Ministry of Agriculture and Food Security South Sudan

Food and Agriculture Organization of the United Nations

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Technologies for African Agricultural Transformation

Towards Strengthening Agricultural Research Capacity for Sustainable Agricultural Development and Economic Growth in South Sudan

The Report of an IITA Mission to the Republic of South Sudan

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Disclaimer

This report has been prepared as a deliverable for IITA and the TAAT programme and has not undergone peer review. Any opinions stated herein are those of the author (s) and do not necessarily reflect the points of view of IITA or the TAAT programme.

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1. Background and justification for the mission (extracted from existing documents submitted prior to the mission)

An IITA mission was undertaken from 3-10 September in the Republic of South Sudan by IITA Scientists Dr Silvestro Meseka (maize specialist) and Dr Rony Swennen (banana specialist). Due to health reasons, Dr James Legg (cassava specialist) could not participate. The mission was funded by the Technologies for African Agriculture Transformation (TAAT) and executed under the auspices of the IITA Eastern Africa Hub, the Directorate Office of Dr Tripathi Leena. The unwavering in-kind contribution and logistical support of MAFS and FAO made this mission possible.

South Sudan is among the least developed countries, ranked among the poorest countries in the world. Over time, national poverty rose to 78.2% in 2021 (World Bank, 2024). About 78% of the population is in rural areas (World Bank, 2020c). The rural population (78%) derives its living from agriculture, fishing, and pastoralism. The country also faces a high youth bulge due to a high unemployment rate, estimated at 50%, with a young population in which 72% of the total population is below 30 years of age (World Life Expectancy; South Sudan National Bureau of Statistics). Agriculture and food security are key levers for enhancing the growth of the agricultural sector and improving food security in South Sudan. Agricultural investments in South Sudan are thus aimed at driving income growth, ensuring food security, and generating sustainable employment. In response to the country's request for agricultural development, the African Development Bank (AfDB), the World Bank, and other development partners have ongoing large investments in agricultural projects and programs that incorporate CGIAR technologies and innovative solutions to transform the country's agricultural sector.

IITA and the Government of South Sudan, through its Ministry of Agriculture and Food Security (MAFS), recognise the benefits of deploying proven technologies to expedite the delivery of project outputs and achieve the desired outcomes. Therefore, this mission aimed to engage MAFS scientists and other key stakeholders in strengthening MAFS' agricultural research capacity for sustainable agricultural development and economic growth in the country. Building strong partnerships with IITA and TAAT through previous engagements and ongoing FAO/MAFS project interventions, the tripartite partnerships aim to leverage these partnerships and explore new investment opportunities to bolster agriculture in the country. At the end of the mission, the team will deliver the following:

- A mission report with recommendations to MAFS on the challenges, opportunities, gaps and weaknesses of the banana and maize sectors for creating an enabling environment for IITA technical and research support to MAFS research development agenda.
- A road map for research capacity development.
- Screened opportunities for funding from the FAO and the World Bank through existing projects.

2. Observations on crops in Eastern Equatoria, South Sudan

Mission members undertook a 2-day road trip in Torit County, Magwi County (Obo, Palotaka, Magwi), and Ifoto County (Igele farms and individual farmers' farms), during which several locations were visited, both near and far from the road.

The soils in Magwi and Ifoto counties are fertile and can be best described as loamy black soils with good water retention capacity. There are a good number of leguminous trees growing wild in the bush, which might have added to the fertility of the good soils.

2.1. Banana Farming System

2.1.1. Banana farming systems and plantation

Bananas are cultivated in Magwi and Torit at altitudes between 600 and 1200 masl, and cultivation by smallholders differs significantly from that in other African countries. There are no backyards, no fields with intercrops based on shifting culture principles or monoculture plantations. Banana plants are grown in isolated pockets at some 20-50 m distance or further away from the homestead where plants stool freely, and hence banana plants of a single variety grow in clusters (Figure 1). The variety is mostly Kajinja. Also, several varieties grow in clusters near many rivers and creeks (Figure 2). In both farming systems, plants are not managed at all, but given the excellent soils, yields are reasonable. In both farming systems, establishing ownership of banana plants is not straightforward.

Figure 1. Banana plants are grown in clusters at some 20-50 m or further away from the homestead

Figure 2. Bananas are grown in clusters near many rivers and creeks

A banana plantation was visited (apparently the only one remaining), which is part of a large farming enterprise known as Igele Farms (www.Igelefarms.com). The banana field (totalling about 2 ha) is poorly planted and not well managed. The plants are in their first cycle. It is difficult to establish the type of varieties grown because they consist of many varieties (both a diversity of matooke and dessert cultivars) spaced far too wide from each other, with improper sucker management, no leaf sigatoka control, and with a lot of weeds (Figure 3).

Figure 3 Banana cultivated in the commercial farm of Igele Farms

Variety	Genome group	Estimated frequency in Eastern Equatoria	Common Consumption	
			Africa	South Sudan
Kayinja	ABB	65%	Cooking, Brewing	Dessert
Cavendish (Williams, Dwarf Cavendish)	AAA	23%	Dessert	Dessert
Sukari Ndizi	AAB	10%	Dessert	Dessert
Red	AAA	1%	Dessert	Dessert
Matooke (different varieties)	AAA	1%	Cooking	Dessert
French plantain	AAB	1 plant	Cooking, Frying	Dessert
Silver Bluggoe	ABB	3 plants	Cooking	Dessert

It is unique to learn that any banana variety grown is consumed as a dessert banana when the fruit has turned yellow (Figure 4-5). In any other African country, the varieties Kayinja, Matooke, Silver Bluggoe and plantain are commonly cooked and not eaten raw. Also, farmers emphasised that planting material originates from Uganda

Figure 4. Matooke (left) sold in the Juba market for consumption at the yellow stage , Gros Michel (Bugoya)(right) is a dessert banana

Figure 5. Kayinja (cooking banana) is on sale as a dessert banana

2.1.2. Pests and diseases

At all locations visited, Banana Bacterial Wilt (BXW) caused by Xanthomonas Vasicola pv. Musacaerum was present, but only in just a few individual plants. This disease was primarily found in Kayinja (Figures 6-7) and to a lesser extent in Cavendish. However, Fusarium was found in Kayinja. Both diseases are very threatening but given their low incidence, it is timely to put in place an eradication program.

Figure 6. BXW symptoms in Kayinja bunches

Figure 7. BXW symptoms in Cavendish

Black Sigatoka caused by Mycosphaerella fijiensis (Figure 8) was present in all susceptible varieties. We strongly believe that these three diseases (BXW, Fusarium, and Black Sigatoka) originated from Uganda, likely with the planting material, where these diseases are also present.

Figure 8. Black Sigatoka disease

No toppling of any plant was seen, indicating that nematodes and banana weevils are not currently of much concern. A few plants with very mild symptoms, caused by banana streak virus, were observed. No plants with Banana Bunchy Top disease were found, but since this disease is present in Uganda and DR Congo, one needs to remain alert, as this is a very devastating disease.

2.1.3. Banana cultivation

To obtain maximal yield and cultivate efficiently (low costs relative to high yield) an entire package of interventions should be applied. There is no doubt that a significant knowledge gap exists in the fundamental principles of excellent agronomic practices, disease control, post-harvest management, plant multiplication, and other related areas.

2.1.4. Market at Juba

A brief visit was made to the market in Juba, where bananas (both single fruits and bunches) originating from Uganda are sold and consumed as dessert bananas. Varieties sold were Gros Michel (not seen in Torit and Magwe), Sukari Ndizi and Matooke (Kisubi, Musakala. The country's banana consumption and demand are very high, yet it has the potential to produce bananas to meet the demand. Given that IITA is well-established in Uganda with its banana breeding program paramount to the development of the banana seed system, this is an area that MAFS can explore to partner with IITA to build a strong banana breeding program and eradicate disease, reduce banana imports, and achieve self-sufficiency in the years to come.

2.1.5. Recommendations

The fact that farmers import banana planting material and sell banana bunches from Uganda highlights the need for increased banana production in South Sudan. Based on the introduction of disease-resistant and high-yielding banana varieties (Figure 9), in Kagera, North-Eastern Tanzania, the high-impact approach applied has demonstrated impactful changes (https://youtu.be/FMhzU9rfv5Q). The results recorded were impressive, notably:

- 47.7% adoption rate in 2024
- 81% increase in banana sales
- 37% increase in per capita household income
- nearly $2.2 million/year added to the region's economy
- new varieties led to an additional 56,399 tons of production

Figure 9. High-yielding banana hybrids in Tanzania, cultivated by smallholders sold on the market

To effectively support the South Sudan banana intervention, below key recommendations:

1. Launching of the eradication program against BXW.
2. Introduction from IITA of disease-resistant and high-yielding banana varieties.
3. Establishment of a mini model farm using tissue culture propagated disease-free planting materials of IITA of disease-resistant and high-yielding banana varieties
4. Installation of infrastructure, initially focusing on multiplication of healthy plant materials, first via micropropagation, and then later via in vitro culture.
5. Training of key technical staff in agronomy, pathology, post-harvest, and seed systems.
6. Upgrading of plant health facilities for early detection of pests and diseases
7. Visit by IITA to Western Equatoria to prepare future interventions and check whether banana Bunchy Top Disease has entered South Sudan from DR Congo.

2.2. Maize Farming System

2.2.1. Maize production in Eastern Equatoria

Maize is a crucial food and cash crop in South Sudan, primarily cultivated by smallholder farmers for subsistence, with land coverage ranging from 2 to 20 hectares. The crop is grown without fertilisers and without chemical control for pests and diseases, yet the yields are as high as 3 t/ha. Visiting one of the farmers harvesting 20 hectares of a maize field, the team was able to see the high crop yield potential (~3.5 t/ha) of the Longe-5 variety (Figure 10). This variety was developed and released by the National Agricultural Research Organisation (NARO) of Uganda more than 15 years ago.

Figure 10. Harvested maize ears of a local farmer near Magwi town

The main maize variety grown by farmers is the open-pollinated variety Longe-5. It has a high yield potential of up to 6 t/ha at the research farm and 3.5 t/ha at farmers' fields. The team observed a mixture of dent and semi-dent kernels as well as mixed light yellow to white kernel colours in the same farmer's field. When the farmer was asked about his knowledge of the mixture in the field, he informed the team that the mixture was brought about by the honeybees hovering around the field. However, upon examining the field, the team discovered several other maize farms in the vicinity, less than 200m away, which significantly contributed to the major source of foreign pollen grains, as well as the main source of mixtures of grain texture and colour in farmers' fields.

Other challenges included poor agronomic practices and the lack of knowledge about pests and disease management. The team observed wide inter-plot and intra-plot spacing (Figure 11), which reduced the maize population per unit area and increased the size of maize ears per plant. This low population translated into low yield or production, despite the high yield potential of maize.

Figure 11. Wide spacing of maize intercropped with cassava at Magwi

Upon visiting farmers in Ifoto County, the local farmers disclosed that they obtain most of their maize seeds from Uganda (Longe, 5). There was only one farmer growing yellow maize, who preserved the seed from his previous planting for more than 20 years. One of the farmers, who planted approximately 5ha of maize, reported that he faced numerous challenges during the first rainy season, during which he lost 40 bags of harvested maize ears due to the lack of a drying facility (Figure 12). Other farmers in the same area, as well as some in Magwi County, emphasised the same problem.

Figure 12. Famer drying maize in the open during the rainy season

Upon visiting Igele Farms, owned by lawyer Mr Ajo, maize farms of roughly 50 hectares were harvested, although some were still to be harvested. The harvested maize ears were being dried in three locally constructed barns. However, it was clear that the maize ears in the barns (Figure 13) were left to dry without being routinely turned from one side to the other to ensure uniform drying. At the time of the visit, the farm owner was not available, but the visiting team was able to speak with some of his staff. Some of these staff members are graduates from Uganda.

Figure 13. Drying of maize ears in a barn at Igele farms, Ifoto county

Generally, farmers access seeds from local sources, including neighbours and friends, as well as from the local market (grains) and the relief organisations. According to some farmers, there is a high rate of uncontrolled importation of substandard maize seeds (mainly OPVs) from Uganda. This single but serious action has led to the importation of maize pests and diseases, including Maize Lethal Necrosis (MLN), Fall Armyworm (FAW), Grey Leaf Spots (GLS) and Maize Streak Virus (MSV), which are prevalent in Uganda as well as on most maize fields visited in South Sudan. It also had a negative impact on the growth of maize seed systems in South Sudan.

According to a seed company operating in South Sudan, farmers are ready to transition into maize hybrid production. For example, farmers in Western Equatoria state are purchasing 1kg of imported hybrid seed from Uganda at USD 6 (six US Dollars), which is equivalent to SSP 36,000.00 (thirty-six thousand South Sudanese Pounds). This provides an opportunity for local seed companies operating in South Sudan to engage in hybrid maize production. There are local seed companies, such as Pro Seed, that are already producing hybrid maize in Yambio. This also presents a growing opportunity for business expansion in the seed sector within the country.

2.2.2. Problems/ challenges for maize production

1. Poor agronomic practices, especially inter-row and intra-row spacing, which are normally kept at more than one meter.
2. Poor weeding: most farmers weed only once, allowing weeds to compete with maize plants, thereby reducing the yield.
3. Drying maize during the second rainy season is a big challenge for most farmers.
4. High foliar disease pressure, especially common rust and maize streak virus.
5. Some farmers reported the presence of Striga hermonthica both in maize and sorghum fields, which is now spreading to other areas that did not use to have this noxious weed.
6. Inadequate availability and expensive, unaffordable improved seeds, particularly the hybrids
7. The absence of maize hybrids in farmers' fields, which could be due to the lack of diffusion and adoption of the released maize hybrids in South Sudan.
8. The limited use of farm implements by farmers, especially tractors. Moreover, the few tractors working the field only have disc ploughs but no harrows and ridgers.
9. Farmers also reported terminal drought spells between and within the two rainy seasons (bimodal rainfall pattern).

2.2.3. Recommendations

1. Introduction and release of MSV and common rust-resistant maize varieties from the International Institute of Tropical Agriculture.
2. Introduction and release of Striga-resistant (multiple stress) maize varieties combining tolerance to drought developed by IITA.
3. Training farmers in best agronomic practices, including spacing, timely weeding, and

harvesting, as well as good post-harvest management.

4. Deploy farm implements to provide services to farmers at a subsidised level.
5. Building strong seed systems, including mapping of the seed distribution network.
6. Strengthening of the local seed systems by promoting local seed companies and community-based seed producers as the main sources of improved maize varieties in the country.
7. Gradual scaling down distribution of relief seeds whilst improving farmers' access to locally adapted seeds through improved local seed systems using market-based approaches such as seed fairs and voucher systems.
8. Training of farmers in the conduct of on-farm demonstrations to showcase the performance of both maize open-pollinated varieties and hybrids on farmers' fields.
9. Value addition of maize grains – both wet and dry millers to supply the local markets.
10. Introduction and use (diversification) of maize as animal feed, especially provitamin-A maize for poultry and small ruminant animals, to encourage semi-intensive or intensive grazing as ways to reduce free ranching, which is the main factor of farmer-pastoralist armed conflicts.

2.3. Cassava Farming System

Cassava is among the five top priority crops of the Government of South Sudan. It is mainly grown in the Great Equatoria Region (the breadbasket of the country). Generally, farmers have various sources of planting materials, including those obtained from friends, relief aid, and others directly sourced from Uganda. The planting materials from Uganda enter South Sudan without any restrictions due to the porous nature of the border, coupled with the aggressive behaviour of relief non-governmental organisations, which see themselves as the only agents of agricultural development in South Sudan.

In Magwi, the team visited a progressive farmer's field, who cultivated about 30 ha of maize and 20 ha of cassava and banana. During the visit, the farmer was harvesting 20 hectares of a maize field, and cassava was beautifully growing on the far end of the field (Figure 14). We also visited other cassava farmers, including a female farmer growing about 0.5 ha of cassava, but with mixed varieties, all imported from Uganda (Figure 15).

Figure 14. Cassava field on a farmer's field at Magwi (with stock of harvested maize)

Figure 15. A female cassava farmer with IITA's Dr Meseka in a mixed cassava field at Obo

In Ifoto County, the team visited a cassava farmer who was growing approximately 2 hectares of cassava fields with planting materials imported from Uganda. The farmer demonstrated high potential of cassava productivity by uprooting one of the cassava stands, with about 1.5m root length (Figure 16). This variety was called "Japan" imported across the porous border from Uganda.

Figure 16. A happy cassava farmer with his family uprooted a stand of Japan variety at Ifoto

Most cassava fields visited were intercropped with maize, pigeon pea (Cajanus cajan), and/or sorghum (Sorghum bicolour L.). The farmers do not follow the best agronomic practices and have limited knowledge of cassava pests and diseases. There are several opportunities for improving cassava production and productivity in Central Equatoria, particularly in the Green Belt that extends up to Western Equatoria State.

1. Fertile soils that support the growth of cassava with little agronomic effort.
2. Farmers' interest in growing cassava for self-sufficiency and economic growth.
3. The interest of consumers, especially those coming from Juba, who buy cassava flour in Magwi County, creates a market for the local farmers, although cassava farmers in Magwi prefer to sell fresh cassava roots to flour.
4. The presence of unemployed youth who are going into agriculture for profit-making.
5. Interested women in selling fresh cassava roots in Juba markets

There are a lot of challenges that need to be addressed to realise high-yield potential and economic viability of cassava, including but not limited to:

1. Poor agronomic practices, including the lack of timely weeding, inter-row and intra-row spacing.
2. Weak seed systems involving the lack of policymakers enacting and implementing seed regulations and laws in South Sudan.
3. Inter-cropping of cassava with maize and/or sorghum (these two crops are heavy feeders), depleting the soil in a very short time.
4. The lack of awareness about pests and diseases. The team observed

cassava mosaic disease (CMD) with visible symptoms on the leaves in a female farmer's field in Obo, Magwi County.
5. The lack of value addition, including mechanisation and post-harvest losses management of cassava products (dry and wet millers), and drying facilities, especially during the rainy season.
6. The absence of a well-structured market for the local farmers to make reasonable profits.
7. Importation of planting materials from Uganda and DR Congo opens doors for bringing diseases which are prevalent in Uganda to South Sudan (e.g. cassava brown disease (CBD), CMD, etc.).
8. Limited government support to agricultural development in South Sudan.
9. Poor linkage between research and extension services and local farmers.
10. Unclear coordination mechanism between national and state ministries in support of farmers

2.3.1. Recommendations

Most IITA stations, especially those in Nigeria (Ibadan, Kano, Abuja, Onne), Uganda, and Kenya, share similar agro-ecologies with South Sudan. Planting materials developed in these IITA stations have a high chance of adaptation in South Sudan's agro-ecological conditions.

3. Opportunities for funding with FAO, African Development Bank (AfDB) and European Union through existing projects

With the support of FAO, the IITA team met with partners, primarily the AfDB and the EU, and presented the mission findings, as well as the recommendations highlighted in this report. The findings and recommendations were positively received by the FAO, AfDB, and EU, and the need to support the country in enhancing its research capacity was clear.

- FAO and AfDB endorsed the proposition to take key decision makers to IITA Uganda and Tanzania for a study visit, where IITA has achieved remarkable results. According to the FAO, any possible intervention by IITA in the country should be focused on the 15 locations where FAO is active, aiming to enhance and leverage ongoing interventions to facilitate the smooth implementation of the work to be done.

- AfDB was more interested in the policy support intervention to improve the capacity of MAFS. According to MAFS, the country has planned for 5 policy interventions in the areas of (i) National Research Policy, (ii) National Seed Policy, (iii) National Fertility/Health Policy. MAFS also informed the audience that South Sudan, being a Partner State of the East African Community (EAC), it offers the country the opportunity to use released materials from the neighbouring countries to fast-track the adoption of improved varieties.

- In the framework of the Food and Agriculture Delivery Compact of the AfDB presented during the "High-Level Summit on Feed Africa: Food Sovereignty and Resilience (January 2023)", the Country developed a Compact Delivery called Climate Resilient Agri-Food Systems Transformation Program – Project 1 (CRAFT-1). CRAFT-1's objective is to increase agricultural productivity and food security, and build resilience in South Sudan, specifically the project intends to (i) scale up climate-adaptive technologies and production systems; (ii) develop women and youth-led businesses in priority value chains, (iii) promote digital agricultural and climate advisory solutions, and (iv) build vocational, technical and entrepreneurship skills for more job opportunities for women and youth.

  I. AfDB suggested that the IITA Research Capacity Support to MAFS should fall under CRAFT-1. Although CRAFT-1 works on rice, sorghum, and fish value chains, maize, cassava, and banana can be integrated in the project to support smallholder who grows these crops to build their food systems, as the "final target of any intervention is the farmer who grows different crops". Additionally, since MAFS prioritises interventions on maize, cassava, and banana, AFDB respects government requests.
  II. Additionally, AfDB expressed the need for FAO to develop a vision document to integrate maize, cassava and banana into the existing Compact Delivery CRAFT-1.

- The EU emphasised that the country has many projects. They expect that MAFS and FAO find ways to link the proposed maize, cassava and banana interventions to existing projects for complementarity and create synergies on the ground for greater impact. They were pleased to hear the suggestion from AfDB to link the outcome of this mission to the CRAFT-1 project. The EU also aims to support a pilot project and review a Concept Note on how the pilot project is integrated into a larger strategic document. The EU is very interested in strengthening the MAFS capacity by training a new class of emerging scientists, upgrading them to Master's and PhD levels.

4. Recommendations

This report outlines key recommendations for each specific crop intervention. Additionally, the IITA team recommends the following to keep momentum:

1. Organise a virtual meeting with IFAD, as IFAD was not available during the mission.
2. FAO and MAFS to develop a strategic document on how the planned interventions will be linked to Compact Delivery CRAFT-1.
3. FAO to develop a holistic approach to address farmers' needs beyond improving access for traditional primary crop seeds to diversifying livelihoods and income streams, including integrating nutrition-sensitive approaches based on location-specific needs.
4. Develop a joint proposal between the DAR, FAO and IITA to address the pertinent agricultural challenges and develop a research capacity program in South Sudan.
5. FAO to propose a maximum of 6 locations out of the 15 existing intervention sites for the IITA intervention.
6. Organise a study visit by key decision makers and stakeholders to IITA sites, especially those in Nigeria (Ibadan, Kano, Abuja, Onne), Uganda, Tanzania and Kenya, as they share similar agro-ecological conditions with South Sudan, to learn cutting-edge research advances in the areas of maize, cassava and banana systems. Planting materials developed in IITA research stations have a high chance of adaptability in the agro-ecologies of South Sudan.
7. Have IITA Focal Person based in Juba to coordinate activities on the ground.
8. Share with MAFS the existing IITA manuals corresponding to key crops.
9. Launching of an eradication program against a specific disease, such as BXW, in banana.
10. Introduction of disease and pest-resistant and high-yielding varieties.
11. Establishment of plant tissue laboratory to propagate and distribute disease-free planting materials of vegetatively propagated plants; cassava, banana, etc
12. Building of a strong seed system, including mapping of the seed distribution network.
13. Strengthening of the local seed systems by promoting local seed companies and community-based seed producers as the main sources of improved varieties.
14. Comprehensive baseline study on Banana covering the Equatoria region (Green belt, Hills and Mountain, and Ironstone Plateau) and part of Western Bahr el Ghazal (Ironstone Plateau).
15. Promote banana cultivation using a model farm approach with lead farmers at Payam level (e.g in Magwi, Yei, Maridi, Yambio, Wau).
16. Gradual scaling down distribution of relief seeds whilst improving farmers' access to locally-adapted seeds through improved local seed systems using market-based approaches such as seed fairs and voucher systems. Training of key technical staff and farmers in best agronomic practices, including spacing, timely weeding, and harvesting, as well as good post-harvest management.
17. Identify during training potential candidates for MSc and PhD programs.
18. Upgrading of extension services and skills of MAFS to transfer knowledge to farmers and seed producers.
19. Upgrading of plant health facilities for early detection of pests and diseases.
20. Visit by IITA to Western Equatoria to prepare future interventions.
21. Deploy farm implements to provide services to farmers at a subsidised level.

Figure 17. Kayinja (left) and Cavendish (right)


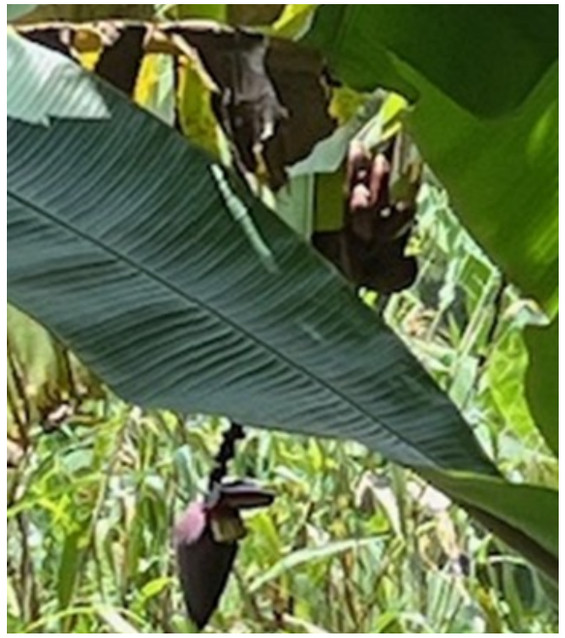

Figure 18. Sukari Ndizi (right) and Red (left)


Figure 19. Kisubi matooke (left) and Fresh plantain (right)


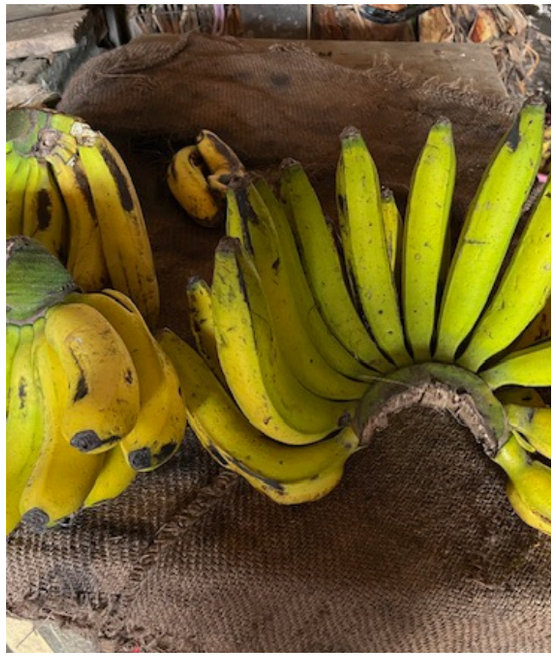

Figure 20.Silver Bluggoe (right) and ripe fruits of matooke (left) and Gros Michel (right)

Annex 2. Mission adjusted agenda

Date	Location	Topic
3 September	Arrival of Dr. S. Masako, overnight at Juba	
4 September	Arrival of Dr. R. Swennen, overnight at Juba	
5 September	Travel to Torit and Magwe, overnight at Magwe	Visit to the farmer's fields
6 September	Travel to Magwe and Basic Seed Centre-Palotaka, overnight at Torit	Visit to the farmer's fields and the plant multiplication centre
7 September	Travel to Igele Farms	Visit to the company farm
8 September	Travel to Juba and the Juba market	Visit the Juba market with banana fruits on sale
9 September	Meeting with FAO, ADB and EU	
	Opportunities for funding with FAO, African Development Bank, EU through existing projects	
10 September	Travel to Entebbe	

Annex 3. Key Stakeholders met

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