

POTATO PRODUCTION CASE STUDY



LENAFU

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Thriving Potato Production “Matelile Potato Association”

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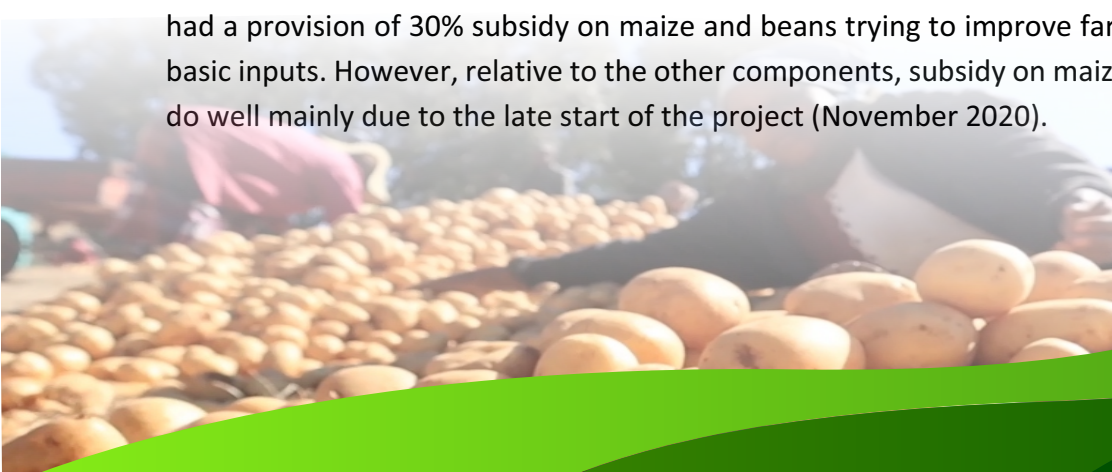


While the country is putting much of the effort to control the spread of corona virus pandemic, there is a need for urgent interventions to support and capacitate farmers to continue and improve their farming activities for production of good quantities and qualities of agriculture products. Lesotho National Farmers Union (LENAFU) identified a need to support the affected farmers with inputs and basic assets such as seeds/ seedlings and fodder to help them maintain sufficient production in the country. Attempting to support its members, LENAFU implemented the project “Support African Farmers in 2020 Emergency (SAFE2020) through the support of the International Fund for Agriculture Development (IFAD). The overall objective of the project is to improve the resilience of rural livelihoods in the context of the COVID-19 pandemic by ensuring timely access to inputs, information and markets in Lesotho. The following are the specific objectives:

- I. To provide inputs and basic assets to 3,127 farmers in Lesotho as a response to COVID-19 pandemic
- II. To facilitate access to market for vulnerable farmers in Lesotho amidst COVID-19 pandemic.
- III. To strengthen the information and communication mechanisms to improve the flows of information on COVID-19 and prevention measures towards LENAFU members and their communities

The specific interventions within the **SAFE2020** project include:

Support vegetable farmers with seeds/ seedlings to help them recover from the effects of Corona virus while also ensuring improved quantities and qualities of local vegetable produce in the country. LENAFU demonstrated this through procuring and placing vegetable seedlings (cabbage, tomato and green pepper) and potato seeds to 1667 farmers (total beneficiaries). LENAFU has also supported 350 dairy farmers with 15% subsidy on the fodder. These are the dairy farmers who produce and supply their milk to the markets. On the other hand, LENAFU had a provision of 30% subsidy on maize and beans trying to improve farmers’ access to the basic inputs. However, relative to the other components, subsidy on maize and beans did not do well mainly due to the late start of the project (November 2020).





Through the SAFE2020 project support, LENAfu procured 400 bags of 25kg potato seeds and placed to its members. Amongst the beneficiary farmers groups, Matelile farmers also benefited. About 100 people in Matelile, about 1 hour 20 minutes' drive from Maseru (79.0 km) via Main South 1 Road, have teamed up to form an organisation they hope can be their passport out of hunger and poverty that is rife in the rural community. The name of the association is called Matelile Farmers Association. The association is the member of Potato Lesotho Association (PLA) which is the member of the farmers' mother body, Lesotho National Farmers Union (LENAfu).

In addition to the support from SAFE2020 (potato seeds), the Matelile Farmers Association got potato seeds and fertilisers from the Food and Agricultural Association (FAO) through the assistance of LENAfu early this year. Overall, FAO has made a placement of 1 600 bags of potato seeds (25kg) and 600 bags of fertilizers (50kg) to Matelile Farmers Association.

FAO also supported additional 300 LENAfu farmers from the three areas in Maseru district; Semonkong, Nyakosobo and Moits'upeli. Overall, FAO has made a total placement of 6 400 bags of potato seeds (25kg) and 2 400 bags of fertilizers (50kg). Besides the response to COVID impacts on the potato farmers, FAO wanted to showcase that potato production is a valuable cash crop with excellent potential in Lesotho. Realising that this was not an opportunity to be missed, the Matelile farmers like others in the other three areas rolled their sleeves and planted a total of 81 acres of land. Before venturing into potato farming, the farmers used to plant peas and wheat as individuals for their own consumption.

The Matelile farmers have so far (early September) sold 17 000 bags (10kg) of potatoes to different buyers, especially businesses in the country. Some potatoes are yet to be harvested while some have already been packaged and ready for sale. The sell a bag (10kg) at M 45.00 (local currency) which is equivalent to USD 3.14. The potatoes are graded into extra-large, large, medium, small and extra-small sizes to give buyers more choice. After the potatoes are harvested, they are transported from the fields using an ox-drawn cart to a large storeroom for grading and sampling. This is followed by the packaging process. The association has got "a massive and lucrative" market. The farmers are projecting an overall harvest of 20 000 bags. The bags weigh 10kg each.



“We want the government to ban the importation of potatoes in future, and we will try improve on our production quantities in the next planting season 2021-2022,” Mrs ‘Marethabile Mokitimi, chairperson of the association said.

Harvesting the potatoes using cow-drawn plough is the major challenge as the farmers end up with losses that occur when some of the potatoes are damaged in the process. Harvesting and post-harvest activities involve a lot of manual operations and as a result it takes long for the farmers to get their produce ready for supply to the markets. There are no potato harvesters, harvesting is done manually as well as cleaning, sorting & grading and packaging of the potatoes. The farmers could experience better yields if they could be assisted with planter machines and modern harvesting machinery. They lose a lot of the crop because they are using traditional ways of harvesting. One other challenge is paying for storage of the potatoes while awaiting delivery to the market. It takes them time to collect the produce and assemble at the store for other processes until it is ready for supply to the markets.

The Department of Marketing in the Ministry of Agriculture and Food Security visited the association in April 2021 during the multi-stakeholders field day that was organized by LENAFU. The purpose of the event was to bring together different actors in the potato value chain to observe the work done by Matelile farmers and to identify the challenges and possible solutions as well as mapping the necessary future interventions in line with promoting the potato food system in Lesotho. The main mandate of the Department is to provide a marketing policy environment that promotes competitiveness, private sector participation, market-oriented production and diversified output in accordance with comparative/competitive advantage and the development of marketing systems.

The Department of Marketing working collaboratively with LENAFU held the buyer-seller meeting in June 2021 for Mafeteng district to enable information sharing between the producers (farmers) and the buyers. Basically the events are organized to promote the local agricultural business where the farmers present about the production they have or may have while on the other hand the buyers pronounce their demand (time of supply, packaging and quality & quantity).



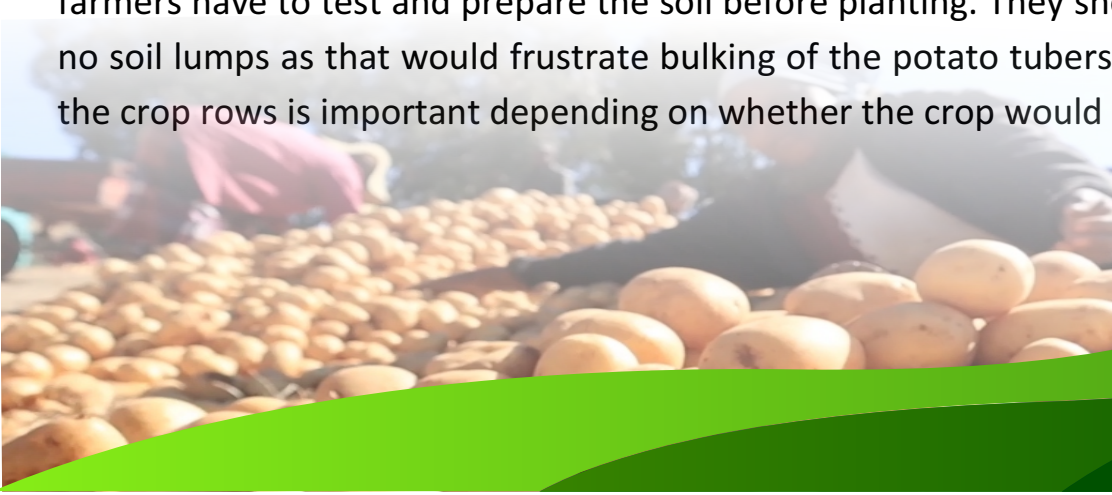


The Department of Marketing has supported the Matelile Potato producers by directing people and businesses in need of potatoes to Matelile. What the Department needed from the farmers was the information regarding the extent of the potato production in the area (the production quantities) to enable them assist the farmers with market access.

Director of Marketing in the Ministry of Agriculture and Food Security, Mr Lekhooe Makhate, hailed the project. The primary guidelines that the farmers have to follow include the right packaging. The potatoes are on the list of fruits and vegetables that the country imports from South Africa and the project could help reduce the country's reliance on imports.

Director of Crops at the Ministry of Agriculture and Food Security, Mr Mofihli Mots'etséro said their work was to provide a technical advice to the farmers involved so that they could know how best they could plant the potatoes. The stake of the Ministry was to demonstrate how best potatoes could be planted. Then, it was the responsibility of LENAUFU and its member PLA to identify the potential beneficiaries for the implementation of the potato project. According to the Director Crops, the production of potatoes is not as easy as some people think. There is a lot of expertise and knowledge that is needed for one to produce quality potatoes and it was very imperative to implement the potato demonstration project through the organized community of farmers such as LENAUFU and PLA.

Despite efforts by some potato producers in different areas in the country, potato production is still low in the country. The major challenge is that the country does not have breeders to produce early generation seed that is indispensable for high yields. The right choice of cultivar is important before the plantation starts as some varieties take a long time to mature. The farmers have to test and prepare the soil before planting. They should ensure that there are no soil lumps as that would frustrate bulking of the potato tubers in the soil. The spacing of the crop rows is important depending on whether the crop would be rain-fed or irrigated.





The seeding depth is also critical when planting potatoes and it should equal the diameter of the seed depending on the soil moisture level. During planting, potato seeds do not need excess moisture because they could rot. The moisture that the seed has suffices for it to germinate. Fertilisers can be applied at planting but carefully close to seed tubers because the potatoes have a weak rooting that could easily explore the nutrients. The choice of fertiliser and application rate depends on soil analysis results. Before the farmers can select seeds, it should be clear if they want potatoes for home consumption, sales or industrial purposes (processing).

The ridging of potatoes is done within 4-5 weeks after the emergence of crops. During this time the crop is about 20-25cm high. At that time, the application of nitrogen (LAN) is also needed to help boost the growth of the plants. The purpose of ridging is to protect formed tubers from the sunlight, insect, pests and disease-causing organisms. The potatoes do not need much sunlight because that reduces their quality and could be toxic. The farmers need to scout potato crops at least every two weeks so that they can monitor the growth of the plants, pests and diseases. After harvesting, packaging is of great importance and farmers should be equipped with the necessary skills at this stage. The potatoes have to be stored in a cool, dry and well-ventilated place where there is no direct sunlight. The paper bags and perforated baskets are preferable. If exposed to sunlight, the potatoes can change the colour and turn greener, something which is dangerous to human health.

The FAO potato support to the farmers in planting season 2020/2021 was done a bit late after what is known as the cut-off-planting date in Lesotho. FAO struggled to get the potato seeds on time and that delayed the actual placement to the farmers. The challenge to get the inputs on time also impacted on the quantities of potato seeds set to be placed to the farmers for the planting season. Though the placement was made a bit late, but surprisingly the production quantities of potatoes in the Foothills including the Matelile area has been good, though there are still packages of potatoes that could not be supplied to the markets due to their small size.



No one expected this good harvest after the potatoes were planted after the planting cut – off date. This has been a good learning curve not only to the farmers but also to the Ministry of Agriculture/FAO that the potato production cut-off planting dates need be reviewed. The Ministry of Agriculture and Food Security needs to expand the list of recommended potato seed varieties with the addition of Allison variety (the new variety that was within the input package from FAO) during this planting season 2020-2021. The initial plan was to place 12 000 bags (2kg) of potatoes to the 400 farmers in the four selected areas, however only 6 400 bags were placed.

Regarding the future plans on the support to potato farmers and the sub-sector in general, LENAFU through the SAFE2020 project, will procure and place about 2 571 bags (25kg) of potato seeds to the farmers in the 10 districts of Lesotho during the planting season 2021-2022. The support is meant to advance food and nutrition security of the farming households and this is in line with supporting the farmers to recover from the impacts of COVID 19. Each farmer will receive about 4 bags (25kg) of potatoes. Overall the project will cover a total of 625 farmers. On the other hand, FAO working with the Ministry of Agriculture and Food Security, LENAFU and PLA would like to balloon the production of potato in the country by involving more 350 farmers.

This is adding on the 400 beneficiaries from the previous planting season who are going to receive the balance of 16 000 bags (25kg) of potato seeds. The new selected areas for the potato demonstration project are; Molumong in Mokhotlong, Mant'sonyane in Thabatseka, Marakabei in Maseru, Mpharane in Mphahle's Hoek and Mphaki in Quthing district respectively. FAO will make a placement of 10 500 bags (25kg) of potato seeds and 2 100 bags (50kg) of fertilizer to the 350 beneficiaries in these areas. The adding of these five areas and the contribution of LENAFU-SAFE2020 project will increase on the overall area planted potatoes in the country. We estimate 398 hectors of the arable land to be planted potatoes for the planting season 2021-2022.





FAO considers providing additional material support. The procurement of essential equipment including but not limited to potato planters, potato diggers, potato sorting and grading to accelerate potato production in Lesotho and most importantly to strengthen the capacity of the farmers in the following thematic areas:

- -Soil preparation,
- -Seeding
- -Fertilizer application rate,
- -Harvesting, sorting and grading

In an effort to investigate the challenges and gaps that hinder the development of the potato sector in Lesotho as well as to identify opportunities and possible ways for developing the potato sector, LENAFU organized the multistakeholders Potato Food System in Lesotho on the 18th August 2021.

LENAFU has produced a separate report about the proceedings and the resolutions from the Multi-stakeholders meeting on Potato Food System in Lesotho. However, the summary of the discussions and resolutions is that, the future plans in line with the promotion of the potato value chain in Lesotho should include provision of inputs to the farmers on time. The production of potatoes should be mechanised where planters, harvesters and other necessary tools should be engaged. Storage should be of good quality to make the potatoes be available for a long time and for prolonged supply to the markets. The sorting, grading and packaging facility has to be enhanced. Finally, Lesotho has to develop Lesotho Potato Improvement Strategy to guide and govern the production of potatoes from the seed level.



MATELILE POTATO ASSOCIATION



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