

# Lesotho; working to commercialise agricultural sector

The Lesotho Review

2018

Over the past three decades, the structure of Lesotho's economy has changed significantly. Agriculture, which is the pillar of the rural economy and the sector that employs most of the poor, has been on a downward trajectory since the early 1990s. As a result, its contribution to Lesotho's gross domestic product (GDP) has been declining. Between 1985 and 1994 it shrank from 11.8 percent to approximately 7.2 percent, and today makes up around 5 percent of GDP.

The arable subsector is concerned primarily with rain-fed cereal production, while livestock farming involves extensive animal grazing, wool and mohair production, as well as a fast-growing aquaculture industry. Output from arable farming has decreased over the years, and today the livestock subsector has expanded to make up some 62 percent of the agricultural sector.

Constraints related to domestic agricultural production include limited use of irrigation and technology, weak extension systems, sub-standard marketing infrastructure, poor access to markets for small producers, insecure land tenure and land degradation. In addition, the sector has struggled with the effects of climate change, such as unpredictable weather conditions, marked by inconsistent rains and persistent droughts.

According to the International Fund for Agriculture Development (IFAD) in its Rural Poverty Portal, only 10 percent of the total land in Lesotho is arable. The majority of smallholder farmers live on what they can produce from cultivating an average of less than 1.5 hectares of land or from herding livestock on grazing land that is increasingly degraded and hit by extreme weather events. This set of challenges makes Lesotho a net food importer. In an average year, about two thirds of the cereal utilised is imported, leaving the economy highly susceptible to exogenous shocks and food price fluctuations.

There is a pressing need to commercialise agriculture in Lesotho, and Government has prioritised this as an important part of its growth strategy. Efforts to promote investment have been intensified, with agro opportunities to be found in crop farming, aquaculture, horticulture, livestock and food processing. In spite of current climatic and structural challenges, the sector does hold immense potential to drive economic growth through generating employment and reducing poverty levels.

## **Current developments**

According to the Central Bank of Lesotho (CBL) in its 2017 Annual Report, real output in the agriculture, forestry and fishing subsector is estimated to have grown by 3.4 percent in 2017, albeit at a slower pace than the 7.2 percent recorded in 2016. Real output growth was attributed to a rebound in crop production in 2017, mainly due to better weather conditions relative to the two previous years when droughts caused by El Niño conditions dramatically cut crop production yields.

Published in June 2018, the CBL Economic outlook (2018-2020) forecasts a decline of 1.3 percent in the sector during 2018, predominantly because of the poor crops performance. A host of factors, including late onset of rains, and dry spells coupled with extremely high temperatures and hailstorms, have affected crop development. Production is thus predicted to be lower than the previous year.

*Agriculture remains an important sector because it provides employment to some 40.1 percent of the population.*

The crops subsector is expected to recover mildly going forward, contributing to the sectoral growth forecast of 2.1 percent and 0.5 percent in 2019 and 2020, respectively. Crop projections rely not just on the expected above-average rainfall, but also on the assumption of timely winter cropping.

## **DEVELOPING AGRICULTURE**

Current efforts to strengthen the agricultural sector rest on sustainable commercialism and diversification, as well as the development of integrated value chains and marketing infrastructure. Medium-term priorities include increasing cereal crop production and enhancing food and nutrition security. To reduce dependency on imports, the Ministry aims to ensure that agricultural inputs are available on time, thereby enabling farmers to increase production to at least meet local demand for staple food products. Relevant technical advice is provided to farmers so as to increase agricultural production and productivity as well as improve nutrition.

Furthermore, the spotlight is on increasing production of high value crops, livestock and cottage industry products through programmes that support improving the quality of wool and mohair, processing of food crops (food preservation) and livestock products, and those that encourage the commercialisation process. In addition to increasing farming incomes in the face of prevailing climatic condition, development of the value chain for high value products will be essential for sustaining commercialisation. This focuses on strengthening extension services for farmers at all levels as well as improving training modules and developing and promoting agricultural technologies.

The Climate-Smart Agriculture (CSA) Profile launched in Maseru in May 2018 aims to improve the integration of agricultural development and climate responsiveness in order to achieve food security and broader development goals. This will assist in minimising climate change impacts for agricultural development, and will advance CSA in the public agenda, raising awareness of the importance of investing in technologies and practices that simultaneously increase agricultural productivity, adaptation and mitigation.

Livestock diseases and parasites, as well as crop pests such as army worm and diseases like fungi, have an adverse effect on agricultural production. Current control and prevention strategies include continuous surveillance for Foot and Mouth Disease (FMD) and awareness campaigns concerning possible pests and mechanisms for controlling them. These control measures will safeguard public health by tracking animal disease transmission to humans, and protecting consumers from food-related health issues.

#### **Priority actions: 2018/19–2020/21**

Budget priorities in the 2018/19–2020/21 period highlight raising productivity by commercialisation, diversification and climate proofing agriculture. Key strategic actions in this regard comprise:

- Scaling up commercial fruit and vegetable production by 100 hectares per year
- Promoting private investment in developing integrated value-chains of existing agricultural sub-industries such as: vegetables, fruits, potato, poultry, piggery, mushrooms, wool and mohair, among others
- Facilitating the development of water harvesting, irrigation and climate smart (green houses and hydroponics) agricultural infrastructure
- Introducing and/or modernising short and long-term agricultural programmes offered by local training institutions
- Strengthening research capacity in respect of high-value agricultural products through collaboration with regional and international research centres
- Developing infrastructure for national quality assurance and quality control
- Facilitating the development of agricultural marketing intelligence and infrastructure

#### **The World Food Programme's strategic plan**

World Food Programme (WFP) Lesotho has prepared a Transitional Interim Country Strategic Plan (T-ICSP) covering the period January 2018 to June 2019 in alignment with the upcoming National Strategic Development Plan II (NSDP II) and the Lesotho UN Development Assistance Framework (UNDAF), which will be effective as of 2019.

WFP Lesotho's vision follows two complementary directions: continuing longer-term efforts to improve resilience in the most disaster-prone districts; and furthering capacity strengthening and transition to national ownership processes in the areas of social protection, food security analysis, education and nutrition.

This T-ICSP supports the Government in achieving the following strategic outcomes: households in chronically food insecure areas are able to meet their basic food and nutritional requirements throughout the year; school children in food insecure areas have access to nutritious food throughout the year; and targeted populations in prioritised districts have improved nutritional status in line with national targets by 2023.

#### **Smallholder Agricultural Development Programme**

The Smallholder Agricultural Development Programme (SADP) aims to support smallholder farmers in exploiting opportunities and increasing productivity, as well as diversifying into market-oriented agriculture. The programme's initial focus was on four selected districts with high agricultural potential: Botha-Bothe, Leribe, Berea and Mafeteng. Beneficiaries have been provided with grants and technical assistance to boost their productivity and market access, with projects in irrigated vegetable production, wool and mohair, dairy, piggery and poultry hatcheries, among others. The bulk of funding has come from the World Bank and IFAD, with the Lesotho Government responsible for the balance.

In September 2017, the World Bank approved an additional US \$10 million in financing from the International Development Association (IDA). These funds are supporting smallholders in the initial four districts as well as those in Mohale's Hoek and Quthing. Grants are awarded to farmers to test and demonstrate new business initiatives and technological innovations, especially those that focus on climate-smart agriculture. Farmer groups as well as government agencies are also assisted in improving food quality and safety standards.

#### **UN Development Assistance Plan for Lesotho**

Under the ongoing Lesotho United Nations Development Assistance Plan (LUNDAP), priorities are to:

- Accelerate the implementation of the climate change, natural resources management, food security and livelihoods projects
- Develop more project proposals around climate change, natural resources management and protection of biodiversity
- Mainstream climate change into Lesotho's NSDP II
- Initiate the establishment of an integrated agriculture information system
- Facilitate private sector involvement in the provision of services

- Develop national capacity for animal disease surveillance
- Facilitate the development of an investment plan for the Zero Hunger strategy
- Facilitate public expenditure review for the agricultural sector

### **Rangeland management**

The management of Lesotho's rangelands is imperative for supporting livestock development and the production of red meat, hides, wool and mohair. When well-managed, the rangelands also help protect wetlands and recharge water sources. Further, rangelands are vital to the livestock and deciduous fruit value chains.

Government has instructed the ministries of Forestry and Land Reclamation, Agriculture and Food Security, Trade and Industry, Small Business Development, Cooperatives and Marketing and Water to work together with private investors to rehabilitate rangelands and wetlands with the objective of stimulating investments in the above mentioned value chains. This should lead to further investments in commercial red meat production, hides and related products, wool and mohair and related products, chicken broiler and egg production, and fruit tree production.

The successful rehabilitation of rangelands together with enhanced grazing methods will not only improve grazing resources but will also help restore water recharge rates across the country. In addition, the Ministry of Forestry and Land Reclamation is implementing a programme to remove shrubs from rangelands, and Government intends setting up a Hub to help reverse desertification and intrusion of shrub species on rangelands. Irrigation and expansion of orchards is likely to benefit immensely from the successful rehabilitation of foothill and mountain rangelands.

*The rehabilitation of rangelands and widespread introduction of management grazing should stimulate the livestock and deciduous fruit value chains, both of which are priority sectors for Lesotho.*

## **LIVESTOCK FARMING**

The livestock subsector comprises primarily cattle, sheep, goats, pigs and poultry, and makes up around 62 percent of agricultural GDP. Cattle are raised mainly for subsistence, draught power, milk, fuel (dung) and meat, while pigs are reared solely for food. Sheep are kept for meat production and also provide wool and skins, with goats a source of meat as well as mohair and hides. Livestock farming – in particular wool and mohair – has been singled out as one of the country's most important value chains.

The emphasis is on initiatives to build poultry and piggery abattoirs, upgrade the national abattoir to meet international standards, and construct 50 feedlots throughout the country (five per district). Government also supports developments in the wool and mohair industry and the associated value chain. M277.8 million was set aside in the 2018/19 budget to pursue these investments in livestock. A further M100 million was proposed for the Ministry of Development Planning to support feasibility studies and designs.

### **Cattle and pigs**

The latest statistics indicate that the country has 540 133 head of cattle and around 63 415 pigs. Lesotho is self-sufficient in beef production, with output of some 13 500 metric tonnes per year, making it the largest source of animal protein in the country. This is followed by the production of pork at 3 698 tonnes. While around four-fifths of meat sold at butcheries is supplied through informal slaughter, according to legislation, informally slaughtered meat is only for home or subsistence consumption. Apart from a few isolated instances, neither export nor import of beef takes place.

Chinese company Ketchin has proposed a substantial investment with the goal of producing livestock for export to China and Europe. This will include construction of a large slaughterhouse and feedlots around the country. Investment discussions were expected to be concluded in 2018. When completed, the scale of this operation will not only place Lesotho on the international beef market but also foster the development of an industry in hides and stimulate production of other goods in the beef value chain.

The pig production sector is still in its infancy. It is dominated by large-scale farmers (41 percent), while small and medium-scale farmers account for 35 percent and 24 percent respectively. Almost all of the pork supplied to retail and wholesale outlets in Lesotho comes from South Africa through formal marketing channels. There is currently limited capacity in the production value chain and no accredited slaughtering facilities.

This situation looks set to change, with the Lesotho National Development Corporation (LNDC) having sealed a M250 million deal with South African company Number Two Piggeries in August 2018. The project is expected to contribute to the development of production and supply chains and create over 1 000 jobs in the agricultural sector.

### **Wool and mohair**

Wool and mohair are major income earners for Lesotho, with the industry utilising a combined total of some 4 million sheep and goats. Although wool and mohair are also used by local producers of tapestries and knitwear, traditionally a large proportion of the produce has been sent to South Africa for processing and packaging before being sold in international markets such as Asia and Europe. The industry has been growing steadily, and is now worth around M300 million annually.

The main pasturelands are located in the foothills and mountains of the Lesotho highlands, which provide favourable ecological conditions for extensive small stock production. The indigenous Merino sheep is hardy and well adapted to the environment, as are Angora goats. Wool and mohair are produced in the Quthing, Qacha's Nek, Mokhotlong and Thaba-Tseka districts.

According to the recently gazetted Agricultural Marketing (Wool and Mohair Licensing) Regulations of 2018, trade in wool and mohair now requires a licence from the Ministry of Small Business, Cooperatives and Marketing. Licenses will be issued in six business categories: shearing sheds; brokers; wool and mohair testing; trading and auctioning; processing; and export. Furthermore, the holder of an export licence is not permitted to export wool and mohair unless it is prepared, brokered, traded and auctioned in Lesotho.

This move is intended to end the monopoly that has existed in the sector and resulted in Lesotho's failure to derive maximum benefits from its high-quality produce. For the past 44 years, farmers have auctioned their wool and mohair through brokers from the South African Wool and Mohair Buyers' Association at the Port Elizabeth Wool Exchange. The localisation of the wool and mohair marketing directly from Lesotho to international markets will improve the business environment, increase local beneficiation, enhance monitoring and evaluation of transactions, and concentrate banking transactions in Lesotho.

### **Poultry**

The Basotho Poultry Farmers' Association (BAPOFA) acts as the legal regulatory body for the poultry sector, which comprises both commercial activities and village industries. The association attempts to encourage a supportive business environment through advocacy, training and provision of technical assistance in the development and implementation of enabling policies and laws.

The poultry value chain comprises three principal marketing channels: formal live bird markets (higher-income consumers); informal city markets (lower-income consumers); informal rural markets (rural consumers). Only some 20 percent of chicken is marketed through the formal sector. The main challenge is the high cost of inputs, many of which need to be sourced from outside the country. The lack of domestic hatchery services has been a concern for some time, with inadequate hatchery machines limiting growth as most local poultry farmers have to import fertilised eggs and chicks from South Africa, which adds to the cost of the end product.

Phula Poultry Products, one of the first National University of Lesotho (NUL) companies to be developed under the university's innovation hub, aims to cover the entire value chain, from production of fertilised eggs and one day old chicks to selling full grown chickens. The venture has already seen the development of an artificial egg incubator with a hatching rate of over 80 percent compared with conventional egg incubators which have a hatching rate of between 50 and 60 percent. Phula released its first 1 000 chickens in June 2018, and aimed to be producing 4 000 a month by December 2018. There are also plans to open an abattoir for local commercial outlets. The goal is to raise output to 40 000 chickens per month over the next three to four years.

### **Dairy**

Government is working to stimulate the development of the dairy industry, which has been declared a priority sector as regards food security. Dairy farming is a viable business proposition for both rural and peri-urban areas of Lesotho. The Lesotho National Dairy Board (LNDB) is a state-owned enterprise which is charged with serving and protecting the interests of local dairy farmers.

At present, the vast majority of locally consumed dairy products are imported from South Africa. Lesotho spent M210 million on 18.9 million litres of milk and other dairy products in 2017/18, with local farmers producing just 1.3 million litres.

In an effort to become self-sustaining in terms of milk production, the Lesotho Dairy Plant in Maseru has been refurbished with Government funding of M18 million. This will enable all processing and packaging of milk to be done in the country, thus avoiding the lengthy process of exporting milk to South Africa for processing. In addition, the training of dairy farmers in advanced animal care to increase output has been undertaken in Leribe, Botha-Bothe and Berea districts.

*There is a need to diversify dairy production in Lesotho to include products like cheese and yoghurt, particularly in view of their longer shelf-life.*

NUL has developed a yoghurt factory on its Roma campus under the name of Sebatatso Yoghurt, producing mixed berry, strawberry and fruit cocktail flavours. Following a successful incubation period the yogurt has become a favourite local brand, encouraging Sebatatso to increase its product line to include fresh and sour milk.

A M5.5 million commercial dairy facility funded by Letšeng Diamonds and consisting of a milking parlour, milk processing room and offices, was handed over to the Liphamola Dairy Farmers Association (LDFA) in February 2018. The dairy farm, which is based in Mokhotlong, now produces approximately 160 to 200 litres per day of pasteurised and packaged fresh milk for the local community and mines, with plans to later expand into other districts.

### **Fisheries**

Aquaculture plays an important role in the development of the fisheries industry, where potential has increased thanks to the dam reservoirs built as part of the ongoing Lesotho Highlands Water Project. Lesotho has two distinct fish farming zones; namely:

- The Lowlands, where temperatures are relatively high.
- The Highlands, characterised by cold climatic conditions, which are suitable for the production of high-quality trout requiring clean, cold, well-oxygenated and fast-moving water at high altitude.

Commercial floating cage aquaculture for large rainbow trout (*Oncorhynchus Mykiss*), marketed as salmon trout, is undertaken at Katse Dam, a site known for its deep, pristine waters which create a highly favourable environment for growing premium trout. Steps have been taken to involve the surrounding communities so that they also benefit from aquaculture through jobs, training and skills development.

Lesotho's trout has become a favourite both locally and overseas (the Japanese market in particular), and it is expected that more than 3 000 tonnes per annum will be sold internationally in 2018. There are good prospects for expansion and additional enterprises of this nature in the Metolong Dam.

One Thousand & One Voices®, a US private capital fund, has invested in the SanLei trout production and processing facility located on the shores of the Katse Dam. SanLei produces sushi quality trout, primarily for consumption in Japan and South Africa, and is the largest facility of its kind in Africa.

According to the LNDC, there are also opportunities for the farming of tilapia fish. Other potential investment areas comprise processing and packaging operations, including filleting, trimming and smoking; the extraction of Omega oils; facilities for genetic material production (ova/eggs and fingerlings); and fish food production.

## ARABLE FARMING

Just over 10 percent of Lesotho's total land area is estimated to be arable, and only a small percentage of this is presently used for irrigated crop production. Annual precipitation is highly variable, both temporally and spatially, ranging from 500 millimetre per year to 1 200 millimetres per year, most of which is received during the summer months between October and March.

The main crops are maize, sorghum and wheat, which occupy, respectively, about 60 percent, 20 percent and 10 percent of agricultural land. Beans and peas are also grown. Summer season crops are those planted between 1 August and 31 January, and cover maize, sorghum, wheat, beans and peas, with wheat mostly grown in the mountain areas. Winter season crops are planted between 1 February and 31 July, and comprise both wheat and peas.

### **Horticulture**

The World Bank's Second Private Sector Competitiveness and Economic Diversification Project (PSCEDP II) for Lesotho has spurred growth in the horticulture sector, particularly the deciduous fruit market. Three pilot projects were implemented on farms in Thuathe, Qoqolosing and Mahobong between 2007 and 2013 to evaluate the feasibility of growing fruit and identify promising varieties and afro-climate locations, based on factors such as altitude, soils and access to water. Maps were drawn up to indicate areas where, for instance, the climate was favourable but additional infrastructure was required.

The pilot study showed that a large portion of Lesotho was suitable for successful deciduous fruit production: from Botha-Bothe, cutting across the western lowlands and running all the way to the southern foothills near Mphaki. The research also explored the potential for Lesotho to engage in the commercial growing of horticultural produce which could be harvested substantially earlier than the corresponding produce in South Africa, allowing for market infiltration two to three weeks before her neighbour.

The project has subsequently been scaled-up to several farms over an area of 35 hectares and has achieved Global GAP (Good Agricultural Practices) certification as well as attracting interest from commercial investors and international distributors. The commercial production of apples, plums, peaches and apricots has been established for the local and South African markets.

In 2018/19, Government committed to supporting the expansion of orchards and the development of a deciduous fruit industry as part of the strategy to create additional jobs. The ministries of Forestry and Land Reclamation, Trade and Industry, Small Business and Cooperatives, Agriculture and Food Security are working with banks, insurance companies, buyers and investors in this regard. Their efforts build on the successful operation of the Likhothola Orchard in Mahobong, Leribe. Furthermore, Government has been working to entice Dutoit Agri (Pty) Ltd and other large fruit growers to invest in Lesotho's fruit industry.

There is also a drive to produce high value cash produce such as herbs, spices and aromatic plants for export to the United States under AGOA, and Europe under Everything but Arms. Government, through the ministries of Forestry and Land Reclamation, Trade and Industry, Small Business and Cooperatives, and Agriculture and Food Security, is working with farmers and contract farming investors during the 2018/19 fiscal year to explore the feasibility of this idea. Consideration is also being given to scaling up honey production and commercialising organic peaches and dried fruit.