highest risk score in that report and deserve to be a priority. Losses due to pests and diseases are estimated at: 10-20% (pre harvest); 20-30% (post-harvest); and up to 100% for perishable crops and export crops. Annual losses in the priority crops suffering the highest monetary loss due to pests are estimated at: US$

35-200 million (bananas), US$60-80 million (cassava), US$10 million (cotton) and US$8 million (coffee).

Examples of key pests that are seriously constraining any increases in agricultural productivity in priority crops include: coffee wilt disease, coffee twig borer, banana xanthomonas wilt (BXW), cassava brown streak virus, fruit flies citrus canker and the fall army worm among others. Pests, disease and vector losses have also been experienced in animal, entomology and fisheries. Tick resistance, foot and mouth disease, bird flu were of significant recognition during the year under review.

Despite the evidenced experiences over the year and specifically under the year under review, pests, disease and vector control continue to attract insignificant funding causing imprompt responses during outbreaks and inadequate management. We have observed that in the current financial year; availability and distribution of Foot and Mouth Disease vaccines and related livestock disease control, still required an additional UGX 4.0 billion; emergency control of tsetse flies and Nagana in Karamoja sub region and 20 other districts; and routine surveillance exercises in tsetse high risk districts required additional resources of UGX 8.2 billion; to control the new breed of Kariba water weed, required an additional UGX 4 billion.

We therefore recommend that government through MAAIF re-introduces routine massive vaccination of livestock as part of the communal pests and disease control under provision of agriculture extension, this should be supported with the monitoring and early warning system for pests and disease control.

We further recommend that

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MAAIF strengthens capacity of its inspection units both technically and financially in order to predict and manage pests and disease outbreaks, support research and build community resilience.

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