THE REPUBLIC OF UGANDA

The Ministry of Agriculture, Animal Industry and
Fisheries



IMPLEMETATION STATUS OF THE NRM MANIFESTO 2021-2026
COMMITMENTS WITHIN AGRICULTURE

MAY 2023

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1. Introduction

Agriculture remains the main thrust of Uganda's economic growth and is among the four key sectors highlighted in the Uganda Vision 2040 that will greatly contribute to wealth and employment creation. The sector also contributed 24.1% of the national GDP and continues to employ over 70% of Uganda's population directly or indirectly. In absolute terms the GDP of the agriculture sector increased from UGX 35,360 billion in the FY 2020/21 to UGX 39,152 billion in the FY 2021/22. The Agricultural sector grew by 4.4% in the FY 2021/22 as compared to 4.3% in the FY 2020/21.

The value of Agricultural export registered a tremendous growth of 24 percent from USD 1,678 million in FY 2020/21 to USD 2,085 million in FY 2021/22 thereby contributing 58% to the total exports in the FY 2021/22 compared to 33% in FY 2020/21. The performance was attributed to the increased volumes and quality of coffee, dairy, fish and tea exported.

The 2021-2026 NRM manifesto committed to support key strategic commodities to ensure greater impact on household incomes and national export earnings. Emphasis of the interventions has therefore focused on commodity value chains, focusing on: research; extension; pest, vector and disease control; provision of inputs; Agriculture

mechanisation, provision of water for production and irrigation promoting sustainable land use and soil management; post-harvest handling; improving market access and infrastructure; and value addition.

Several interventions have been undertaken by Government in the Agriculture that have led to increased employment, increased household incomes, food security and exports. The 2014 Population and Housing Census figures indicated that close to 80% of the households in the country are involved in agriculture. Agricultural contribution to the national economy still remains strong.

Our interventions are also anchored on the NDP three strategic objectives;

- i. Increasing agricultural production and productivity;
- ii. Improving post-harvest handling and storage of agricultural products;
- iii. Increasing agro-processing and value addition;
- iv. Increasing market access and competitiveness of agricultural products in domestic and international markets;
- v. Increasing the mobilization, access, and utilization of agricultural finance; and
- vi. Strengthening agriculture sector institutional capacities for agroindustrialization.

These strategic objectives are guiding implementation of Pillar one (Production, Storage, Processing and Marketing) of the Parish Development Model (PDM).

Over the last two years, the sector has been on track in implementing the 2021-2026 NRM Manifesto whose objective is securing our future through Job creation and Inclusive development. This has been possible through prioritizing and integrating the Manifesto commitments and the Presidential directives/resolutions in all the programs as highlighted below.

2. Agriculture commercialization and industrialization

COFFEE

Commitment #1:Improving quality of coffee to achieve large coffee beans of screen 18 grade

Commitment #2: Distribution of the right planting materials to farmer obtained from nurseries licensed by UCDA

Commitment #3: Farmer education in quality assurance, such as picking only red ripe coffee

Commitment #4: Increase coffee production to 20 million 60Kg bags by 2025

Commitment #5: Support the setting up of a soluble coffee plant, as well as coffee processing in Bugisu and Buganda

Status

Government through UCDA has distributed 101,872,271 **coffee seedlings** (51,009,745 seedlings in FY 2020/21 and 33,756,000 seedlings in FY 2021/22 and 17,106,526 seedlings in the FY 2022/23). UCDA trained 2,313 value chain actors in good harvesting and post-harvest handling practices that included only picking red ripe coffee.

UCDA stumped **16,857,218** old and unproductive coffee trees in the different regions these were motivated through distribution of 573,268 bags of organic fertilizers. NARO has also developed and promoted new resistant varieties for coffee with a yield potential of up to 3.9 tons per hectare.

These efforts in the coffee subsector have resulted into an increase in Coffee Production from **8.06 million** 60kg bags in FY2020/21 to **8.45 million** 60kg bags in FY 2021/22. Coffee exports have also increased from 6.08 million 60kg bags valued at USD 554.89 million in FY2020/21to 6.26 million 60kg bags valued at USD 862.22 million in FY 2021/22.

Government is in the process of establishing coffee soluble plants in Bugisu and Buganda and process is in advanced stages.

MAIZE

Commitment #6: Distribution of 2,246MT of maize seed in FY 2020/21. More will be distributed in subsequent years to ensure food security and commercialization.

Status

Government through NAADS has distributed **7,136,000 kgs** of maize seed under the Food Security Initiative to **891,568 HHs** including youths, women, older persons, PWDs and other vulnerable groups to establish 713,600 acres across the country. This has resulted to an increase in production of maize from **3.5Million** MT in FY2020/21 to **4.7 million MT** in FY2021/22.

Commitment #7: Establishment of a large - scale grain milling facilities in Kyenjojo, Bugiri, Sironko, Kapchorwa and Pallisa

<u>Status</u>

At the end of the FY 2021/22, NAADS established 5 grain stores of 300MT capacity each in Kasese (2), Kyegegwa (1), Kitagwenda (2) under AGRILED program for the Rwenzori sub region.

TEA

Commitment #8: Distribution of 22,158,614 tea seedlings in FY 2020/21.

<u>Status</u>

Government through NAADS has distributed **199,785,979 tea seedlings** to districts of Zombo, Buhweju, Rubanda, Kisoro, Mitooma, Kanungu, Rukungiri, Ntungamo, Sheema, Rukiga and Bushenyi. These efforts have increased tea production from **67,000MT** in the FY 2015/16 to **84,185 MT** in FY 2021/22. These efforts have resulted in a 39% increase in the volume of exports from **54,898 MT** (worth USD 74.5 million) in FY 2015/16 to 76,532 MT (worth USD 85.50 million) in FY 2021/22.

This commitment has been achieved 100%.

CASSAVA

Commitment #9: Distribution of 250,000 bags of cassava cuttings to more farmers.

Status

Government through NAADS has distributed **612,552 bags** of cassava cuttings to **8 DLGs** in Acholi sub region and 5 DLGs in **Lango sub** region as part of the Cassava commercialization project with Gulu Archdiocese.

This commitment has been achieved 100%.

Fruits (Citrus, Mangoes, Pineapples and apples)



Farmers in Nama sub county in Mukono district after receiving mango and citrus seedlings from NAADS at

Commitment #10: Distribute more fruit seedlings. During FY 2020/21, Government will distribute 1,540,560 seedlings of citrus, 2,217,481 seedlings of mangoes, 4,190,000 suckers of pineapples and 111,111 seedlings of apples across the country.

Commitment # 11:Invest in additional equipment for fruit - processing facilities in Yumbe, Kapeeka, Bunyangabo and Kayunga

Status

Government has distributed 2,966,418 citrus seedlings to 9,677 households to establish 9,677 acres; 3,638,271 mango seedlings to 15,620 households to establish 15,620 acres; 269,123 apple seedlings to

506 households to establish 506 acres and 7,926,666 pineapple suckers to 700 households to establish 700 acres.

Government **completed** construction and equipping of the main factory building for the 5MT/hr Yumbe mango processing plant, installation of additional 0.5MT/hr pineapple processing facility for Kayunga factory and installation of 2 MT/hr multi-fruit processing facility for Kapeeka. Government is also planning to construct a 12 MT/Hour Nwoya multifruit processing factory. The facilities will largely contribute to reduction of post-harvest losses of fruits and vegetables by almost double from the current 35%. These interventions have already resulted into an increase in export earnings from USD 43.80 million in FY 2020/21 to USD 47.05 million in FY 2021/22.

Livestock

Commitment #12:Distribution of livestock/stocking materials (1,782 heifers, 8,186 pigs, poultry birds - 29,950 broilers, 6,000 layers plus 59,950 kroilers and fish - 3,960,400 fingerlings)

Commitment #13: Continued support to dairy farmers with inputs such as in - calf heifers, free pasture seed and pasture; rangeland improvement in the national milk sheds, artificial insemination, drugs, milk collection and bulk cooling facilities.

Commitment #14:Establishment of four mini-dairy processing facilities across the four regions of Uganda to process dairy products such as pasteurized milk, yoghurt, ice cream and other related products.



Hon. Rtd. Dr. Rwamirama Bright at Rubona Government stock farm in Bunyangabo District.

Status

Government has distributed, 3,256 calf heifers, 3,771,924 fingerlings(1,820,000 fingerlings of tilapia, 1,896,924 fingerlings of cat fish, 55,000 fingerlings of mirror cap), 101,387 kgs of fish feed,24,121 pigs, 97,000 layers chicks, 30,000 kuroilers and 91,600 broilers among others to further improve the livelihood of the 68% and also support their migration into the Money economy.

Through NAGRIC, Government has established poultry hatcheries in Busoga and Buganda with incubators that, together have a capacity to hatch at least 9,600,000 eggs every year. Over 2.5 million chicks have been produced and availed to farmers with the main objective of promoting poultry enterprise countrywide.

Government through the National Animal Genetic Resources and Data Bank produced a total of 135,584 doses of semen at the National Bull stud and genetic evaluation center and availed to actors along the Artificial Reproductive Technology value chain to boost community breeding activities countrywide. A total of 103,619 litres of liquid nitrogen were produced and availed for use at Entebbe, Mbarara and Buikwe liquid nitrogen plants to enhance community-based breeding initiatives, synchronization protocols with better conception rates and increased availability of Liquid Nitrogen which boosted the use of Artificial Insemination.

NARO has established a livestock IVF platform to enable production of cost-effective and quality bovine embryos and boost availability of elite livestock seed. The platform, the first of its kind in Uganda, has a capacity to produce 200,000 embryos annually, at a cost of USD 100 per embryo as compared to the imported embryos that costs 300 dollars per embryo

NAADS Procured **two (2) mini dairy processing plants** of capacity 250L/batch/hour each for beneficiaries in Isingiro and Sembabule.

Contracts signed in June 2022 and delivery to be completed during FY 2022/23.

NAADS Completed Civil works for construction of slabs and ancillary structures for **12 containerized milk coolers** for Kamwenge, Kyegegwa, Kyenjojo, & Kabarole.

In an attempt to improve the quality of the livestock breeds across the country, Government through NAGRIC &DB distributed **1,215** Artificial Insemination kits in Bukedi, Lango, Busoga, Acholi, Karamoja, Teso, Buganda, Kigezi, and Toro subregions.

Government through NAGRIC&DB established and operationalized a **5MT/hr** feed mill in Busoga sub region to process livestock feeds (poultry layer mash, chick and duck mash, pig feeds, bull breeding mash).

Due to the above interventions, the production of milk increased by **92%** from **2.81 billion** litres in FY 2020/21 to **5.4** billion litres in FY 2021/22 despite the reported drought in selected milk sheds in the country.

In the same period, the export value of milk and milk products increased from **USD 98.8 million** in 2021 to **USD 103 million** in 2022. This is attributed to the intensified enforcement and compliance by the private sector to quality standards and regulations. Licensed milk collection centers have also increased from **475** with a total installed capacity of **2.21 million litres** in 2020/21 to **547** with a total estimated capacity of **2.3 million litres** in 2021/22 to match rising milk production.

The production of beef increased from **228,243MT** in the FY2020/21 to **230,746MT** in the FY2021/22. In the calendar year 2022, the amount of beef exported was 247,234 kg valued at UGX 2.944 billion as compared to UGX 1.018 billion fetched in the year 2021.

Sugar canes

Commitment #15: <u>Establish a National Sugar Research Centre to Improve sugarcane varieties for higher yields</u>

Status

In accordance with the Sugar Act 2020, NARO has started the process of establishing the National Sugar Research Centre. A draft cabinet Memo has been developed and is under consultations.

Rice

Commitment #16: <u>Set up nucleus farm and support out growers to produce and meet the country's demand for rice.</u>

Commitment #17: Support rice farmers in Bukedi, Busoga, Teso, Acholi and other sub-regions to access quality seed.

Commitment #18: <u>Invest more in rice milling equipment to help farmers add value to their rice</u>

Status

Government completed construction of a 3- acre mini-irrigation scheme at Namulonge to support rice research specifically to boost the production of breeder and foundation seed, and a 5-acre seed certification mini-irrigation scheme at Namalere to support seed certification of other enterprises. Government also released 4 short maturing, drought tolerant, high yielding (4.8-7t/ha) and disease resistant varieties of rice. This is to ensure access and availability of good quality rice seed by farnmers.

Government supported 49 farmer organizations (Acholi (26), East Central (10), Teso (8), Elgon (3) and Lango (2)) with rice mills to support them in value addition and government is in the process of procuring 5 sets of rice mills is ongoing.

Cotton

Commitment # 19: Support large-scale cotton production in areas with relatively larger pieces of arable land.

Commitment #20: Build competitive and sustainable cotton, textiles and apparel industry for value-addition, job-creation and export growth

Status

Government through CDO has distributed 2,449 MT of cotton planting seed, 773,573 units of pesticides, 2,049 spray pumps and of 334 MT

fertilizers (fertilizers were mainly for Prison Farms) to cotton farmers in Busoga, Bukedi, Bugisu, Teso, Lango, Acholi, West Nile, Mid-West & Central and Rwenzori Regions.

Government distributed a total of 9,384 bales of lint to two local textile manufacturers; Fine Spinners (U) Ltd (located in Bugolobi, Kampala) and Southern Range Nyanza (NYTIL) located in Njeru. The two factories employ about 4,100 people and produce yarn, finished fabrics, T-shirts, garments, uniforms, bedsheets, curtain materials, etc for both domestic and export markets.

A total of 115,975 bales of cotton were produced in 2022/23; contributing about Sh. 102 billion to cotton farmers' incomes and US\$ 37 million from lint sales.

With effect from FY 2022/23, NAADS started implementation of an intervention to promote and scale up the production of emerging high value strategic commodities such as; Macadamia & Hass Avocado.

NAADS has established partnerships with six (6) Hass Avocado and three (3) Macadamia nucleus farmers respectively to scale up production of the enterprises. Accordingly, the following achievements have been realized:

159,214 Macadamia seedlings were distributed to establish 1,592 acres for farmer out growers/associations in 53 DLGs under the NAADS-Nucleus farmer partnership strategy for promotion and scaling up Macadamia.

444,825 Hass Avocado seedlings were delivered and distributed to establish 2,780 acres for farmer out growers/associations in 90 DLGs under the NAADS-Nucleus farmer partnership strategy for promotion and scaling up Hass Avocado.

Horticulture

Commitment #21: Revamp the horticulture sub-sector through the deployment of a commodity value chain approach and simultaneously target production, post - harvest handling, marketing and utilization/consumption nodes.

Status

Government partnered with the private sector dealing in horticulture through their umbrella Organization (Hortifresh). The Main objective of this partnership is to support the private sector self-regulate and also create awareness amongst the producers and exporters of horticulture on both the agronomic and post-harvest handling practices. This has resulted in a reduction in Uganda's agriculture products consignments resulting in rejections due to prohibited organisms, and failed to comply with maximum pesticide residue levels by 90%.

Commitment #22:Provision of hand hoes (2.5 million hand hoes). So far, Government have given out 1.2 million hoes through NAADS and Government are going to increase the number to 2.5 million

Status

Government distributed a total of **2,500,000** to beneficiaries in three sub regions of **Karamoja**, **West Nile** and **Teso** (districts of Abim, Amudat, Kaabong, Karenga, Kotido, Moroto, Nabilatuk, Nakapiripirit, Napak, Adjumani, Moyo, Obongi, Amuria, Bukedea, Kaberamaido, Kalaki, Kapelebyong, Katakwi, Kumi, Ngora, Serere, Soroti, Arua, Koboko, Madi okollo, Maracha, Nebbi, Pakwach, Yumbe, Terego, Zombo). The commitment has been fully achieved.

Commitment #23: Accelerate disease control measures in livestock sector to meet international standards.

Status

A total of 6,650,000 animal disease vaccines were acquired and distributed to farmers. These included 2.65M doses of FMD and 2,000,000 doses of LSD Vaccine,2,000,000 doses of PPR.

National Agriculture Research organisation (NARO) is undertaking research on anti-tick vaccine development and Efficacy evaluation trials have started in Kiburara prisons farms, Isimba prisons farms, Maruzi, Nabuin and Mbarara and this will be completed by the end of July 2023.

The National Agriculture Research organisation (NARO) is in advanced stages of establishing a local animal vaccine manufacturing infrastructure at Nakyesasa in Wakiso District to produce vaccines for ticks, foot and mouth disease. The facility has a capacity to produce over 50,000,000 doses of anti-tick vaccine. The quantities are sufficient to cover the demand of both the country and region in control of tick resistance. Once the facility is completed, it will enhance foreign exchange earnings for the country due to sale of vaccine in the region and save the country USD. 1.1bn which the country loses annually due to ticks and tick bone diseases. It will further help the country tap into the UGX. 3trillion Regional Market for Meat and Milk.

The National Agriculture Research organisation (NARO) is also setting up an aflaSafe facility at Namulonge to help in management of aflatoxin in cereals which has become a threat to food safety and trade in the region. The facility will have productions line with capacity to produce 5tons of aflasafe per hour). Once this facility is functional, Uganda will save an estimated US\$38 million lost annually in export opportunities due to aflatoxin. This will also greatly impact on the economy in terms of prevention of diseases in human beings (mainly cancer) and increasing the production of quality milk and eggs.

Construction of Zonal Animal Disease Control centre in Got Apwoyo - Nwoya district is at 95% level of completion and initiated the procurement process for the Zonal Animal disease control centre in Kiruhura district.

Commitment #24: Increased access to agricultural finance and insurance services

Status

Data compiled from the reports on the Performance of the Economy by Ministry of Finance Planning and Economic Development (MFPED) shows that, the funding in terms of new loans to the agricultural value chain (production, marketing and processing) increased from UGX 1,127 billion in the FY 2020/21 to UGX 1,454 billion in the FY 2021/22. Agricultural financing registered the second highest increase of 29% followed by the Building, Mortgage, Construction and Real Estate sector at 22%. The share of agricultural financing to total financing increased from 11.3% in the FY 2020/21 to 13.1% in the FY 2021/22.

Commitment #25: Build a quality assurance system from the farm through the entire value chain.

<u>Status</u>

Government has developed a quality assurance system (traceability system) for exports of horticulture, fresh fruit and vegetables and coffee.

Government recognises the need to address some of the challenges in agriculture inputs and produce supply chains. Government is therefore, constructing an internationally accredited National Metrology Laboratory at Uganda National Bureau of Standards (at 95% level of completion). The laboratory will calibrate equipment used in the National Food Safety Laboratory and other agro-food processing laboratories and industries (such as lactometers, moisture meters, thermometers, hygrometers) to ensure accurate measurement and reliable testing results.

Government rehabilitated the National Dairy Laboratory, and maintained three dairy laboratories in Gulu, Mbarara and Soroti to increase the quality of Milk and Milk products for both the domestic and international markets

Government has intensified the inspection and regulation function through registration, certification of farmers who produce specifically for export; and training of key export value chain actors including; inspectors, farmers and exporters on quality and standards requirements. These efforts coupled with the introduction of the online e-certification system for issuance of Phytosanitary Certificates, has reduced the interceptions of our products to Europe due to documentation by 90%.

Commitment #26: Use of the e-voucher system, under the parish model, to ensure proper distribution of inputs

<u>Status</u>

Government has implemented the e-voucher system to distribute inputs in 57 districts. To date, a total of 317,179 farmers have been provided with inputs under the e-voucher program. The Ministry is planning to roll out the e-voucher system under the parish development model building on the lessons learnt.

3. Agricultural Mechanization

Commitment #27:Incentives to private sector players investing in agricultural equipment for hire

Commitment #28:Setting up of a tractor assembly plant, in partnership with private sector, to avail affordable and user-friendly tractors for the farmers using the Parish model.

Status



Mechanization is critical to commercialization of agriculture.

Government has partnered with Wash and wills Uganda limited for purchase of the single axle tractors/power tillers, implements and accessories at affordable price (tax waivers).

Government has partnered with New Holland international to set up a manufacturing and assembly plant for tractors, implements and spare parts and other related accessories to ease importation and promote export and local manufacture. Plans to set up the plant in Namalere are in advanced stages.

In the meantime, Government procured additional **360** tractors and implements since FY 2020/21 bringing the total number of tractors procured by Government to 685. Government also procured seven hundred and forty (740units) units Single Axle (Low powered-walking tractors) tractors with all accessories to support farmers to open, plough more farm land for cultivation. These small machines also support value addition, irrigation and transportation of produce. Procurement of additional 120 tractors and matching implements is in advanced stages.

To increase access and availability of the agricultural mechanization and farm machinery services to all the farming communities, the Ministry is constructing and equipping the five Zonal agricultural mechanization Centers of Mbale, Kiryandongo, Bushenyi, Agwata and Buwama out of the 19 planned Centres country wide. Each centre is equipped with excavators, self-loading tracks, heavy earth-moving equipment, bulldozers. MAAIF zonal engineers running these centres use the machines to open ground for the applicant farmers at subsidized rates compared to market hire rates. The Ministry has trained over 2,000 operators, engineers, technicians and mechanics to support farmers in the use of the tractors.

The Ministry is also piloting provision of tractor hire services using 40 tractors and implements for hire at a subsidized rate. These tractors and implements are accessed at the subsidized hire rate of Ugx 80,000 per acre for ploughing, harrowing and spraying, as compared with Ugx 120,000 per Acre charged by the private equipment owners. Equally, access to heavy earth moving equipment is subsidized. The Ministry rate is **Ugx 480,000 per acre** compared to Ugx **1,200,000 per acre** charged by the private sector

The Government has increased its capacity to bush clear and open land for agriculture production from 2,206 acres per year to now 20,744 acres per year and we have also increased the capacity to open, improve and rehabilitate farm access roads from 90.5km per year to now 938kms per year. This has reduced time spent by farmers travelling long distances on bad roads to access improved inputs and also opened up their villages to

markets for their produce. The farmers are also better placed to negotiate for better prices with improved linkage and connectivity to the markets.



Permanent Secretary, Maj. Gen. David Kasura-Kyomukama inspecting one of the mobile garages at Namarere in Wakiso Distrct

4. Water for production and irrigation



Some of the heavy earth moving equipment procured by MAAIF to support Agro Industrialisation Agenda

Commitment #29:Construction of 500 private valley tanks and 120 communal valley tanks for livestock watering in the cattle corridor districts with affirmative action offered. to particular areas

Commitment #30:Establishment of new small, medium and large-scale irrigation schemes in the following areas:

Commitment #31: Support creation of water for production storage capacity by private farmers

Status

Cumulative Water for Production storage capacity increased from 52.165 Million cubic meters in FY 2020/2021 to 52.48 Million cubic meters in the FY 2021/22. The performance was attributed to government deliberate effort to construct both on-farm and off-farm water for agricultural production facilities. Area under formal irrigation is now 22,797 ha up from 15,147 ha in 2017/18. Relatedly, Government has procured two complete sets of heavy earth moving equipment to support establishment of water harvesting facilities across the country.

Large Scale Irrigation Schemes

The Ministry is constructing 2 large scale irrigation schemes, Acomai irrigation Scheme in Bukedea District (1,480 ha targeting 1,600); Atari Irrigation scheme in Kween/Bulambuli District (680 ha targeting 2,667 HH);

The Ministry of Agriculture, Animal Industry and Fisheries plans to construct Igogero-Naigombwa irrigation scheme in Bugiri and Bugweri Districts respectively. These schemes will support 9000 small-scale rice farming households to increase rice production from 1.5 ton to 5 ton per ha.

Small-scale irrigation schemes and Valley Tanks/Dams

Government established **1,000** micro-scale irrigation schemes country wide for crop production for small holder farmers in 40 District Local Governments covering 800ha and 562 individual and communal valley tanks with a total holding capacity of 9.64 million m3 for livestock watering in the cattle corridor districts.

5. Four-acre approach under the parish development model

Commitment #32: Government is to continue with the four - acre model: one acre for clonal coffee; one acre for fruits; one acre for food crops for the family; and one acre for pasture for dairy cattle; poultry; piggery; and fish farming.

For those with less than four acres, Government is going to support them to engage in poultry, piggery, onions, tomatoes, mushrooms, zero-grazing dairy cattle, apples and grapes.

For households with six acres and more, they should first apply the four-acre approach, and the rest can be used to grow low-value crops of one's choice say sugarcane, cotton, tobacco and maize.

For the households with large pieces of land, Government will assist them in supporting plantation farming.

<u>Status</u>

Government is currently implementing the Parish Development Model (PDM) to transform the livelihood of the 39% of the households still in subsistence to modern/commercial farming. The strategy under PDM is to transfer funds to parish-based SACCOS from where farmers can borrow and procure inputs such as seed and agro-chemicals for selected enterprises, including food security crops such as maize and beans.

Government will continue to ensure that farmers across the country access quality seed, planting and stocking material, in addition to other functions in disease and pest control, research, extension and overall policy guidance.

The Government will identify, profile, and partner with largescale commercial farmers (especially those with big chunks of land) to produce on a large scale, identified high-value commodities with high national and international demand. Some key commodities have been identified in this regard namely: Coffee, Macadamia, Avocado, Cashew nuts, Tea, Cotton, Beef Ranching, Oil Seeds (sunflower, sim sim, soya beans, and ground nuts), Oil Palm, Horticulture, Cocoa, Aquaculture, and any other enterprise that may emerge from time to time depending on its national and international demand.

6. Post-harvest handling and storage

Commitment #33: Finalize and implement the fisheries and aquaculture law including, regulation, guidelines and statutory instruments to streamline the fish maw value chain.

Commitment #34: Through the parish-based production co-operatives, we are going to educate farmers on the right post-harvest handling practices.

Commitment #35: <u>Acquire appropriate technology for post-harvest</u> handling of fish, beef, dairy and horticulture products.

Commitment #36: Ensure regulatory authorities - UNBS, UCDA, Dairy Development Association (DDA) and Cotton Development Organization (CDO) - perform their role of enforcing adherence to quality standards by the private sector players.

Commitment #37: Acquire appropriate technology and physical infrastructure for post-harvest handling of cereals and grains.

Commitment #38: Construct community grain stores in Busoga and Bukedi sub-regionsC

Status

The Government has approved the new Fisheries and Aquaculture bill 2023 to; provide for control and regulation of all fisheries and aquaculture production activities and practices in an integrated manner to achieve conservation and sustainable economic, social and environmental benefits for the present and future generations

Government approved the post-harvest loss reduction strategy which is guiding creation of awareness, promotion of better harvesting, post-harvest handling and storage facilities.

Government has made considerable investments in post-harvest management including supporting farmers/farmer groups with post-harvest handling equipment and establishment of storage facilities and trainings to increase farmer awareness of post-harvest losses. These efforts have led to the reduction in post-harvest losses for grain from 37% in the year 2017/18 (base year) to about 18.2 percent while storage capacity for grain (in MT) has improved from 550,000 MT in 2017/18 to 1,230,000 MT in 2021/22.

Government has supported 296 farmer organisations to establish storage facilities with a total holding capacity of 54,579 MT across the country against the target of 358 storage facilities by the end of the Financial

Year. These comprised of 35 stores for beans, 41 for cassava, 92 for coffee, 82 for maize and 37 for rice. This has resulted into a decrease in post-harvest losses to 18.2% compared to the 24.9% previously.

NAADS established 5 grain stores of 300MT capacity each in Kasese (2), Kyegegwa (1), Kitagwenda (2) under AGRILED program for the Rwenzori sub region.

In the **dairy** sub-sector, Government completed rehabilitation of 2 milk collection centres in Kyegegwa and Katakwi districts and distributed 39 units of milk cooling equipment (coolers and generators) to 39 dairy farmers' organizations in south western, Midwestern and central milk sheds to stimulate and rejuvenate dairy business activity within such areas and to increase the milk industry storage capacity.

Additionally, Government has distributed **485** milk handling equipment to different dairy stakeholders across the country. The high-grade milk handling equipment came in three sizes (50L, 25L and 10L) to facilitate clean milk post-harvest storage and transportation. A total of **60** dairy cooperatives and farmer groups benefited from the milk handling equipment country wide.

DDA Licensed and registered **1,564** dairy businesses countrywide. These included milk sales outlets/premises, dairy equipment dealers, exporters and importers, milk processors, transporters and Milk Collection Centers.

The Authority is in the process to accredit the National Dairy Laboratory that will enable the Country acquire National and International acceptance of test results and therefore facilitate both domestic and foreign trade.

7. Agro processing and value addition

Commitment #39: Establish new and expand existing agro-industries for processing of cassava, fruits, cocoa, coffee, sugarcane, dairy, maize and rice

Commercialization of agriculture requires value addition and agro-processing. Agro processing and value addition has improved through the provision of equipment including; Motorized Maize milling equipment, Milk coolers and generators; Rice milling equipment (threshers, hullers-polishers, cleaners, graders, etc.). The interventions have resulted in a tremendous growth in the value of agricultural exports of 24 percent from USD 1,678 million in FY 2020/21 to USD 2,085 million in FY 2021/22. Specific interventions include;

Government through MAAIF has established 232 processing facilities for farmer organizations across the country. These included; 64 coffee hullers, 55 maize mills, 5 sets of feed mills, 27 rice mills, 17 cassava mills and 31 beans sorters, 14 sets of milk coolers and matching generators. Other equipment included 58 weighing scales, 64 moisture meters and 27 driers.

Government under NAADS and Rwenzori AGRILED program installed 57 motorized coffee Pulpers (800kg of Cherie per hour) for 57 coffee wet processing stations under Bukonzo Organics farmers' Cooperative Union & Mt Rwenzori farmers' Cooperative union in Kasese District.

In the dairy sub-sector, Government provided an enabling environment which led to an increase in milk production from 2.51billion litres to now 5.4 billion litres of which 80% litres is marketed. The country has increased its capacity to process dairy products including; milk powder; ghee, butter; UHT milk; casein; whey protein concentrate; pasteurized milk; yoghurt, cream, ice cream and cheese both for exports and local consumption from 3.1 million litres per day to now 3.4 million litres per day. This has resulted in an increase in the value of quality milk and milk products exported from USD 98.8million in 2021 to 103 million in 2022.

Uganda currently has new/emerging markets for milk and milk products specifically the Algeria Market which has offered Uganda a quota of USD. 500 million annually for powder milk.

8. Challenges

The Sector is currently experiencing the following challenges:

- i. Prevalent pests, vectors and diseases, notably; Fall army worm, tick resistance, Foot and Mouth Disease which constrained the sourcing and timeliness of delivery of stocking materials. For example, the prolonged quarantine in source districts for livestock due to outbreak of Foot and mouth disease led to slow progress in the distribution of livestock materials particularly dairy heifers.
- ii. Land acquisition for infrastructure projects and demonstrations are lengthy and complex due to land tenure and ownership challenges.
- iii. Many input suppliers do not have adequate capacity to produce adequate and quality inputs.
- iv. Inadequate critical facilities including analytical and diagnostic laboratories, motor vehicles (cars, motorcycles) for field activities, high-speed internet connectivity and office space.
- v. Rejection of agricultural products in the regional markets due to non-tariff barriers (NTBs);
- vi. Overwhelming demand for inputs against a limited budget; including supporting unforeseen strategic/special intervention which require budget re-allocations in the course of budget implementation.
- vii. Changing weather patterns which affect timely distribution of planting materials sometimes resulting into wastage of planting materials and low crop survival rates, excessive rainfall in some parts of the country affecting seasonal crops especially legumes.

9. STRATEGIC DIRECTION IN THE MEDIUM TERM

Government approved the Agriculture Value Chain Development Strategy (AVCDS) which recognizes that interventions for farmers specifically; under the Parish Development Model will be guided through the following:

- i. Guiding on enterprise selection.
- ii. Ensuring adequate quantities and qualities of seed, breeding and stocking material i.e. Research and Breeding.
- iii. Ensure sustainable high yields through control of pests, vectors and diseases for crops, animals and diseases
- iv. Precision agriculture (water harvesting, irrigation infrastructure and machinery)
- v. Provision of farm power (land opening, cultivation machinery and assorted post-harvest and small value addition equipment)
- vi. Ensuring that the materials planted survive through ensuring adequate farmer education (Okuzukusa) and extension.
- vii. Maintaining and ensuring the standards of both the inputs and produce from the farms (certification).
- viii. Ensuring that there is proper post-harvest management to avoid pre and post-harvest losses.
- ix. Supporting primary processing through provision of skills and assorted equipment to address specific value chain needs.
- x. Supporting medium to large scale, model or extensive farmers because these create effective demand (markets) for the small scale and intensive farmers.
- xi. The need for special support to sustainable fisheries.

In order to achieve sustainable growth at household and at national level through-out the country, there is need to address certain policy and institutional loop holes and challenges which cut across the value chains and are characterised by low production levels, low quality of produce brought about by poor breeds, poor pre- and post-harvesting processes and lack of adequate farmer information and knowledge. The following should be undertaken to address these challenges;

i. Production, multiplication, certification and distribution of seed and stocking material

The Government Agencies, specifically National Agricultural Research Organization (NARO) and National Animal Genetics Resources Centre and Data Bank (NAGRC & DB) will have monopoly and control of seed and stocking materials development, production, and importation. These Government bodies will be in charge of developing and producing all foundation seed and breeding stock material, importing foundation seed/parent stock where needed, and releasing it to the licensed private sector for multiplication and distribution. This will enable Government to be in charge and responsible for safety and quality assurance across the value chains.

The Government will also create a commercial arm of NARO and NAGRC & DB in the form of a private seed company, as a vehicle of intervention for purposes of availing seed and disseminating other research outputs, and address affordability issues.

ii. Pest and Disease Control

Government will work towards achieving the status of "A Fully Vaccinated Country" under the World Animal Health Organization (OIE) and thus gain trade entry to big ready markets like China, Indonesia, Mexico and Brazil among others. To achieve this, the Government will undertake universal vaccination of all vulnerable livestock species biannually for at least 3 consecutive years targeting cattle, goats, sheep and pigs. Government will also enforce the illegal entry of diseased animals from other countries.

Government will also create an Animal Disease Control Fund under which farmers will be charged a subsidized rate (cost sharing) for the vaccines and the Government will provide a one-off seed contribution towards the vaccines. Government will also impose fines and levies against culprits of illegal animal movement, which contributes to the spread of animal diseases.

iii. Mechanization and Irrigation

The Government has set a target of increasing the percentage of arable land under agricultural use from the current 34.4% to at least 50% in

the next 5 years as well as increasing productivity per hectare for the various enterprises. To achieve this target, Government will invest in and support farmers with appropriate technologies for mechanization and irrigation across the value chain stages. The planning here will also distinguish between the machinery needs of the different farmer categories; that is, for intensive and extensive farmers.

Under the PDM, smallholder farmers through the enterprise based SACCOs will receive hand hoes, walk behind/ride on tractors (single axle tractors/implements ranging from 8 to 25 horsepower), Draught Animal Power, harvest and post-harvest handling equipment (hullers, threshers, shellers, grinders, and so on), and on-farm small scale (micro) irrigation equipment. On the other hand, higher power tractors (65 HP and above), larger post-harvest equipment, medium and large value-added machines, storage and primary processing equipment, and irrigation systems will be provided to large-scale farmers with large land holdings.

Operationalization of the mechanization centers in the 18 zones of the country will be completed. These zonal mechanization centers will be equipped with specialized high-power earth moving equipment sets to help farmers to access equipment and machinery (on a hire and lease basis at greatly reduced rates) for bush clearing, development of farm access infrastructure, and water harvesting and storage facilities. The centers will also help with maintenance and repair of all agricultural equipment, for both Government/ public and private, and skill/train machinery operators, mechanics, and farmers on the use of small farm machinery.

On irrigation, the Ministry of Water and Environment (MWE) will deal with water for human consumption and take care of bore-holes for domestic use in the villages while MAAIF will deal with Water for irrigation and other agriculture related water issues.

iv. Farmer Mobilization and Education

The Government will roll out a national crusade/campaign that advocates for commercial farming through the dissemination of clear and simplified messages in various dialects showing the profitability potential of each enterprise as well as the best recommended agronomic and

husbandry practices. The MAAIF has developed an enterprise selection manual and other farming educational materials to use in this campaign. The campaign will leverage the wide media space (TV, radio, newspapers, and social media) to make the farming conversation dominant.

In particular, Government will launch a monthly Farmer Baraza that will be broadcast widely with the help of UBC and other partner media stations, discussing the A - Z practices of a particular commodity. For each month, a baraza will focus on a particular selected commodity. The Baraza will sit in the region/sub-region where that commodity is dominant. For example, if it is bananas, the Baraza will sit in Bushenyi/Isingiro/Mbarara. If it is Arabica coffee, the Baraza will sit in the Elgon/Rwenzori regions. If the Baraza is about oil seeds, it will sit in the North and North Eastern regions of the country. In addition to the Barazas, farmers will have Expos to showcase their products and connect with market actors. Messages about land fragmentation and environmental protection, as guided by Your Excellency, will also be strongly disseminated at these Barazas. This crusade/campaign will be inclusive and universal involving all categories of leaders and targeting the youth to be champions. H.E. the President will be the Chief Champion of this campaign and will launch the first National Farmers Baraza in July 2022.

v. Partnerships with big commercial farmers for the production of strategic commodities to meet national and international demand

The Government will identify, profile, and partner with largescale commercial farmers (especially those with big chunks of land) to produce on a large scale, identified high-value commodities with high national and international demand. Some key commodities have been identified in this regard namely: Coffee, Macadamia, Avocado, Cashew nuts, Tea, Cotton, Beef Ranching, Oil Seeds (sunflower, sim sim, soya beans, and ground nuts), Oil Palm, Horticulture, Cocoa, Aquaculture, and any other enterprise that may emerge from time to time depending on its national and international demand. The combined market value of some of these commodities in Africa alone was over USD 20 billion but Uganda's export

earnings from these commodities amounted to less than USD 1 billion in the year 2020.

The smallholder farmers will be supported to work with co-operatives, which will collaborate with the large commercial farmers. The smallholder farmers will in effect be helped to produce qualitatively and sustainably for the market. The big commercial farmer will increase both his/her own production and the off-take capacity for the products of the cooperatives.

Government will provide tractors, bush clearing equipment on hire, production and storage infrastructure, and use the big farmer's farm as a training and demonstration center for the smallholder farmer. This will build capacity to increase production to meet targeted volumes, produce qualitatively according to market standards, and improve post-harvest handling and storage and marketing/primary processing.

Transparent criteria for selecting these big commodity commercial farmers per district/sub-region will be developed by MAAIF.

vi. Special intervention/affirmative action for the fisheries subsector and aquaculture development

The Government will support fishing communities with the requisite fishing gear (especially engines) to ensure sustainability of the fish – catch industry. Government will register fishers, mobilize them and support them with boats and sustainable fishing practices.

Government will also develop aquaculture parks in suitable eco-systems. This will be both a viable commercial enterprise for many people, especially the youths, and an alternative to rice growing that compromises the integrity of wetlands.

Government will support the development of hatcheries, construct fishponds and provide fingerlings and feed. Under the PDM, farmers will use the borrowed money from their SACCOS to buy fingerlings (seed).