



MINISTRY OF AGRICULTURE STRATEGIC PLAN (2018- 2023)

Administrator

[COMPANY NAME] [Company address]



1. EXECUTIVE SUMMARY

The Kingdom of Eswatini is a developing country with a potential to transition and become a prosperous country if prudent policies can be advanced to support key developmental programmes. In terms of development, the core challenges include high prevalence of poverty rates ranging at 59%, high unemployment rates of 28% of the labour force, chronic food insecurity due to climate variability. Given the natural resource endowment which is land and water and the inclusive nature of agricultural development; agriculture is the logical priority sector that can sustainable change the economic situation for the better.

The Agriculture Sector Strategy had been formulated to drive agriculture development in the country for the next 5 years (2018 -2023). It has been formulated based on the National Development Strategy (NDS) and other national strategies aimed at reviving the economy of Eswatini and improving the overall welfare of Eswatini. The premise of the plan is also hinged on the sector policies and informed by the 2014 Malabo Declaration on accelerated agricultural growth and transformation for shared prosperity and improved livelihoods; where the key targets include eliminating hunger, halving poverty and tripling intra-Africa trade among others.

The vision of the strategy is to optimize utilization of agricultural resources to create wealth for Eswatini where the goals are to increase contribution of the sector to economic development, reduce poverty and increase food security. These will be achieved through various subsector strategies aimed at increasing production and productivity for both crops and livestock products. The production will be sustained through activation of policies and legislation that will provide an enabling environment for sustainable operation of agricultural enterprises. The implementation approach will include a strong mobilization of the private sector to strengthen the prioritized commodity value chains through setting up commercial anchor-farms, providing viable agricultural finance products and providing markets for smallholder producers.

Like all strategies, the success of this agriculture strategy will depend on the “buy in” by all stakeholders and concerted effort to provide adequate resources for rolling out the proposed strategic interventions. During implementation there is need for regular monitoring, re-planning and adjustment in accordance with new evidence and knowledge, thus the strategy should not be viewed as a static document.

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2. VISION

To optimize utilization of agricultural resources to create wealth for Emaswati.

3. MISSION

To transform agriculture into a modernized, sustainable, diversified production and export oriented sector that contributes to improved food security, export revenue generation, job creation and overall economic development.

4. PRINCIPLES AND VALUES

The implementation of this charter will be guided by the following principles and values:

- a) **Service Excellency:** We shall be committed to adhering to the highest standards of diligence when executing our duties and constantly search for the best ways to meet the requirements of our stakeholders. We shall adhere to the code of conduct as illustrated in the Public Service Bill and further adhere to ethics and high degree of competence.
- b) **Innovative:** We shall endeavor to improve service delivery through the application of better services, processes, technologies and novel ideas.
- c) **Transparency:** We shall be as open and accountable as possible about all the decisions and actions taken in a uniform, impartial fair and reasonable manner. We shall also avail non-confidential information on the operations and activities of MoA to all stakeholders.
- d) **Integrity:** We shall be honest, truthful and driven by strong values and moral principles in conducting all Ministry and public affairs. We shall ensure that proper rules are in place, and that they are aligned with the principles and policies of Government, and are strictly followed and enforced.
- e) **Fairness:** We shall treat our clients equally without favoritism or discrimination.
- f) **Loyalty:** We shall be committed to the policies and programmes of the Government of the Kingdom of Swaziland.
- g) **Responsiveness:** We shall expeditiously respond to our stakeholders by providing timely information and services at any particular time period, given available resources.

5. BEHAVIOURS

- a) Accountability
- b) Collaborative
- c) Punctuality
- d) Continuous learning
- e) Performance management
- f) Team work
- g) Etiquette

6. INSTITUTIONAL, POLICY AND LEGISLETIVE FRAMEWORK

a) **Organizational Structure**

The Ministry consists of the following departments;

- Administration (Support services)
- Department of Agricultural Planning and Analysis
- Department of Veterinary and Livestock Services;
- Department of Agriculture and Extension
- Department of Land Use Planning and Development
- Department of Agricultural Research and Specialist Services

Within these Departments there are a number of support divisions and sections with specific functions to facilitate the efficient and effective implementation of developmental programmes and projects including regulatory functions.

b) **Public Enterprises/ Parastatals**

The Ministry has five (5) Public Enterprises/ Parastatals under its portfolio. They are as follows:

- National Agricultural Marketing Board
- National Maize Corporation
- Swaziland Water and Agricultural Development Enterprise
- Swaziland Dairy Board
- Swaziland Cotton Board

c) **The Legislative and Policy Environment**

Legislation and Policy are a prerogative of the government, therefore the Ministry of Agriculture is responsible for ensuring adherence to all legislation, development and the implementation of policies under its portfolio and incognizant of other statutory legislation in the country. The sector regulatory and policy framework essentially, guide the day-to-day operations of the ministry as it enforce controls, initiate and support agriculture development. The key stakeholders who are affected and or benefit from

these policies include primary producers of agricultural products, traders, markets and consumers of agricultural products.

The key legislations and policies are as enumerated below.

- [Operational Legislation in Agriculture](#)

The following are some of the legislations that are operational and are being administered by the Ministry of Agriculture mainly for regulatory purposes:

- **Private forests Act 1951:** It provides better regulation and protection of private forests in Swaziland
- **Grass burning Act 1955:** To consolidate the law relating to grass burning and grass fires.
- **Cane Growers Act 12 of 1967:** To incorporate the Swaziland Cane Growers' Association and to empower the Minister to impose a levy on Growers of sugar cane for the purposes of the association.
- **The Cotton Act 1967:** To provide constitution and functions of the Cotton Board.
- **Dairy Act 1968:** For the control and improvement of the dairy industry and its products.
- **The NAMBoard Act 1985:** Establish the National Agricultural Marketing Board.
- **Seeds and Plants Varieties Act 2000:** It provides control, sale, importation and exportation of seeds.
- **Cattle Routes Act 1918:** Makes provision for the access of cattle to public dipping tanks.
- **The Registration of Pedigree Livestock Act, 1921:** To confer certain rights on the South African Stud Book Association in Swaziland, and to make provision for the protection of such rights.
- **The Great Stock Branding Act 1937:** It provides registration of the brands imprinted on great stock. It was repealed by the Livestock Identification Act of 13/2001.
- **The Cattle Dipping Charges Act 1950:** Consolidate and amend the laws relating to the imposition and recovery of charges for the dipping of cattle of persons domiciled in Swaziland, at dips which are supplied with dipping material at the cost of the Government.
- **The Registration of Dogs Act 1954:** To amend and consolidate the law relating to the registration and control of dogs. It is operational, however it is administered under the Ministry of Housing and Urban Development.
- **The Prevention of cruelty to Animals Act 1962:** For the prevention of cruelty to animals.
- **The Animal Diseases Act 1965:** Makes new provision for the prevention of disease amongst animals.
- **The Livestock Identification Act 2001:** For registration of livestock identification marks and the compulsory marking of livestock with registered livestock identification.
- **Veterinary Public Health Act 2013:** Makes provision for ensuring high level of consumer protection with regard to food safety by facilitating advanced methods of primary production in the food chain of food of animal origin.

- **The Game Control Act 1947:** To make provision for the control of the numbers of games in the country.
- **The Veterinary Surgeons Act 1997:** To establish a Veterinary Council of Swaziland and to provide for the registration and control of Veterinary surgeons.
- **The Swaziland National Research Authority Act, 2018**
Objective: To provide for the establishment and functions of the Swaziland National Agricultural Research
- **Pesticides Management Act, 2017**
 - *Objective:* To regulate the importation, manufacture, exportation, distribution, sale and use of pesticides in order to enable people to obtain the benefits with minimal adverse effects on human, animals and the environment.

- **Legislations Undergoing Development**

- **The Plant Health Protection Bill, 2015**
 - *Objective:* To provide for the prevention of the introduction and spread of pests and to facilitate trade in plants and plant products in accordance with the provisions of the International Plant Protection Convention.
- **The Swazi Nation Land Commercialization Bill 2015**
 - *Objective:* To provide for the designation, demarcation and allocation of Swazi Nation Land for agri-business, registration of land use-rights, establishment of Chiefdom land allocation Committee and the Appeals Tribunal.
- **The Livestock Identification and Traceability Regulations, 2015**
 - *Objective:* To give effect to The Livestock Identification Act 2001
- **The Swaziland Dairy Regulations, 2016**
 - *Objective:* To give effect to the Dairy Act no. 28 of 1968
- **The Fisheries and Aquaculture Bill, 2015**
 - *Objective:* To Regulate the fisheries industry

d) **Policies in the Agriculture Sector**

The sector policies guide the Ministry of Agriculture to deliver in accordance with its mandate within its sub-sectors and they are linked to higher policy levels in a well-structured framework.

Above the sector policies are the National Policies that is, the National Development Strategy (NDS) and the Poverty Reduction Strategy and Action Plan (PRSAP). These outline national strategies and aspirations to provide a guide to the sector on its desired deliverables.

The national policies are in line with International, Continental and Regional policy documents and declarations such as the Sustainable Development Goals of the United Nations, the Comprehensive Africa Agriculture Development Programme (CAADP) of the African Union (AU) and the Regional Indicative Strategic Development Programme (RISDP) of the Southern Africa Development Community (SADC). The country has also aligned itself with the SADC Regional Agriculture Policy (SADC-RAP).

The CAADP is of particular interest in this Strategic Plan since it operationalize the Maputo and Malabo Declarations as endorsed by the African Union Heads of States and Governments in 2003 and 2014 respectively. Under this framework there are seven (7) commitments that were made to ensure that agriculture drive the continents shared prosperity and transformation and accelerated growth. The commitments are translated into thematic areas as follows:

- i. Recommitment to the CAADP principles and process
- ii. Enhancing investment finance in agriculture
- iii. Ending hunger by 2025
- iv. Halving poverty by 2025 through inclusive agriculture growth
- v. Boosting intra-Africa trade in agriculture commodities and services
- vi. Enhancing resilience of livelihoods and production systems from climate variability risks
- vii. Strengthening mutual accountability to actions and results

Below is a list of policies within the agriculture portfolio/sector:

- Comprehensive Agriculture Sector Policy
- The Food Security Policy
- Livestock Development Policy
- Irrigation Policy
- Rural Resettlement Policy;
- Fisheries Policy; and
- National Agricultural Research Policy

7. AGRICULTURE SECTOR OVERVIEW

Agriculture is defined as the mainstay of the Swaziland economy although its contribution to GDP has declined over the years. Agriculture and forestry accounted for 8.6% of Swaziland GDP in 2017 (MEPD 2018). According to the Central Bank of Swaziland Report, 2016 the agricultural sector recorded a negative growth of -11.2%. This negative growth was as a result of reduced output due to severe drought where overall production output declined by 30 to 40%. The performance of the sector is mainly influenced by value of sugar exports which account for over 70% of the value of agricultural production. The sector is also supporting agro-based industries and manufacturing which contributes about 27% of Swaziland GDP. Export of agricultural commodities include sugar, wood products, Citrus Fruits, canned fruits, meat and meat products and textiles. These sectors are the main sources of foreign earnings. However there are future uncertainties as follows:

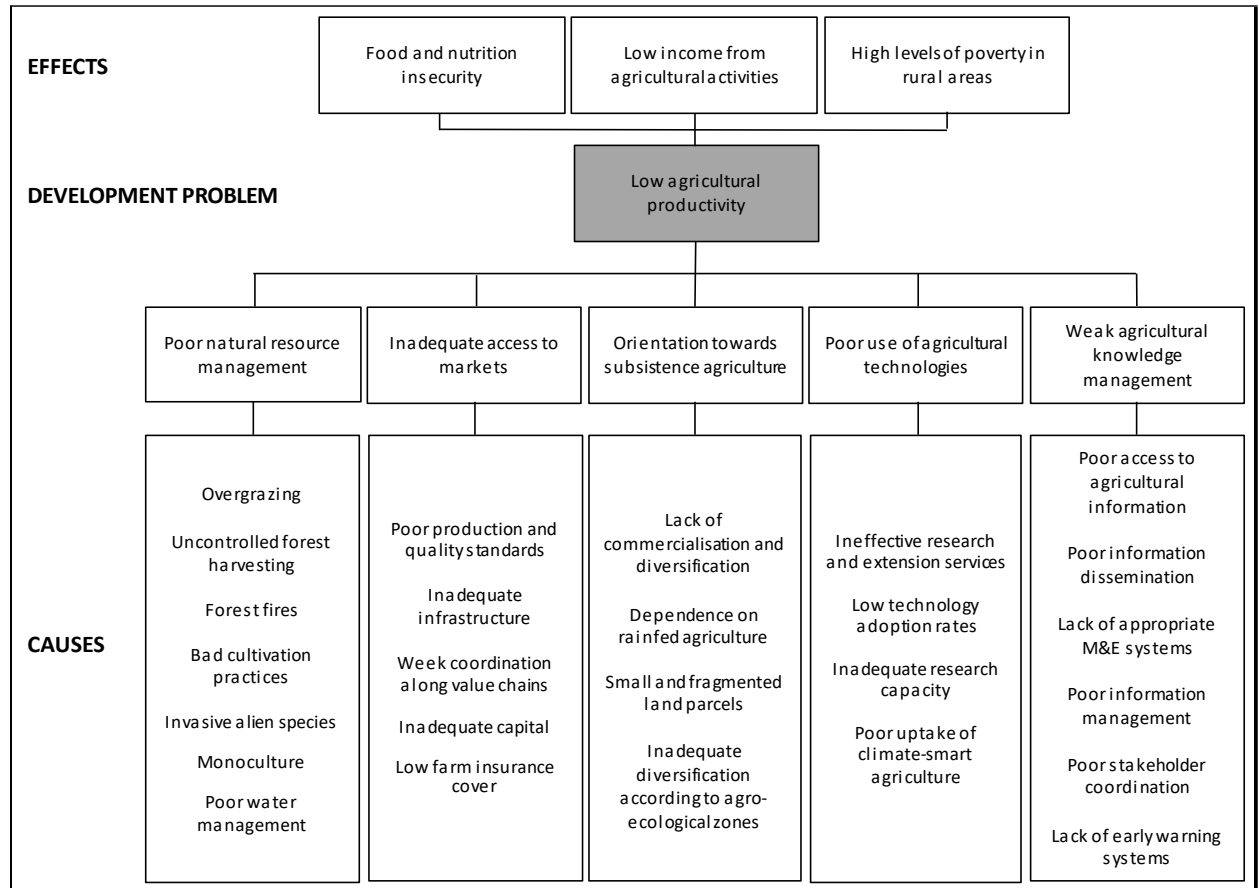
- **Sugar:** The liberalization of the European Union (EU) sugar market and falling global sugar prices are likely to negatively affect the Swaziland sugar industry. This is likely to negatively affect

the sector's contribution to the country's GDP significantly since sugar has the principal share on the sector's output.

- **Fruit canning:** The plantation production of fruit such as pineapple is facing competition from sugar production expansion especially in the Malkerns valley where there is also increasing competition from human settlement. The fruit canning industry had found it difficult to put more land under pineapple production, but recent reports indicate that
- **Beef:** exports volume continues to increase and the country was able to meet its quota for the Norway market in past 5 years, until October 2017 where the country suspended beef exports due to foot and mouth disease control uncertainty. There is need to always increase vigilance on trans-boundary diseases to comply with the standards required by the EU markets. Challenges remain on improving the livestock management practices to increase productivity and value addition on livestock products which is also weak.
- **Smallholder producers:** Most of the smallholder producers are found in rural areas which are on Swazi Nation Land (SNL) where agricultural land is under serious threat due to sprawling uncontrolled human settlements development resulting in fragmentation of agricultural land into small land holdings which are becoming non-viable for entrepreneurship production. Range lands are suffering the "tragedy of the commons" due to incomplete property rights and free access to all.
- **Unpredictable weather** patterns and climate change remain major threats to agricultural productivity. Issues of water harvesting and efficient water use are key for agricultural development.

8. PROBLEM TREE

The figure below summarizes the cause and effects of the developmental problem in the agriculture sector



The country is attempting however to increase productivity of the sugar industry and to strengthen its competitiveness. There are also endeavors to increase agricultural productivity of the major food crops and livestock through adoption of climate smart agricultural practices. These endeavors are mainly driven by the MoA and its parastatals to provide an enabling environment for the private sector and smallholder farmers to invest in agricultural enterprises as producers, service and input providers; including marketing of produce.

9. MINISTRY OF AGRICULTURE STRATEGY

a) Overall goals and objectives

- i. Increase the contribution of agriculture to economic development,
- ii. Reduce rural poverty, and
- iii. Improve food and nutrition security

b) Specific objectives

The all-encompassing objective of the sector is to increase agriculture production output, increase marketing and value addition of local agricultural products and improve food security and nutrition. More specifically the objectives are as follows:

- To increase domestic production and productivity of both agriculture and livestock products including fisheries
- To improve commodity value chains for efficient marketing, development of export capacities and reduction of post-harvest losses
- To enhance food security and nutrition by improving home management and imparting income generation skills for targeted households
- To promote the plant and animal health status of the country to meet local and international food safety standards.
- To rationalize utilization of land resources and improving on water harvesting for sustainable agricultural development.
- To promote fisheries production and commercialization.

In order to achieve the above objectives, it is a necessary condition that the following strategic elements are mainstreamed across the implementation plans:

- Improved knowledge management and learning anchored in strong monitoring and evaluation of programmes
- Increase investment in agricultural services and infrastructure development including marketing, soil conservation, water harvesting and other associated facilities
- Strengthening Public Private Sector Partnerships
- Embrace modern technologies to improve productivity and resilience to climate variability

10. STRATEGIC SUBSECTOR PLANS

A. LIVESTOCK SUBSECTOR

Livestock is a key feature for agriculture production in Swaziland where cattle, poultry and dairy are the major commodities being produced. The contribution of livestock to the agriculture GDP on average is 51% with an annual average negative trade balance of E263.8 Million, (SNAIP, 2015). Smallholder farmers on Swazi Nation Land (SNL) are a majority of passive actors in the livestock value chains and have a potential to increase productivity and marketing of their produce to increase overall contribution to the sector's total output.

The development of the livestock sector generally requires strengthening of the value chains, especially if smallholder farmers are expected to fulfil their production potential. This requires better institutional arrangement for employment of production resources, improvement of animal husbandry, provision of animal health services, and improved access to local and international markets, stimulated by increased private sector investment.

The livestock sector development is led by the Ministry of Agriculture's Department of Veterinary Services and Livestock Services. The department leads policy development and regulate the industry while providing services for animal health, livestock production extension and range management and management of government Ranches (Sisa , breeding).

I. Priority livestock value chains

- **Beef cattle** is key stock produced for local and international markets. More than 80% of the stock is sourced from smallholder farmers on SNL. Smallholder farmer livestock production is based on open communal land grazing where each farmer/ household looks after their stock with no limit on the number of units that may be kept. During winter season the animals supplement feeding through foraging on cultivation land where maize stalks and fenced off grasses sustain the animals throughout the dry winter season. The Department of Livestock provide support services for veterinary services with a strong monitoring system anchored on the dipping programme and livestock movement control and traceability system. In an effort to improve production, the department provides extension services, provide access to improved breeding bulls, provide access to Sisa and fattening ranches, and promote feed and fodder production and utilization for supplementary feeding. Marketing is characterized by low off take rates at 7%, as most cattle owners only sell as and

when there is a need. The Swaziland Meat Industries is one of the key beef markets in the country and its food safety standards are of international repute; coupled with the national veterinary standards, the SMI had been able to access EU beef markets without interruption since 2010 until September 2017 where beef exports were suspended due to imminent threat of possible Foot and Mouth Disease incidences.

The proposed strategies for continuous improvement of the performance of the beef industry are as follows:

- a. *Improvement of institutional arrangement for sustainable rangeland management.*** *This should be driven by targeted investments and capacity support at community level to provide incentives and stimulate sustainable commercial livestock production.*
 - i. Improve range/ pasture conditions in selected chiefdoms with high potential for beef production*
 - ii. Support formation of ranch schemes and develop regulatory framework to guide range management*
 - iii. Support communities in mapping and restoration of degraded range lands*
 - iv. Promote modern and sustainable range management practices*
- b. *Strengthen beef cattle breeding and improvement programme***
 - i. Develop an animal breeding policy and regulatory framework*
 - ii. Take stock and create a database on animal genetic resources in the country to inform research and development , including gene preservation*
 - iii. Review the “bull loan” government programme and improve its effectiveness*
 - iv. Support establishment of farmer/private sector breeders associations and establish partnerships networks locally and internationally*
- c. *Upscale feed and fodder production and utilization***
 - i. Establish safety and quality standards and regulatory framework for livestock feed and fodder products*
 - ii. Conduct regular research on nutritional value of feed and fodder, technologies and additives for improving palatability*
 - iii. Promote local feed and fodder production, utilization and marketing*
 - iv. Promote utilization of waste and other agricultural bi-products for feed formulation and utilization*

- v. *Support infrastructure development and access to equipment for feed and fodder research including quality assurance*
- vi. *Conduct research on nutritionally superior grass and fodder tree species that maybe introduced in various pastures*
- vii.

d. *Improvement of marketing in the beef cattle value chain*

- i. *Facilitate improvement of the beef value chain through:*
 - 1. *Capacity building and coordination of producers for commercialized beef cattle production*
 - 2. *Engage and support linkages of private sector meat processors, producers, feed industries and financial institutions to establish a viable beef production model that will foster specialization and associated incentives*
 - 3. *Explore and exploit access to lucrative regional beef markets to improve intra-Africa trade*
 - 4. *Facilitate establishment of the Meat Board /Commission which will regulate the meat industry*
 - 5. *Improve access to livestock marketing information and facilitate creation of livestock trader's platform to share knowledge for improvement of the industry*

e. *Strengthen animal health and veterinary support services to combat animal diseases and improve food safety standards*

- i. *Fast-track approval of the regulations of the VPH Act and enforce its implementation to ensure compliance to food safety standards*
- ii. *Promote "one health" approach to effectively partner with stakeholders in the control and or elimination of zoonotic diseases*
- iii. *Develop and promote early warning system and network controlling epidemic and endemic animal diseases, and facilitate establishment of an emergency fund for rapid control*
- iv. *Strengthen the outreach and surveillance of veterinary services to smallholder farmers in sync with the intensification of beef production*
- v. *Provide investment for infrastructure improvement of veterinary and food safety laboratories, cordon fences*

and communication to ensure continued efficient and effective veterinary services

2. **Goat production and marketing** in the Kingdom of Eswatini is mostly done under subsistence mode. The current population is estimated at 501 496 Units. The management style is similar to that of beef cattle where each household has its own stock reared through browsing on communal grazing land. Government provide subsidized dipping services and extension support. However, due to lack of dedicated support and absence of efficient markets, the goat production has remained far below its potential in the country.

The key production challenges include uncontrolled breeding, poor feeding, poor housing and the relatively small size of the local breed. Overall the goat meat industry is currently underdeveloped with no dedicated goat meat processors or traders resulting to high information asymmetry for the goat market.

Goat production and marketing is an untapped opportunity to grow the output of the agriculture sector and improving livelihood of the producers. The proposed strategies are as follows:

- i. Promote commercialization approaches for goat meat production through dedicated extension services for targeted farmers*
 - ii. Explore and promote suitable goat production model and target actors along the whole value chain(breeders, growers, health and production extension, traders, input suppliers, traders, processors, financiers)*
 - iii. Encourage and support establishment of goat meat processors and traders and support their linkages with producers*
 - iv. Establish a goat breeding programme to guide genetic resource improvement while ensuring preservation of the local goat gene pool*
 - v. Conduct research on goat nutrition and feeding options to improve growth and or production*
3. **Pig and pork production** is one of the fast establishing industry in the country which is popular among enterprising smallholder farmers. The current recorded production value is E35 839 115.00. The government is currently providing breeding stock at subsidized costs through its Mpisi Pig breeding station. Producers are supported through training programmes on production and marketing of pork. In order to improve efficiency, the department of livestock has introduced artificial insemination technology which will help improve productivity. On the

marketing aspects, there are a number of private butcheries and eateries who create a significant demand for pork while demand for processed products are mainly met through imports.

The country still needs to build its competitiveness in the pork industry to meet the local demand and export to regional and international markets. Some of the challenges include the limited producers of breeding stock hence heavy reliance on government supply, high feed costs which compromise viability of the pig production enterprise, high number of uncoordinated small producers nor vertically linked to markets, inadequate adherence to public health standards in pig and pork production, lack of a national traceability system for pork production, limited access to investment finance for pig production.

In an effort to optimize pig and pork production in the country, there is need to build on the current programme to improve competitiveness of pig and pork production. The following strategies need to be rolled out:

- i. Target potential pig producers for capacity building and provision of support services to enhance their production*
- ii. Engage the private sector to explore the potential of investment in production of breeding stock and upscale artificial insemination*
- iii. Promote and facilitate the value chain approach in pig production to improve efficiencies in the whole industry*
- iv. Introduce a national traceability system for pigs to improve local pork credibility and disease control*
- v. Strengthen environmental and public health control measures in pig and pork production*
- vi. Provide incentives for youth and gender involvement in the pig and pork value chain*

- 4. Poultry production** is characterized by existence of large scale broiler and table eggs producers. With these large scale players, the country is able to meet its demand for these products and table eggs are further exported. Smallholder producers in the broiler and egg industry have been systematically crowded out due to economies of scale, inadequate bargaining power with input and produce markets. The ministry continue to provide production extension and veterinary services to the industry. The industry is still dependent on importation of production stock such as fertilized eggs and day old chicks. It is thus vulnerable to series of diseases out breaks which results in local supply shortages due to importation bans to prevent infection of local stock and uphold public safety. In an endeavor to improve food security and livelihoods the ministry has introduced a programme to modernize **indigenous chicken production**. Indigenous chicken are predominately kept for subsistence purposes in all

rural households. Their upkeep is characterized by poor feeding, poor housing, prone to predators and high mortality of the chicks. The ministry provides training on modern indigenous chicken production and facilitates access to markets where flea markets are organized in urban areas and linkages are created for producers to supply a number of restaurants. Some of the challenges include inconsistency in supply of produce, inadequate specialization along the value chain, lack of common production standards.

In strengthening the poultry value chains there is need to implement the following strategies:

- i. Regulate marketing of poultry products to create market space for smallholder producers
- ii. Support local production of input stock for day old chicks and fertile eggs
- iii. Explore export markets and facilitate international trade for poultry products
- iv. Conduct research for indigenous chicken production and improvement of the genetic resources
- v. Promote specialization in the indigenous chicken value chain and strengthen linkages
- vi. Capacitate producers in commercialization of indigenous chicken production
- vii. Provide investment support for improved housing and production technologies, establishment of processing and marketing facilities

5. **Fisheries production** is mainly in the form of aquaculture production in the Kingdom of Eswatini due to the land locked nature of the country's location and no existence of large water bodies. However, within the existing river basins and dams fishing had long been practiced and continues to date. The ministry regulate fishing and protect over exploitation of fisheries resources. In order to encourage fish consumption and availability, the Ministry promotes aquaculture production for both food and nutrition security purposes and for marketing purposes to improve household's livelihoods. The Ministry has long embarked on the construction of a fish hatchery aimed at bolstering production of fish fingerlings to supply fish farmers. The ministry also promotes aquaculture production through its extension services where farmers are encouraged to produce in small ponds.

The fish industry is still at infant stage where producers are isolated with no dedicated input and produce markets. The aquaculture promotion programme is limited to training activities with no further support for construction of ponds and supply or sourcing of inputs and or facilitation

of market linkages. Some of the proposed strategies to upscale aquaculture production are as follows:

- i. Fast-track completion of the fish hatchery and explore “public private partnership” for viable operation and production of fingerlings
- ii. Build capacity to improve service delivery to the fisheries production and development
- iii. Provide comprehensive and coordinated support for smallholder farmers targeted for aquaculture production
- iv. Explore opportunities and incentives for private sector investment in aquaculture production to spearhead growth of the industry
- v. Conduct research on fish species production and suitability to the different climatic regions of the country
- vi. Take stock and strengthen conservation measures for fresh water fish in the country’s river system
- vii. Engage the Republic of Mozambique to explore marine fishing

6. **Bee and honey production** is one of the emerging agricultural enterprises where some private players are now engaged in production, processing and marketing of honey. The production of honey is done through harnessing of honey bees into beehives where they then use the natural method of honey production through collecting pollen from various plant species. Smallholder farmers (youth and gender groups) are trained in bee keeping for marketing and household consumption. There is a huge market for locally produced honey but there is need to meet the market standards, especially for export purposes. Most smallholder farmers produce for selling in the local informal markets with limited branding and growth path towards industrial scales.

Some of the proposed strategies to grow the industry are as follows:

- i. Developing expertise in apiculture across the value chain
- ii. Provide targeted capacity building and extension services to honey producers
- iii. Improve adherence to food safety standards including irradiation treatment
- iv. Promote coordination of producers for aggregation purposes

7. **Dairy production and marketing** is a valuable industry which has a huge potential towards enabling inclusive economic growth in the country. Key stakeholders include the Swaziland Dairy Board which plays both a developmental and regulatory function in the industry. Parmalat Swaziland is currently the largest processor of dairy products in the country with few small scale processors. The industry is characterized by

many smallholder producers whose production is dominated by the few large scale producers. In terms of production, the country is a net importer of dairy products including raw milk. Local dairy processing is very limited, resulting in missed opportunity for adding value to our local produce and satisfying the local demand for a variety of dairy commodities.

Key challenges of the industry include poor availability of dairy animals in hence large reliance on importation of production stock, inadequate supply of animal feed especially during the dry season, poor competitiveness of smallholder producers, poor access to financing due to unfavorable terms of credit, inefficient veterinary services and the overall uncoordinated value chain in terms of producers, service providers and markets.

Key strategies to improve production in the dairy industry are as follows:

- i. Promote establishment of dairy processing firms / enterprises to catalyze expansion of local production*
- ii. Provide targeted support to increase production by local smallholder producers including training and provision of start-up packages*
- iii. Promote organized marketing of dairy products through establishment of aggregation units at strategic locations*
- iv. Promote processing and value addition for production of various dairy products for local and export markets*
- v. Promote local production of dairy feed and marketing*
- vi. Promote modernization of dairy production to improve efficiency and sanitary standards*
- vii. Improve veterinary outreach for dairy farms*
- viii. Facilitate breeding of dairy animals in the country to improve access to production stock*
- ix. Conduct research on optimum management strategies to improve dairy production*

B) Crops and horticulture

Cultivated agriculture is by far the largest contributor to the agriculture sector GDP and by extension to the country's economic growth. Major crops include sugar cane production, Maize production, pineapples production, citrus fruits, banana production, conventional and baby vegetables and other fruits. To a lesser extent, legumes production is mainly practiced for household consumption and similar with tubers, that is, mainly sweet potatoes and potatoes. Sugar cane production and its downstream processing is the major export crop termed "Swazi Gold" due to its lucrative contribution to agriculture GDP which stands at 80-85% of the total output. Other major commercial products are pineapples, citrus fruits and bananas. The country's staple crops remain dominant

agricultural activity in the rural areas of the Kingdom of Eswatini. It is grown as a mono-crop and seldom mixed cropping with legumes and or tuber crops for food security purposes.

The Ministry of Agriculture is the lead policy and regulatory entity mandated to spearhead the crop and horticulture subsector through its well established Department of Agriculture Promotion and Extension Services. In order to improve marketing of these commodities, the Ministry established a number of parastatals to fill in the existing marketing gap in the market. These include the National Agriculture Marketing Board (NAMBoard), National Maize Cooperation (NMC), Swaziland Cotton Board (SCB), Swaziland Water and Agricultural Enterprise (SWADE). While the establishment of these entities remain a noble feat, there is need to continuously review their relevance to ease space for the private engagement in these value chains and ensure that government actions remain more on creating an enabling environment in-terms of regulation, policy development and investment in services and goods of public interest.

The sugar cane value chain remains a well-established model with the players having strong governing institutions established under the “Sugar Cane Act” where the apex body is the Swaziland Sugar Association with its members being the Sugar Cane Millers and the Sugar Cane Growers Association. Further, there are a plethora of actors in this subsector including the Swaziland National Agriculture Union which the apex farmers organization in the country. Others are Non-governmental organization with varying interests and the private sector who are composed of practitioners and service providers in-terms of input and output markets.

The overriding challenges in the development of the Crops and Horticulture sub sector range from institutional, technology, capacity to outright productivity issues.

The institutional issues are manifest in the distinct land tenure system under which agriculture is practiced. Smallholder farmers happen to be mostly on SNL where they mainly engage in maize, legumes and fruit production on small land parcels with the average holdings reducing to 0.5ha per household. The ownership of the land on SNL does not attract private investment hence there is low development of production infrastructure and very minimal land restoration measures to ensure continued production in the long-term. The modus operandi does not encourage rational utilization of the land and some cultivation areas lie idle (whereas the owners of the resource are in dire economic need) while there is evident potential for such lands to be put into productive use and generate substantive income for potential producers and statutory owners. In this case there is need to put in place regulatory mechanism to make such land available for agriculture use while guarding against disadvantaging substantive owners. Such mechanism can help unlock the potential of SNL which is currently being dimmed by the continued fragmentation into smaller uneconomical units for agriculture production.

Other challenging institutional issues include the slow progress towards establishing an effective and efficient agriculture research and extension system. The law to establish

Swaziland National Agriculture Research Authority remains a Bill with no clear budgetary provision for the transition into an autonomous entity. This delay have underlying costs in-terms of lost time and momentum to rebuild the institution and make its positive impact felt in the farming fraternity. On the other hand the National Agriculture Extension Policy also remain a draft whereas the is growing need to vigorously implement its ethos especial the move to plural extension services given the growing number of service providers and the need for government to play a regulatory role.

The production and marketing of staple crops, vegetables and horticulture is to a large extent not regulated and is characterized by a large number of small uncoordinated producers in the value chain. This results in the typical economic problem where there are many sellers and buyers of identical products, yet the assumptions of a pure market do not exist, given the active role of government entities, sunk costs and seasonal nature of agriculture production, subsidies and imports of same products from other countries which all end up distorting incentives for producers. In order to improve the production of these commodities there is need to strengthen the value chains for each priority commodity and improve the vertical and horizontal coordination within the chain to improve information flow, support services, value addition, capacity building and regulation.

Issues of inadequate capacity among producers results in below average productivity while at national level there is in adequate capacity for processing and value addition resulting in below par production in the food industry. The production yields for most of the commodities is below average potential across the board. This mainly due to declining soil fertility and low use of inputs, low adoption of modern technologies and varieties, the traditional substance approach to production which results to high post-harvest losses (~40 % in maize) and treatment of agriculture as a “pass time” activity, heavy reliance on rain fed agriculture.

Given the growing food demand globally and locally, the agriculture sector provides an opportunity for enterprising farmers to venture into a number of value chains within the crops and horticulture subsector. To catalyze enrollment of producers into these value chains, the government and her partners need to implement the following strategies in the various selected value chains as follows:

1. **Sugar cane production and processing** is not only the important agriculture crop but is the mainstay of the Kingdom’s economy. In an effort to continue building the competitiveness of the country in this commodity there is need to ensure that its production remain economically beneficial to the country and industry while being profitable to the farmers. The Ministry has led programmes aimed at increasing area under sugar cane production and to date an estimated 9000 ha under smallholder producers have been put under sugarcane production while another 4000 ha is underway in the LUSIP phase 2 project. These investments have been made possible through initial investments in water harvesting projects under the Komati river basin

(Maguga Dam) and the Usuthu river basin (Lubovane Dam). Associated investment in road infrastructure and downstream irrigation have been made to enroll an estimated 6 000 farmers in these projects. Modest improvement in the land use rights have unlocked more investments extend by the private sector.

The now known looming challenge for the sugar industry is the liberalized sugar market which seen the raw sugar price plummet to historical lows for Swazi sugar which had been all along enjoying lucrative price and providing super profits for the industry players. The reduced price is likely to disrupt sugar cane production especial for smallholder producers in the new schemes which are struggling with management of their farmer companies and some are still repaying loan credit extended by financial institutions. Without further delay there is need for the industry to consider venturing in diversification within the sugar industry and government support will be critical in this regards. Further, the increasing production costs including electricity charges and water scarcity and costs are a course for concern among small producers.

Given the foregoing, there is need to consider implementation of the following strategies:

- i. Exploring bilateral and regional markets to export the country's sugar products at competitive prices
- ii. Explore further processing and value addition to local sugar into more finished products
- iii. Support establishment of an enabling environment for profitable utilization of sugarcane bi-products and marketing for beneficiation of all players along the value chain
- iv. Improve water use efficiency in sugar cane production and support initiatives for reinvestment in water resources development to ensure water security for the industry

2. **Maize production and other grains** are the major focus for the agriculture sector. The production of these commodities is predominant on Swazi Nation Land (SNL) for household food security purposes and livelihood support. White maize is usually the main crop while the other grains such as beans and ground nuts are minor crops. Maize production has an annual target to meet the local consumption requirement which is estimated at 140 000 mt per year. However, production have fallen short of this figure for the past 15 years where the country has been able to produce an average of 60% of its white grain maize demand while the rest had been met through imports for commercial purposes and for food aid distribution. Government has maintained its strong support for maize production in the form of extension services decentralized in across the four administrative regions, and further into the designated 17 Rural Development Areas (RDAs) with comprehensive outreach in all communities where field officers are designated. Government also have long established a subsidized tractor hire service which is aimed at assisting farmers with land cultivation and other mechanized services. The demand for these services under

the government programme range between 50 000 hours to 60 000 hours annually. Since 2014, government has rolled out another targeted input subsidy where the aim was to improve maize yields and reach a target yield of at least 4 metric tons per ha under rain-fed conditions and also improve mechanization where 100 tractors and associated implements were availed to strengthen the tractor hire service programme. This programme provides inputs such as fertilizer and seeds at 50% cost per farmer per ha. It has since been opened up for production of other grains such as beans and sorghum.

In an effort to improve white grain maize marketing, the government established the National Maize Corporation (NMC) which is responsible for providing a market of last resort to local maize producers and ensure that the country is able to meet the white grain maize demand at all times. In order to ensure stability in the industry, NMC is designated as the sole importer of white grain maize and makes it available to maize millers and the public. The local buying price for NMC is controlled by government and is aimed at ensuring affordable white maize to consumers while also ensuring that producers are able to recoup their production costs. However over the years, it had been observed that large quantities of locally produced maize is traded in the informal markets and processed for household consumption in a number of hammer mills in the communities.

The main challenges to increasing maize production are the low production yields, high post-harvest losses, dependency on rain fed production, prevalence of pests and diseases, relatively high production costs, low adoption of improved technology, limited value addition.

On the other hand, the minor grain crops, that is beans and ground nuts, they are produced under a similar fashion to maize with the only exception being sorghum which used to be traditionally and anchor crop before the advent of maize. The demand for beans and ground nuts remain higher than the local production hence the opportunity to increase local production. The challenges that need to be addressed include improving the value chain linkages for these commodities to improve access to information on demand, production and supply; access to seeds, post-harvest losses management and marketing, value addition and processing facilities and capacity building for all activities along the value chain.

Proposed strategies for the major grain commodities are as follows:

a. Maize:

- i. Improve soil fertility through proper use of fertilizers and improved access
- ii. Improve access to affordable and improved seed varieties through strengthening of the maize seed value chain

- iii. Improve the value chain to reduce post-harvest losses through supporting establishment of aggregation and processing enterprises at community level
- iv. Improve management efficiency of the tractor hire service and input subsidy programme
- v. Conduct research for adoption and adaptation of short maturing maize varieties which are high yielding and drought tolerant
- vi. Conduct research to improve agronomic practices such as land preparation, planting strategy, crop timing, given the climate variability
- vii. Increase utilization of fallow lands on SNL through organized engagement with communities
- viii. Promote contract farming for maize under irrigated agriculture
- ix. Promote production of yellow maize for animal feeder and fodder purposes
- x. Improve the outreach and efficiency of extension services for targeted producers

b. Beans:

- i. Increase production and access to bean seed through promoting bean seed multiplication and marketing
- ii. Promote expansion of bean production through mixed cropping and expansion to fallow lands
- iii. Promote improved technologies to reduce post-harvest losses and mechanization
- iv. Promote aggregation and collective marketing of produce
- v. Conduct research on improved seed varieties and agronomic practices to enhance yields.
- vi. Prioritize irrigation development for bean production

c. Ground nuts:

- i. Support investment in groundnuts processing facilities and strengthen active participation of women groups
- ii. Build capacity of all actors in the value chain to improve productivity and competitiveness in production and value addition, including post-harvest management
- iii. Conduct research on improved agronomic practices and fertilizer use for improved yields, pests and diseases control
- iv. Improve access to affordable seed

3. **Horticulture Production** and marketing is an emerging niche for increasing production and productivity of the agriculture sector in the KoE. The horticulture subsector include production of **conventional vegetables, baby vegetables** and **fruits**.

In the past, **conventional vegetables** have been treated as winter production by smallholder farmers or practiced in relatively small plots for household consumption and sale of surplus produce to neighboring households. Due to realization of the potential income some farmers have expanded area under vegetable production and targeted to sell their produce in the urban areas where there are open markets and produce is sold in reasonable large quantities. Most common products include cabbages, spinach, lettuce, broccoli, tomatoes, potatoes, peppers, onions and butter nuts. The local demand for these products is met through imports from neighboring countries while good quality products are prioritized for export markets. In order to catalyze increase in local production and productivity, there is need to continuously build capacity of targeted producers to produce quality products for the market. The country also need to invest in packaging and processing facilities to add value and reduce post-harvest losses. Another challenge that need to be addressed is availability and access to planting material and other inputs.

Baby vegetables on the other hand are mainly produced by emerging and large scale producers who have the technology required to manage such high value products. These are mainly produced for export purposes through the NAMBoard or directly by producers and or traders. The country has a potential to increase the production and marketing of these products through protected and irrigated agriculture. The major challenge is building capacity of producers and providing investment support for infrastructure development for production and marketing.

Fruit production has been aggressively promoted in the past 5 years where Ministries of Agriculture and that of Commerce Industry and Trade have collaborated to implement a fruit tree planting project where more than 10 000 fruit trees have been planted on annual basis in individual households. Historical the country have been known as a serial producer of citrus fruits, pineapples and bananas; where there are large estates engaged in production and marketing of these commodities. Other thriving fruits that need to be promoted include avocado, pitaya, Mangoes and pawpaw. Even though there is existence of large estates for some of the fruit products, smallholder producers have had no established linkages to this industry. While fruit production remains a viable area of growth, there is need to provide capacity support for fruit tree planting and management among targeted producers. For some highly perishable fruit types, there is need to focus beyond the fresh produce market and support investment for downstream processing and marketing.

The Ministry of Agriculture and its parastatals are promoting production and marketing of these commodities where the National Agricultural Marketing Board (NAMBoard) provides a market for local producers and build capacity of farmers to meet specific market quality standards. The Swaziland Water and Agricultural Development Enterprise (SWADE) is a key partner in mobilizing communities and development of irrigation infrastructure for production purposes. The Ministry provides extension services in all communities in the country and such service is

anchored in the 17 Rural Development Areas decentralized in various sub-regions. There are a number of players in the private sector involved in production and marketing enterprises for horticulture products and these need to be harnessed to closely collaborate in developing smallholder farmer production models to ensure quality produce, access to viable markets and credit for investment and produce management.

The development of this subsector will be spearheaded through implementation of the following strategies:

- i. Promote and support infrastructure development targeted for irrigation of horticulture products
- ii. Build capacity and knowledge on protected agriculture
- iii. Improve surveillance and monitoring of pests and diseases for horticulture products, especially fruits
- iv. Invest in establishment of facilities for production of disease free tissue culture for various horticulture products
- v. Improve availability and access to planting material for horticulture products including investment in establishment of nurseries
- vi. Promote and support establishment of large scale orchards for fruit production to act as anchor farms for processing enterprises
- vii. Promote and support investment in establishment of processing facilities for various fruits and vegetable products
- viii. Build capacity and improve extension support for targeted producers under specific horticulture value chain products
- ix. Invest in construction and operation of produce aggregation centres (pack houses) in strategic locations
- x. Conduct research on desirable horticulture product varieties for fresh consumption and for processing purposes
- xi. Conduct research on pests and disease control measures and tolerant varieties to the various agro-ecological regions of the country
- xii. Establish out-grower production model to facilitate smallholder farmer linkages to existing and future horticulture production and marketing
- xiii. Engage financial institutions to establish minimum risk credit products for horticulture producers and traders

4. Cotton Production used to be the most lucrative commodity for farmers in the dry areas of the country. Currently, the Swaziland Cotton Board which is the government's urgency in leading the development of this sub-sector, is struggling to get optimum supplies for running its ginnery operations. The number of farmers and production quantities have systematically declined over the years. However, given the recurring dry spells patterns experienced in the country, the resilience of cotton to such conditions makes it the most relevant crop for the Lowveld regions. The existence of the ginnery and the vibrant local textile industry provides a solid ground on which to firmly anchor a strong value chain for the local cotton industry. Current challenges include poor adoption of advanced production technologies, limited access to inputs and fluctuating global prices for cotton.

Given the importance of this crop to the local economy, the following strategies are proposed:

- i. Advocate for adoption of improved seed technologies to improve production and productivity
- ii. Increase area under cotton production to meet the demand of the Ginnery through leasing land and or contracting large scale producers
- iii. Provide support services to smallholder producers
- iv. Improve marketing and value addition for cotton products

c) **Land and Water Resources Development**

Land and water resources are the basic resources required for agricultural development. For many years land and water resources had been identified as a comparative advantage for the country to advance agricultural production.

- The land situation in the country is governed under dual land tenure system where there is title deed land (TDL) ownership and the Swazi Nation Land (SNL) management system. The difference between these two systems is that on TDL there is individual private ownership and this is prevalent in urban areas, government land, private farms and Estates. The private farms and Estates are major contributors to agricultural output in the country and account for more than 80% of Agriculture GDP. The private farms are characterized by relatively good land management practices and high productivity. The production in the private farms is for commercial purposes and major activities are cash crops such as sugar cane, citrus fruits, pineapples, cattle ranching and there are well establish poultry production enterprises. Dairy production and vegetable production is also on the rise.

On the other hand, the SNL which consist an estimated 60% of agricultural land in the country is held in trust by the King for the Swazi Nation and is administered by the Chiefs on behalf of the King. This land is accessed through the Kukhonta system where a husband and wife are allocated land on which they have user rights for residential and field cropping purposes. Range land is accessed on common property rights basis by all members of the community. This is where you find smallholder farmers with small land holdings averaging 0.5 hectares per household. The production is mainly for subsistence purposes and dominated by maize production, varied mixed cropping with some legumes, limited vegetable production and laissez-faire fruit production. Productivity is very low and there are high post-harvest losses. Investment in land management is wanting and the crop land is used for foraging in winter to supplement livestock grazing from rangelands.

As indicated the rangelands on SNL are utilized under common property rights basis where every household with a specific community has equal access with no individual obligation but collective common interest for good management and sustainable utilization of the rangeland. This approach result in the resource suffering the “tragedy of the commons” where by all users are maximizing their self-interest without any regard for reinvestment in the rehabilitation and administering good rangelands management

practices. The result is wide spread degradation of the land due to overstocking, overgrazing, spread of invasive species and human settlements encroachment.

Currently there has been some positive initiatives in management of SNL where government is putting up investment projects for agricultural development. There has been the introduction of Chiefdom development planning where the community and the local authority produce land use and development plan to guide allocation of land uses in the community. The aim of this plan is to ensure preservation of arable land while ensuring improved community planning and allocation of land for various uses to ensure sustainability of the natural environment. Of importance is the annexing of land for agricultural use and issuance of the Chiefs Letter which provides exclusive land use rights to a local group for agricultural production purposes. This is prevalent under the Komati Downstream Development Project (KDDP) and in the Lower Usuthu Smallholder Irrigation Project (LUSIP) where a combined total of 16 000 ha is planned to be managed under this approach and already 10 000 ha has been put under production by producer groups who has formed Farmer Companies for mostly sugar cane production.

Over the past two decades government had been struggling to promulgate legislation and policy that would improve and comprehensively control land management in the country. A draft land policy is in place under the Ministry of Natural Resources portfolio but have not been approved to date since the first draft was produced in the 1999 year of the Lord. In addition the SNL Commercialization Bill was produced in 2015 and it also remains an unapproved draft aimed at demarcation of commercial agricultural land and an SNL Register.

In order to improve land management for agricultural development there is need to prioritize implementation of the following strategies:

- i. Improve cooperation with the Ministry of Natural Resources and lobby for approval and enforcement of the land policy and the SNL Commercialization Bill
 - ii. Conduct baseline surveys to map current arable land and rangeland including the existing conditions
 - iii. Explore and pilot improved land management systems for both field crop and range management
 - iv. Establish Private Public Partnerships and incentives for improved production in Government farms and Private Farms
 - v. Promote soil conservation practices to reduce land degradation and improve fertility
- **Water Resources and irrigation development** is vital for agriculture production, especially in the face climate variability where dependency on rainfall is no longer sustainable for ensuring household and national food security. The Ministry collaborates with the Ministry of Natural Resources and Energy to drive government investment in water resources development for agricultural use.

The two Ministries have collaborated to construct the Maguga dam and Lubovane dam which has supported the irrigation development of 6000ha in the KDDP and is currently implementing Phase II of the LUSIP which will irrigate 5200 Ha and 10 000 ha in total including the area covered under Phase I. Under its Water Harvesting Programme the Ministry had prioritized the construction of Small and Medium Sized Earth dams which have a capacity to irrigate 20 ha to 200 ha of land. These are mainly constructed in the high rainfall areas where there are perennial streams with a capacity for establishment reservoirs and or weirs to harvest water for irrigation purposes. The irrigated areas under this programme are mainly for horticulture production. In the Lowveld, the Ministry has over the implemented the Earth Dam construction programme where the objective is to harvest rainfall water for livestock drinking purposes. Given the food insecurity levels and lack of income generation activities, downstream one (1) ha gardens had been development for the communities to grow vegetables for both household consumption and selling to local markets.

In response to the frequency and intensity of recurring drought conditions and the economic losses incurred by the agriculture sector and by extension the country's economy, the ministry is continuing the water harvesting and irrigation initiatives. Significant support is provided by development partners including the African Development Bank, European Investment Bank, Kuwait and the Arab Bank (LUSIP II), IFAD and the GEF (SMLP), and the European Union support under the 11TH EDF (WHDP and HVCHP).

In order to improve water use effectiveness and efficiency in agriculture production there is need to consider implementation of the following strategies:

- iv. Undertake a national water resources assessment and identification of associated irrigable areas to develop an agriculture water resources and irrigation master plan, and further develop according to the findings and priorities of the subsequent plan
- v. Prioritize and accelerate implementation of existing water harvesting programmes financed by Development Partners
- vi. Mobilize resources for investment in prioritized large scale water harvesting infrastructure development such as the Mkhondvo- Ngwavuma Water Augmentation Scheme and concretize studies to assess viability for construction of the Silingane Dam
- vii. Collaborate with Ministry of Natural Resources and Energy and the private sector to promote modern water serving technologies to improve water use efficiency
- viii. Promote improved watershed management for all river basins in the country in partnership with the Ministry of Natural Resources

d) Food and nutrition Security

Food and nutrition security is the key pillar towards attaining the country's vision of a 1st World Status in 2022 the Malabo commitment of Zero hunger by 2025. The country has further committed to work towards achieving the Sustainable Development Goals where goal number 2 is targeting eliminating hunger by 2030 in the Global setting.

The prevailing situation in the country is such that food and nutrition security is mostly influenced by individual capacity to either produce their own food or access or afford quality and sufficient food all the time. Another key issue is that of food preparation and utilization to nourish the body. The country conducts annual vulnerability assessment where the major issue is determining the level of food and nutrition security at national level through assessing the conditions at selected households across the country.

On the issue of availability and access, the mostly used proxy is availability of maize which is a staple food in the country. On annual basis it is reported that the country produces 80 000 mt of maize on average against a national consumption requirement of 140 000 mt. this usually result in an estimated number of 20 000 to 40 000 exposed to food shortages and requiring emergency support to maintain their food security status. This is confounded by the high incidence of poverty where 28% of the population's labour force is unemployed and have no alternative income buy food in cases of crop failure or during the lean season.

Food and nutrition security is however beyond the production and access to staple food. It relates more to diversified nutrition diet available and consumed by individuals at household level. This is further influenced by hygiene and sanitation at household and community level. Child feeding and ensuring availability of micro nutrients is key to ensuring a holistic approach to food nutrition security.

Key strategies that need to be implemented include:

- i. To improve knowledge and attitudes of the population on healthy eating and appropriate food choices
- ii. To increase the consumption of diversified foods across the lifecycle with more focus on the vulnerable groups such as infants & young children, adolescents, women of child bearing age and the ageing population
- iii. To improve the health environment within households in order to reduce the spread of infections within household and communities
- iv. To promote income generation interventions to support other household nutritional needs

11. IMPLEMENTING THE STRATEGIC PLAN

a) Implementation Success Factors

Successful implementation of the MoA Strategic Plan (SP) depends on the following key organizational issues:

- recognition, ownership of the SP,
- alignment of all planning to the SP,
- recognition of all in ensuring the success of the SP,
- development of a M&E system,
- inter-departmental approach to implementation and monitoring,
- aligning focus from individual personalities to department collective effort,
- prompt resolution of conflict,
- focus on service delivery,
- Talking about and around the strategy in all meeting.

Internally, the SP will be communicated to all stakeholders' at all organizational levels. Directors, Managers and staff members need to have a clear understanding of the Plan and their roles in it. A "perfect" plan has little value if it is not widely understood and accepted. It must form the basis for daily action throughout the Ministry and amongst stakeholders. Ways for improving communications about this Plan include:

- Talk about the plan at all meetings.
- Distribute copies of the full plan to program managers.
- Prepare a condensed brochure version (1 pager) of the plan to share with all key stakeholders.
- Recognize progress on achieving the plan's goals and objectives at all meetings
- Display the vision, mission and value statements in a prominent location in the building.
- Collectively celebrate accomplishments.

b) Resource mobilisation and allocation

Although budget allocation to the Ministry will be mainly through subvention, loans and grants, it is envisaged that the Ministry shall explore other means of resource mobilization especially through development agencies to fund Ministry packaged projects. The implementation will depend not only on the quality and commitment of the Ministry staff but also on the availability and efficient prioritization, allocation and subsequent utilization of resources. Optimal utilization of resources will be achieved through adoption of modern management methods that promote:

- Elimination of wastage
- Procurement that promotes value for money
- Restricting contracted services to areas where internal capacity cannot cope
- Prioritizing contracted services to address areas where internal capacity is lacking or inadequate
- Promotion of shared services within the organization through the elimination of silo mentality.

c) Capacity Building

A Needs Assessment will continuously be undertaken to identify capacity gaps that have to be bridged to improve the impact of the Ministry. Training and capacity building programmes will be developed that will focus on enhancing existing skill and other technical competencies. In line with capacity building requirements, modern working tools and work place environment will be continuously improved. The annual implementation programs derived from annual work-plans in the process of implementing this Strategic Plan, including staffing requirements will be aligned to government policy. The *Strategic Plan* also recognizes the role to be played by a stronger collaboration and partnership with the Ministry's parastatals in order to create effective linkages necessary for the stimulation of technological advancement, productivity and competitiveness. The main coordination issues to be addressed therefore will revolve around policy, legal and institutional arrangements; the delegation of authority; governance and access to markets.

The Ministry will prepare a capacity development strategy for proper human resources management and development. The focus will cover among others the following areas:

- planning and coordination,
- monitoring and evaluation,
- delegation and teamwork.

Accountability for the implementation of this Strategic Plan and the use of resources is critical and will be driven from the office of the Principal Secretary. His office together with HoD's will provide the overall leadership for the implementation while the targets set will be implemented and achieved through annual performance contracts and work plans of the various projects.

12. MONITORING AND EVALUATION

The final element of this SP is the attention to issues of monitoring and evaluation. The SP sets suitable input and outcome parameters with annual targets for tracking implementation. A comprehensive M&E framework has also been developed with detailed reporting system and responsibilities.

The development of the SP is aimed at ensuring a systematic and coordinated plan of action. A plan is as good as its implementation. For the action to bear the desired fruits, it is important that there must be a monitoring & evaluation tool. In addition to developing the tool, it is imperative that there must be human beings who monitor progress made on each activity/target will be monitored and documented.

a) Monitoring Methodologies

To ensure effective participation in plan implementation, there will be:

- Established standard formats for data collection and reporting;
- Clearly spelt out documents to be prepared, periods covered, and details of information to be supplied
- Implementation of a Performance Management System making sure every officer and responsibility holder is accountable for the use of resources and attainment of set objectives; and
- Development of a departmental reporting card on strategic issue.

b) M & E Framework

One of the key elements of a Strategic Plan is the process for monitoring and evaluating performance. By having a systematic way for comparing actual performance to planned performance, the effectiveness of the actions is determined. The M&E System, which will work in tandem with the Implementation Matrix, will be designed to ensure the following: -

- Establishment of clear reporting schedules, channels and feedback mechanisms on an on-going process requiring time and commitment of all;
- Candid specifications of the roles of individuals taking into consideration internal progress reports, and an annual report card; and
- Clear statement and definition of action plans to be taken on specified monitoring results in terms of resource adjustment change of strategy or review of programme/activity.

For effective implementation of this Plan, teams will be at Head of Department level where the team will meet regularly under the chair of the Principal Secretary to discuss and coordinate the implementation of the plan.

The second will be the section managers and the designated monitoring and evaluation officer. The team will meet frequently to discuss action plan implementation, tasks and strategies, and feed its deliberations into the management team meetings.

The M&E System, which will work in tandem with the Implementation Matrix is designed to ensure the establishment of clear reporting schedules, channels and feedback mechanisms; the candid specifications of the roles of individuals submitting or receiving the documents; and clear statement and definition of action plans to be taken on specified monitoring results in terms of resource adjustment change of strategy or review of programme/activity.

• Progress Reports

These reports will be prepared by the officers implementing work plans and be undertaken quarterly and the reports will detail the actions taken by departments towards achieving specific outcomes and strategies of the work plan and will include costs, benefits, performance measures and progress updates.

- **Annual Evaluation Report**

At the end of each year, a report will be produced and released to all stakeholders. It will contain the year's activities related to the plan and indicate how the Ministry has performed.

c) Strategic Plan Risk Management

Risk management is an ongoing process that will continue through the life of the Strategic Plan. It includes processes for risk management planning, identification, analysis, monitoring and control. Many of these processes will be updated throughout the SP lifecycle as new risks can be identified at any time. It's the objective of risk management to decrease the probability and impact of events adverse to the SP. On the other hand, any event that could have a positive impact should be exploited.

13. Implementation Matrix

ACTIVITY LEVEL		
Key Performance Indicator	Activities	Indicator
CONVENTIONAL VEGETABLES		
Production increased from 8 000MT to 20 000MT (E58M to E120M)	<ul style="list-style-type: none"> • Mobilise more SNL farmers to engage in vegetable production and increase production from 2000 to 4000. • Coordinate with ESWADE and have more land into vegetable production. • Lobby private farmers on TDL to engage in vegetable production. • Promote adoption of high tech production systems 	<p>Number of farmers mobilised.</p> <p>Land under production</p> <p>TDL area under veg production.</p> <p>Number of farmers on high tech systems.</p>
Market facilitation	<ul style="list-style-type: none"> • Establish and operate three more pack-houses and five holding facilities. • Facilitate and promote local sourcing by wholesalers and retailers. • Secure and sign markets agreements • Establish a fruit and vegetable processing facility. 	<p>Facilities being used.</p> <p>Volume locally sourced.</p> <p>Volumes marketed</p> <p>Operational processing plant</p>
BABY VEGETABLES		
Production increased from 2000MT to 4000MT.	<ul style="list-style-type: none"> • Increasing number of farmers in baby vegetables • Facilitate adoption of production under tunnels 	<p>Quantities of baby vegetables produced</p> <p>Tunnels operating</p>
Sustainable markets	<ul style="list-style-type: none"> • Signing and supplying EU markets 	<p>Markets supplied</p> <p>Operational facility</p>

	<ul style="list-style-type: none"> Establishment of processing facility 	
Farmers linked to markets	<ul style="list-style-type: none"> Operationalize and simplify use of market information system Encourage contract farming 	<p>Information system operationalized.</p> <p>Number of contracts.</p>
Promotion of exports	<ul style="list-style-type: none"> Construction of a pack house at Sikhuphe. Markets agreements signed (EU and Middle East) Construction and production in tunnels at Sikhuphe (3000MT) 	<p>Operating pack-house</p> <p>Markets supplied</p> <p>Quantity produced in tunnels.</p>
FRUITS		
Increase production to 3000MT	<ul style="list-style-type: none"> Distribute 60 000 seedlings Coordinate and promote production by private farmers 	<p>No. of seedlings</p> <p>Volumes from private farmers.</p>
Market facilitation	<ul style="list-style-type: none"> Establishment of a processing facility. Support entrepreneurs to coordinate purchase and marketing of produce from SNL farmers. 	<p>Facility operating</p> <p>Volumes marketed</p>
Investments facilitated	<ul style="list-style-type: none"> Support potential investors on avocado project Identify land suitable for investment Lobby for water allocation. 	<p>Signed investments</p> <p>Area secured</p> <p>Water allocated</p>
COTTON		
Enabling environment for cotton production (adoption of Biosafety Bill)	<ul style="list-style-type: none"> Lobby MOTEA to resubmit Biosafety Bill to Parliament. Lobby Parliamentarians to support Bill 	<p>Biosafety Act amended.</p>

Adequate and sustainable markets for lint	<ul style="list-style-type: none"> • Signing of purchase contracts with Spintex and TWK 	Number of markets being supplied.
Ensure adequate supply of cotton, 25 000MT, for Ginnery to operate at full capacity	<ul style="list-style-type: none"> • Increase cotton production and productivity by engaging at least 6 large scale irrigators to cover 10 000ha. <p>(Nisela, Richmond farm, SD Citrus, RSSC, Tambankulu, Tambuti).</p> <ul style="list-style-type: none"> • Promote rain-fed cotton production to at least 3 000ha by improving seed availability and distribution. 	<p>Number of farmers engaged and area under production.</p> <p>Area under production</p>
Value addition on by-products	<ul style="list-style-type: none"> • Facilitate oil extraction from cotton seeds 	Oil being extracted.
YELLOW MAIZE		
Yellow maize production increased from 500MT to 25 000MT	<ul style="list-style-type: none"> • Promote and support yellow maize producers • Negotiate with communities for joint ventures. • Increase number of contracted farmers • Establish production schemes. • Improve effectiveness of Extension workers • Secure contracts between Millers and Producers 	<p>Quantity of maize</p> <p>Area under venture</p> <p>No. of contracted</p> <p>No. of schemes</p> <p>Contracts signed</p>
MAIZE		
Production increased from 80 000 to 140 000MT	<ul style="list-style-type: none"> • Negotiate idle arable land within communities for grain production. • Sign contracts with farmers on maize supply. • Lobby production on TDL 	<p>Quantity from SNL</p> <p>Quantity from TDL</p> <p>No. of schemes</p>

	<ul style="list-style-type: none"> • Establish production schemes. • Improve effectiveness of Extension workers 	
LEGUMES		
Production increased by 25 000MT to reduce imports.	<ul style="list-style-type: none"> • Upscale local seed production • Develop strategy for post-harvest management and establish grain storage facilities. 	Seed production Reduction in post- harvest losses
DAIRY		
Enabling environment established	<ul style="list-style-type: none"> • Review and amendment of Dairy Regulations • Signing of MOU on Gege Farm 	Regulations in place MOU signed
Reduced imports and increased exports of dairy products.	<ul style="list-style-type: none"> • Establish a dairy processing facility • Engage an operator for the plant • Engage with Parmalat to increase its products and exports. 	Plant operational Agreement with Operator Increased production And exports
Increased milk supply in the country from 18ML to 120MLlitres per annum.	<ul style="list-style-type: none"> • Engagement of Eswatini Dairy to increase milk production from 2.4ML to 24ML • Lobby increased milk production by other TDL farmers. • Identify and develop additional farms for milk production. • Facilitate milk import to cover deficit. 	Eswatini Dairy producing 24ML milk. Number of TDL farmers in milk production Increase in dairy farms Reduced milk deficit
Increased milk production on SNL	<ul style="list-style-type: none"> • Establish a Dairy Vocational Centre. 	Vocational Centre operational

	<ul style="list-style-type: none"> • Mobilise farmers to embark on dairy farming. • Intensify school dairy program • Increase capacity and number of rural area milk collection centres. 	<p>Number of Schools participation in dairy program</p> <p>Number and capacity of collection points of milk increased</p>
Availability of Dairy animals	<ul style="list-style-type: none"> • Increase dairy cow production in Gege dairy farm. • Promote dairy goat production 	<p>Number of dairy cows to farmers increased</p> <p>Dairy goats produced</p>
BEEF		
Beef production increased from 10 936 to 16 000MT.	<ul style="list-style-type: none"> • Upscale feed and fodder production. • Promote group ranching. • Develop inclusive, efficient and transparent markets for livestock products and services. • Expand the scope of Manyonyaneni Trading account to cater for operations in other farms. • Establish a financing mechanism for farmers • Promote feed-lotting at all levels • Lobby commercial beef farmers to intensify production • Intensify production in government farms 	<p>Increase in slaughter numbers.</p> <p>Number of group ranches established</p> <p>Trading account expanded</p> <p>Mechanism in place</p> <p>Slaughter stock from feedlots.</p> <p>Number of farmers in intensive production</p> <p>Output from the farms</p>
Establishment of a Meat Board	<ul style="list-style-type: none"> • Review and amend NAMboard regulations to include meat products 	<p>Regulations in place</p>

GOATS		
Increased production from 16.25MT to 2 500MT	<ul style="list-style-type: none"> • Implement a 120 slaughter goats per farmer model with at least 80 farmers per year • Promote 30 days feed-lotting concept. • Establish goat breeding centres at Manyonyaneni , Gege and others • Encourage production on private farms. • Promote private sector investment 	<p>Number of goats slaughtered</p> <p>Farmers practising concept</p> <p>Operational centres</p> <p>Slaughter goats from private farms</p> <p>Private sector investment</p>
Farmers having access to markets	<ul style="list-style-type: none"> • Identification of available market outlets. • Develop appropriate slaughter goat supply contracts with markets. • Promote construction of adequate abattoirs for goats. 	<p>Amount of goat meat marketed.</p> <p>Availability of abattoirs</p>
FISHERIES		
Enabling environment	<ul style="list-style-type: none"> • Submit aquaculture and fisheries Bill and regulations 	Act enacted and regulations adopted
Fish production increased from 5MT to 3 500MT	<ul style="list-style-type: none"> • Complete construction and operationalize Melete hatchery. • Engage Republic of Mozambique for access to fishing in the ocean. • Engage ESWADE to facilitate fish farming in the large dams. 	<p>Hatchery operational</p> <p>Agreement signed and operational</p> <p>Fish produced from large dams.</p> <p>Quantities produced by commercial farmers</p> <p>Quantities of high value fish produced</p>

	<ul style="list-style-type: none"> • Identify and support at least 200 farmers to engage in commercial fish farming. • Introduction of high value species (shrimps) 	
Farmers capacity increased	<ul style="list-style-type: none"> • Establishment of a fish training centre. • Organise training courses for potential farmers 	<p>Centre operational</p> <p>Farmers trained</p>
Ministry capacity to support farmers enhanced.	<ul style="list-style-type: none"> • Expose officers to short term practical courses • Recruitment and training of officers to manage the ocean fishing operation. 	<p>Number of officers trained</p> <p>Officers recruited and trained</p>
Land and Water resources development		
Lobby for enactment of land administration policies and legislation	<ul style="list-style-type: none"> • Engage Ministry of Natural resources and Cabinet to consider approval of land policy and SNL Commercialisation Bill 	<ul style="list-style-type: none"> • Land policy approved • SNL Commercialisation Bill enacted into an Act
Large dam project for irrigation developed.	<ul style="list-style-type: none"> • Finalise feasibility studies and detailed designs of the Mkhondvo-Ngwavuma scheme. • Mobilise resources for construction works • Construction of dams (Mpakeni, Ethemba, Mahamba) and canals. 	<p>Feasibility studies submitted</p> <p>Funds available</p> <p>Dams completed</p>

Communities with access to 40 small to medium earth dams	<ul style="list-style-type: none"> • Complete designs of at least 40 dams • Facilitate dam construction through EU funding and other partners. • Mapping of existing dams and strengthen water utilisation. • Mobilise additional resources for dam construction. 	<p>Designs completed</p> <p>Dam construction completed</p> <p>Map of existing dams in place</p> <p>Funds available</p>
Area under irrigation increased by 30 000ha.	<ul style="list-style-type: none"> • Facilitate the implementation of LUSIP II • Mapping and designing of irrigation schemes • Resource mobilisation • Develop infield irrigation infrastructure 	<p>Fully implemented LUSIP II Program</p> <p>Maps and designs available</p> <p>Funds available</p> <p>Irrigation system operational</p>
Sustainable water utilisation	<ul style="list-style-type: none"> • Establishment of farmer companies. • Training of water users on sustainable management. 	<p>Farmer companies operational</p> <p>Farmer companies managing projects</p>
Food and nutrition security	Improved living conditions in at least 25 000 vulnerable households	
Homesteads able to properly prepare food	<ul style="list-style-type: none"> • Promote diet diversification through food preparation, preservation and processing. 	Households able to properly prepare food
Adequate food available	<ul style="list-style-type: none"> • Encourage each household to have a variety of fruit trees. • Upscale food and nutrition gardens and 	<p>Households with fruit trees</p> <p>Homesteads with gardens</p> <p>Homesteads with small stock</p> <p>Homesteads practicing crop diversification</p>

	<ul style="list-style-type: none"> • promote water harvesting techniques. • Promote rearing of small stock. • Advocate for crop diversification with emphasis on leguminous crops. 	
Income generation	<ul style="list-style-type: none"> • Encourage each household to have an enterprise to support financial needs. 	Households having financial support
Home improvement	<ul style="list-style-type: none"> • Implementation of home management strategies (sanitation and hygiene, home improvement). 	Well managed homesteads

STRATEGIC PLAN RESULTS FRAMEWORK

OUTCOME LEVEL

Goal	Objective	Indicator	Baseline	Target
Increased contribution of Agriculture to economic development	To improve Sector's contribution to GDP	Agriculture value added per Year	E4.9 Billion	E7.8 Billion
Reduce rural poverty	To increase employment in the agriculture sector	Number of labour force	37140	43206
Improve food and nutrition security	To increase number of food secure households/ population	% of households /population reporting food shortages		Less than 15% of population reporting food shortage

Key MoA Strategy Results Framework

OUTPUT LEVEL

ITEM	BASE LINE	2022 TARGET	INTERVENTIONS	TIME FRAME	VERIFIABLE INDICATORS	INVESTMENT	Benefits to economy
CONVENTIONAL VEGETABLES	8000 MT E58m	20 000MT E120M	Increase producers from 2 000 to 4000. -Operate four more Pack houses and 5 holding facilities. -Lobby private (TDL) farmer participation. Investment in high tech	2019 to 2022 By 2019 2019 to 2021	Increase in high quality local produce Three new pack-houses and five holding facilities fully operational.	Pack houses EU financed. 2000ha SNL investment 4000ha from TDL farmers -greenhouses	E120M in circulation

Baby Vegetables	2000mt	6000mt	-Increase area under baby vegetables. -Support a tunnel production program. -Sign markets agreements	2019 to 2020	-volumes of high quality baby vegetables. -Level of tunnel adoption.	Tunnels need a E 20M revolving RF. Sikhuphe PPP of E200M.	- 200 Farmers E550M to GDP 300 employed
Fruit and vegetable processing facility		5000	-Establish a processing plant for fruits and vegetables	2019 to 2020	-5000MT of locally processed products	E80M for processing plant.	- Returns E80m annually - Employment 300-500
Fruits (Banana, Avocados, Lemon, papaya)		3000MT	-Seedlings distribution. Support entrepreneurs on marketing. -TDL coordination	2019 to 2021	Increase in volumes and variety of locally produced fruits	Private sector investment.	Contribution of E80m to GDP Employment for 30000
Cotton	250 ha 1300MT	10 000ha 25 000MT	-Amendment of the Biosafety Act of 2012. -Increase area under irrigated cotton	2019 to 2023	-An amended Act in place. - increased area in production	Private sector investment	Value E 146M Employment 1200 annually
Yellow Maize White Maize	500MT 80, 000 MT	25000mt 140, 000 MT	-Secure contracts between Millers and Producers -Promote and support yellow maize producers -Negotiate with communities for joint ventures. -Increase number of contracted farmers	March 2020	Increase yellow maize produced. -At least 140 MT of white maize produced locally.	Private sector initiative Farmer investment	E600M in circulation - Employment of 2000 people

Legumes	120 MT	2000MT	<ul style="list-style-type: none"> -Establish production schemes. -Improve effectiveness of Extension workers -Upscale local seed production for legumes -Develop strategy for post-harvest management. 		increase in grain seed Volume of storage facilities.	Farmer investment	
DAIRY	5M	120M Lts per year	<ul style="list-style-type: none"> -Construction of a dairy processing plant. -Engage private sector to venture into dairy -Facilitate increase production on SNL 	December 2019	<ul style="list-style-type: none"> -Locally produced dairy products -Decline in imports of dairy products 	Funding by SDB E 70M	E1Billion/yr in circulation 5 000 employment opportunities
BEEF	10 937MT	16.000MT	<ul style="list-style-type: none"> -Improve smallholder livestock productivity and engage TDL farmers to increase production and sales. 	March 2022	Increase in animals slaughtered for the market.	Funding by the EU at Euro 9.5 million	SZL 60 million
GOATS	16.25MT	2 500MT	<ul style="list-style-type: none"> -Intensify and assist SNL farmers and promote contracts between markets and farmers. -Mobilize private sector participation. 	2019	Number of goats slaughtered	SMLP and Dairy Board funding	SZL 25 million

FISHERIES	5MT	3 500MT	<ul style="list-style-type: none"> -Complete and operationalize the Melethe Fish hatchery. -Identify and support commercial fish farmers. -Facilitate agreements with Mozambique on fishing in the ocean. -Introduce fish production in big dams. 	December 2019	<ul style="list-style-type: none"> -Fully operational fish hatchery. -Increase in fish production. --volumes of fish obtained from the sea. 	Hatchery project already funded.	Direct payments to 400 farmers SZL 75 million Employment of 600 people
WATER AND IRRIGATION INFRASTRUCTURE			<ul style="list-style-type: none"> -Facilitate completion of the LUSIP 2 project. -Complete designs and construct large Dams (Mahamba, Ethemba, Mpakeni) and canals. -Development of 27 500 hectares irrigation. - Construct 40 s/m dams to irrigate 2000 hectares 	2019 to March 2022	<ul style="list-style-type: none"> -Number of dams constructed. -Area under irrigation 	SZL 100 million for feasibility study and detailed designs. E6 billion for construction	SZL 990 million/year SZL 60 million /year SZL 130,5 million dividends
HOME IMPROVEMENT	5 000 homesteads	25 000 homesteads	Implement home improvement and income generation projects at each homestead	December 2022	Number of homesteads being independent	E 250M	E500M income per annum

