

Strategy for the
development of small and
medium agro-processing
enterprises
in the
Republic of **S**outh **A**frica



agriculture,
forestry & fisheries

Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

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DEPARTMENT OF AGRICULTURE, FORESTRY AND FISHERIES

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ACRONYMS

AgriBEE	Agricultural Black Economic Empowerment
ARC	Agricultural Research Council
BBBEE	Broad Based Black Economic Empowerment
CSIR	Council for Scientific and Industrial Research
DAFF	Department of Agriculture, Forestry and Fisheries
DFI	Development Finance Institutions
DSBD	Department of Small Business Development
DST	Department of Science and Technology
EDD	Economic Development Department
FAO	Food and Agriculture Organisation
FSSC	Food Safety Standards Certification
GAP	Good Agricultural Practice
GEM	Global Entrepreneurship Monitor
GMP	Good Manufacturing Practice
HACCP	Hazard Analysis and Critical Control Points
IDC	Industrial Development Corporation
IPAP	Industrial Policy Action Plan
ISIC	International Standard Industrial Classification
MCEP	Manufacturing Competitiveness and Efficiency Programme
MoU	Memorandum of Understanding
MTSF	Medium Term Strategic Framework
NAMC	National Agricultural Marketing Council
NDP	National Development Plan
NGO	Non-Governmental Organisation
NGP	New Growth Path
NGO	Non-Governmental Organisation
PICC	Presidential Infrastructure Coordinating Commission
PPP	Public Private Partnership
R&D	Research and Development
SIP	Strategic Infrastructure Programme
SLA	Service Level Agreement
SME	Small and medium enterprises
SOE	State Owned Enterprises
TIHMC	The Innovation HUB Management Company
the dti	Department of Trade and Industry

PREAMBLE

The National Development Plan (NDP) and the Industrial Policy Action Plan (IPAP) identified the potential of agro-processing to motivate growth and development through backward and forward linkages with other sectors of the economy. Furthermore, agro-processing is among the sectors that has highest employment multipliers in the economy. However, the sector remains largely concentrated and entry and active participation of small and medium enterprises is limited.

The contribution of small and medium enterprises (SMEs) towards national development objectives of reducing unemployment and poverty is well-documented, emphasising the need for a focused approach by government to strategically support and develop manufacturing industry in general, and agro-processing industry in particular (APAP, 2015; IPAP, 2013; NDP, 2011; NGP, 2010).

This strategy seeks to articulate how government at National, Provincial and Local spheres would support and develop SME agro-processing enterprises. Implementation of this Strategy is in line/conjunction with National Small Business Amendment Act 29 of 2004, Broad Based Black Economic Empowerment Act 53 of 2003, National Policy on Food and Nutrition Security, Agricultural Marketing Policy, Integrated Small Enterprise Development Strategy, Integrated Marketing Strategy for Agriculture, Forestry and Fisheries, Smallholder Development Programme and relevant Provincial Strategies. This strategy is written at a crucial time when there is clarion call for strategic direction as well as better targeted support for agro-processing SME. It is crafted against the background of the following practical realities:

- there is currently no national strategy to give a direction on support and development of SME agro-processing industry in South Africa;
- implementation of SME agro-processing initiatives is fragmented and disjointed because of lack of strategic cohesion at both National, Provincial and Local level;
- provision of funding towards support and development of SME agro-processing initiatives is meagre and available funding mechanism is geared towards large agro-processors;
- potential SME agro-processors find it challenging to penetrate the mainstream market within agro-processing industry characterised by high concentration;
- empirical research depicts knowledge, skills and experience of potential agro-processors as low, requiring significant improvement given agro-processing is technology intensive;
- agro-processing has a high propensity to create rural jobs and encourage rural economies through investment and development.

The aim of this Strategy is to adequately and comprehensively address these gaps and create an enabling environment for SME agro-processors to fully and actively participate in the mainstream economy. While this Strategy provides a strategic direction for the interventions for development of SMEs, the choice of approach, process and products are extensively articulated in Provincial strategies.

While DAFF will lead the strategic processes in this regard, it recognises the role that other Departments have played in providing valuable inputs in this process, notably the Department of Trade & Industry (the dti), the Economic Development Department (EDD) and its agencies, Department of Small Business Development (DSBD), Department of Rural Development & Land Reform (DRDLR) and Provincial Departments of Agriculture & Rural Development; as well as the Industrial Development Corporation (IDC), the National Agricultural Marketing Council (NAMC) and the Agricultural Research Council (ARC). Government recognises the role that other non-governmental and social partners will continue to play in the implementation of the interventions outlined in this document.

1. INTRODUCTION

This strategy on support and development of small and medium agro-processing enterprises was developed to provide guidance towards the implementation of National Development Plan (NDP, 2011); Industrial Policy Action Plan (IPAP, 2013) and the Agricultural Policy Action Plan (2015). The strategy is directly linked to the following outcomes identified by government in the Medium Term Strategic Framework (MTSF, 2014):

- Outcome 4: decent employment through inclusive growth
- Outcome 5: a skilled and capable workforce to support an inclusive growth path
- Outcome 6: an efficient competitive and responsive economic infrastructure network
- Outcome 7: vibrant, equitable, sustainable rural communities contributing towards food security for all
- Outcome 10: protect and enhance our environmental assets and natural resources.

The strategy aims to assist in the fulfilment of strategic vision of the National Development Plan. Agro-processing is among the sectors identified by the National Development Plan (NDP, 2011); New Growth Path (NGP, 2010); Industrial Policy Action Plan (2013) and Agricultural Policy Action Plan (APAP, 2015) for its potential and ability to encourage growth and create jobs, owing to its strong backward linkage with the primary sector and input suppliers but also forward linkages related to income generated from agriculture, forestry and fisheries that may enhance domestic and local demand for manufactured goods.

As South Africa has become a net importer of processed agriculture, forestry and fisheries products and the demand for processed, healthy and quality food is increasing owing to growth in urbanisation and the middle class, there is an opportunity for the country to explore the growth of its agro-processing industry through localisation by promoting the entrance and active participation of smallholder farming entrepreneurs and SMEs agro-processors.

Therefore, persuaded by imperatives to enhance and broaden participation of SME agro-processing into mainstream manufacturing sector, the strategy for the development of SME agro-processing is developed to realise a competitive, sustainable and inclusive agro-processing industry in South Africa. This strategy, therefore, contributes towards reducing the movement of raw products from rural areas to metropolises for processing and then transporting them back at higher prices to the same rural areas where they were produced. Furthermore, it contributes towards a significant reduction of post-harvest losses encountered by smallholder producers through supporting and developing localised agro-processing activities.

2. AGRO-PROCESSING IN CONTEXT

Agro-processing refers to those activities that change the form of agricultural, forestry and fisheries products into various forms to facilitate easier handling and increase shelf-life. Agro-processing is also defined as a set of technology and economical activities undertaken on a basic agriculture, forestry and fisheries product with the aim of transforming it into usable items such as food, fibre, fuel and industrial raw material (FAO, 1997).

It is critical to differentiate between two terms that are mostly used interchangeably, namely, processing and value addition. Processing entails changing the form of a product; while value addition implies addition of value to a product after which a buyer is willing to pay a price for the product that more than compensates for the cost of the inputs used in the process. Value can be added to products without changing their physical form, for example washing or cleaning, grading or labeling. Examples of selected processed products are listed in Table 1 below.

TABLE 1 Examples of selected regular agro-processing products

Primary products	Processed products			
Fruit based	Dehydrated fruit	Juices & beverages	Jam & jelly	Paste, sauce & concentration
Vegetable based	Frozen cut veggies	Dehydrated veggies	Pickles & chips	Sauces and chutney
Grain based	Flour	Cereals	Bread & biscuits	Weaning foods
Milk based	Butter	Cheese	Ice-cream	Yoghurt
Sugar cane	Vinegar	Sugar	Juice	Sweets
Forestry based	Pulp & Paper	Veneer & ply wood	Lump charcoal	Furniture
Fisheries based	Fish paste	Minced fish	Canned fish	Fillet

Agro-processing techno-economic activities may be demarcated into three (3) broad categories which increases in technology use and human capital as the stage of processing increases from upstream which is classified as primary processing to downstream processing classified as advanced agro-processing (see Fig. 1). The interventions in the advanced agro-processing category are currently implemented by the dti and its subsidiary, the IDC and the Department of Science & Technology, through its subsidiary CSIR, this Strategy will focus on small and medium rural based agro-processing initiatives, particularly those located within the primary and secondary agro-processing category, as the current interventions are inadequate to meet the needs and challenges of this segment.

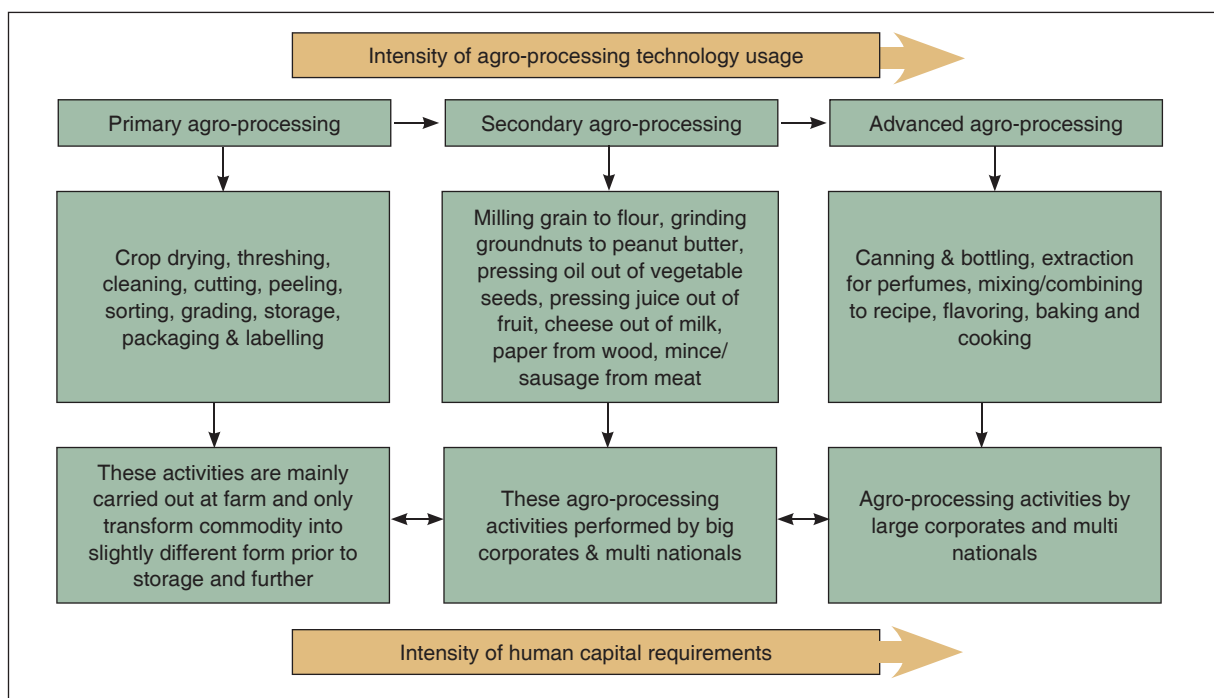


FIG. 1 Different phases of agro-processing activities

The wide-ranging nature of agro-processing activities implies a very wide range and heterogeneity of activities which make classification quite complex. However, the United Nations' International Standard Industrial Classification (ISIC, 2013) has alleviated uncertainty around how to classify agro-processing products by defining a standard classification of agro-industry as consisting of:

- Food and beverages
- Tobacco products
- Paper and wood products
- Textiles, footwear and apparel
- Leather products
- Rubber products.

The Standard Industrial Classification further disaggregates agro-processing industry into several categories. Food and beverage subcomponents, for example, are demarcated into the following four codes:

- Code 301 refers to manufacturing, processing and preservation of meat, fish, vegetables, oils, and fats.
- Code 302 refers to manufacturing, processing and preservation of dairy products.
- Code 303 refers to manufacturing of grain mill products, starch products and prepared animal feeds.
- Code 304 refers to manufacturing of other food products like sugar, chocolate, pasta, coffee, nuts, and spices.

It is also important to define what is meant by the term “small and medium agro-processing enterprises” (SMEs). The National Small Business Amendment Act 29 of 2004 defines SMEs according to certain characteristics such as the total full-time equivalent of paid employees, total turnover and total gross asset value (excluding fixed property). Table 2 summarises the classification of SMEs in the agriculture, forestry and fisheries sector.

TABLE 2 Classification of SMEs

Sector	Size or class	Total full-time equivalent of paid employees <	Total annual turnover <	Total gross asset value (fixed property excluded) <
Agriculture, Forestry and Fisheries	Small	50	R3 m	R3 m
	Medium	100	R5 m	R5 m

Source: *Classification of SMEs according to the dti National Small Business Amendment Act 29 of 2004*

3. PROBLEM STATEMENT

South Africa faces numerous key economic and social challenges which are: high unemployment rates, high poverty rate and high inequality (APAP, 2015; IPAP, 2013; GEM, 2013; NDP, 2011 and NGP, 2010). Unemployment rate averaged 26% over a decade (2000-2012) while the Gini coefficient measuring inequality was at its highest at 0.68 (StatsSA, 2013).

In order to address the challenges of national economic development, unemployment and food insecurity, this strategy aims to support and develop SMEs agro-processors. Fig. 2 provides a non-exhaustive list of key challenges hindering SMEs from participating in agro-processing activities. The major binding constraints facing SME agro-processing enterprises are lack of appropriate technology, access to finance, inadequate infrastructure and lack of technical and entrepreneurial skills.

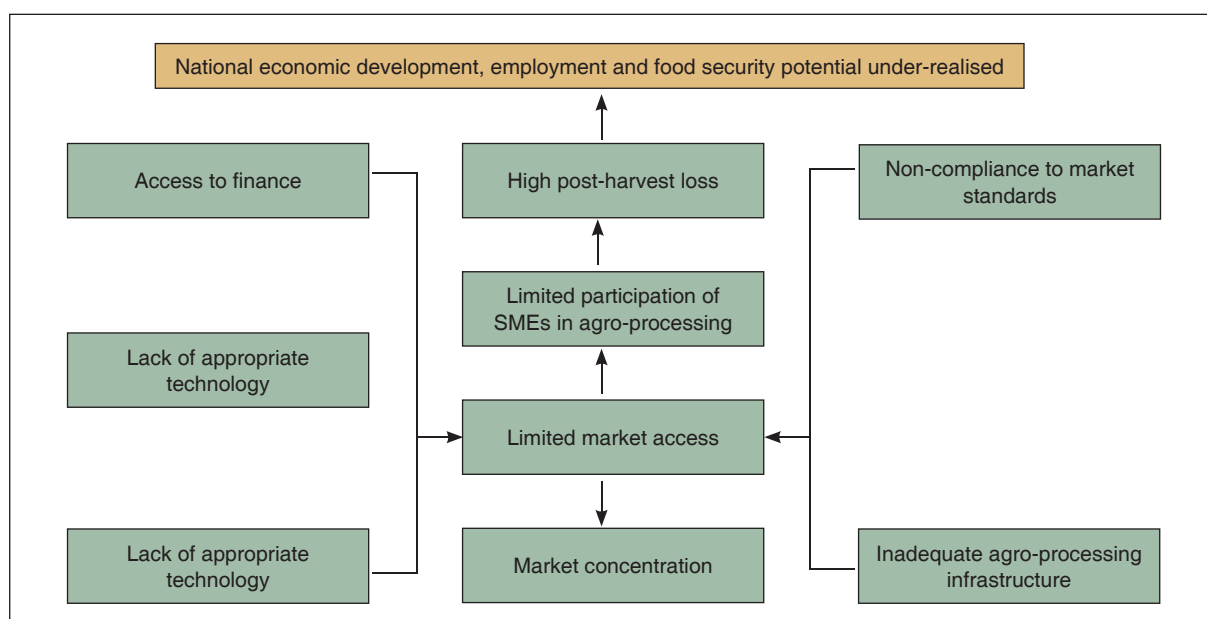


FIG. 2 Constraints limiting participation of SME in agro-processing

Stringent food safety norms, standards and regulations, coupled with poor processing infrastructure entail high transaction costs resulting in barriers to entry in agro-processing activities. As a result SMEs are not able to comply with all the necessary requirements to get certification of their produce and production processes. In addition, high degrees of market concentration is observed in the agro-processing industry, which is manifested first in the domination of supermarkets at the downstream end of the supply chain, which put pressure on upstream food processors to compete for valuable retail shelf space. This has resulted in some cases of mergers and acquisitions in the agro-processing sector. Since SME agro-processors are less able to meet the volumes needed to become listed suppliers and faced with the abovementioned challenges, they could not access formal markets which are vital for promoting their participation in the mainstream economy and creating an inclusive agro-processing industry in South Africa. As a result, rural areas largely remain producers of raw material with little or no value addition and processing activities taking place.

Support and development of agro-processing activities by smallholder producers and processors is, therefore, not only propelled by developmental objectives of reducing unemployment, ensuring food security and enhancing economic growth, but also the need to reduce the post-harvest losses experienced by producers (see Table 3). Post-harvest loss is a collective food loss along the food production chain, from harvest and handling, to storage, processing, packing and transportation. Food losses are indicative of poorly functioning and inefficient food value chain systems.

Agro-processing activities are well noted to minimise post-harvest losses, including significant contributions to increased food availability, nutritional quality, food safety and retained earnings for producers (National Policy on Food and Nutrition security, 2013).

TABLE 3 Post-harvest losses of various agricultural products

Agro-processing segment	Category	Range of percentage loss
Food and beverage	Roots and tubers	10–40%
	Milk	8–16%
	Fruits and vegetables	15–44%
	Cereals, oil seeds and pulses	15–30%
	Fish and sea food	10–40%
	Meat	5–8%

Source: *FAO/World Bank (2010)*

Percentage loss refers to loss of food along the supply chain from harvest until consumption. In grains it occurs during harvesting, transporting, drying, threshing and during storage. In fruits and vegetables it is caused by biological, environmental and socioeconomic factors while in livestock it is mainly due to poor handling practices such as poor hygiene, lack of refrigeration, etc. Post-harvest loss in fisheries is mainly due to spoilage. Table 3 depicts percentage losses of various products with the lowest percentages reflecting post-harvest losses by the commercial enterprises while the highest percentages reflecting losses by smallholder producers.

4. INTERVENTIONS TO SUPPORT AND DEVELOP SME AGRO-PROCESSING INDUSTRY

The following four intervention pillars are outlined and proposed for implementation by DAFF to address the abovementioned key challenges facing the SME agro-processors:

- Intervention pillar 1: Entrepreneurial support
- Intervention pillar 2: Enterprise development
 - Access to finance
 - Market access
 - Incubation

- Intervention pillar 3: Industry research and transfer of technology
- Intervention pillar 4: Infrastructure investment.

4.1 Entrepreneurial support

Government has prioritised entrepreneurship and advancement of SMEs as a catalyst to achieve economic growth and development. According to Global Entrepreneurship Monitor (GEM, 2013) South Africa is characterised by high levels of necessity or survival entrepreneurship. These are ventures classified as informal, mainly initiated because beneficiaries have nothing else as a basis of livelihoods. Necessity or survival entrepreneurship is also synonymous with low growth and stagnant development. Opportunity entrepreneurship is however accompanied by high levels of human capital and high-growth but also likely to be sustainable, which is in contrast to necessity entrepreneurship.

Catalysing high-growth entrepreneurial behaviour of smallholder producers is critical, essential and probably one of the few alternatives to enable smallholder producers to benefit from inclusion into the formal agro-processing mainstream economy through active participation in the value chains. Entrepreneurship involves starting or creating a new venture, innovating or putting together new combinations of resources; relentlessly pursuing opportunity, acquiring resources, taking calculated risks, ensuring profit-seeking and creating value. Participation of SME processors and smallholder farming entrepreneurs in agro-processing activities is influenced and affected by cognitive abilities including exogenous factors at disposal of individual smallholder producers (see Fig. 3 below). Therefore, exploitation of agro-processing business opportunities will be reliant on capability of SME agro-processors and smallholder producers to discover, recognise and exploit business opportunities.

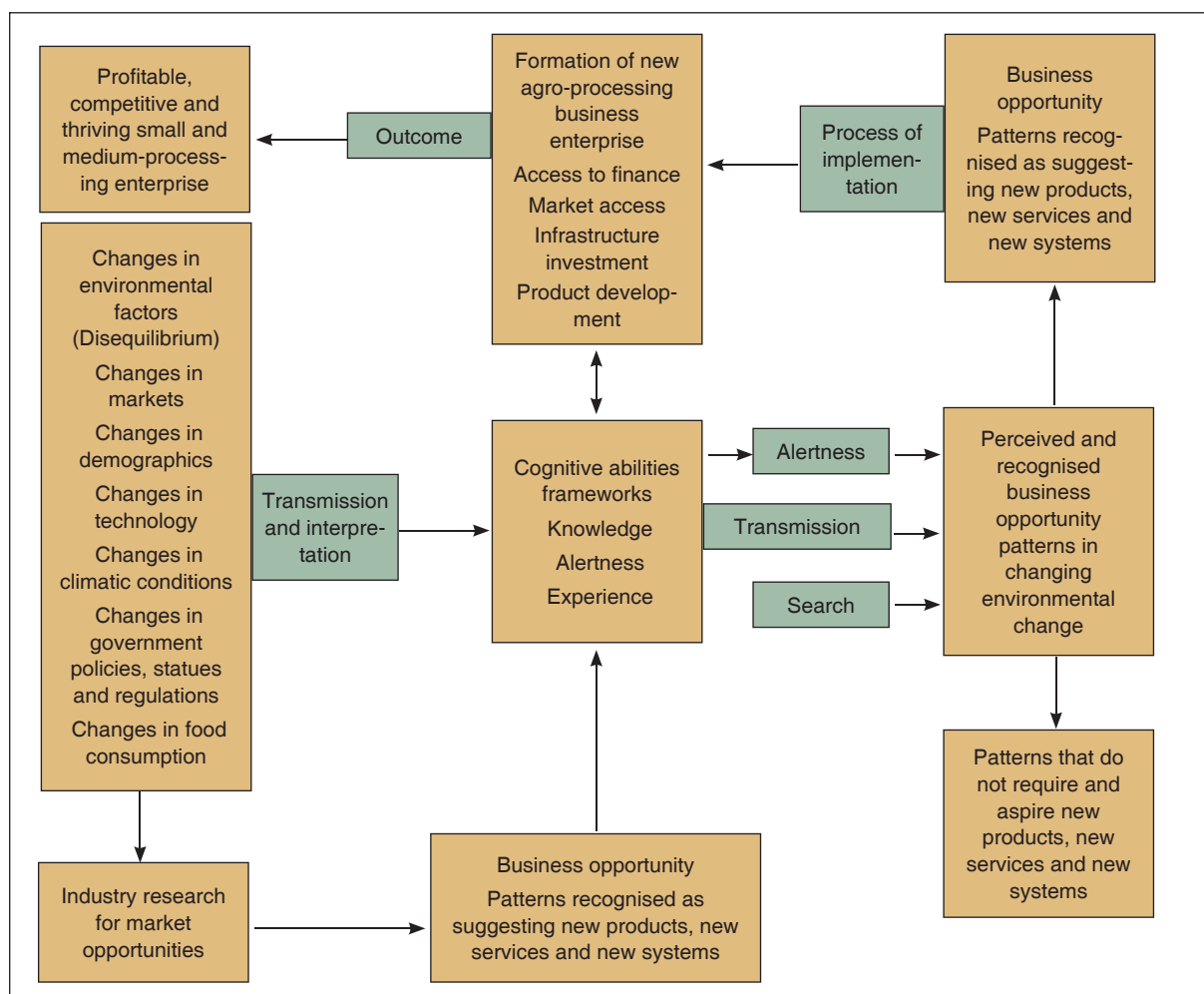


FIG. 3 Pattern of business opportunity recognition

Source: Adapted from Baron, 2006

As increasing and improving entrepreneurial facets of SME agro-processors is critical, Government will implement the entrepreneurial support through the entrepreneurial programmes which will include, but is not limited to:

- establishing networks and ties with training and capacity building institutions that provide entrepreneurial skills development. Networking will be used as a tool by which entrepreneurs use a wide variety of contacts to help them achieve their business and professional objectives. Networking will give entrepreneurs greater access to information, new clients and people with similar business interests.
- entering into partnerships with accredited training institutions such as The Innovation HUB Management Company (TIHMC), Limpopo Agro-food Technology Station, Small Enterprise Development Agency (SEDA), incubation centres, non-governmental agencies such as centres for entrepreneurship and any other institutions involved in the promotion and enhancing entrepreneurial culture
- collaborating with agro-processing industry organisations, provincial departments of agriculture, forestry & fisheries and local government to promote and support SME agro-processors entrepreneurial ventures
- liaising with organised agriculture to access and leverage training programmes already at play, particularly from incubation and mentorship programmes. Mentorship and incubation programmes will offer individual support to the SME agro-processors. The support can include expert advice, business introductions and help with gaining practical experience on the actual technical and management of agro-processing enterprises.
- leveraging on mentorship programmes and strategic partnerships between government and private sector to promote entrepreneurial skills of SME agro-processors
- facilitate hosting of agro-processing information days geared to improve skills and understanding of agro-processing market requirements.

4.2 Enterprise development

AgriBEE charter, which is derived from Broad Based Black Economic Empowerment (BBBEE Act 53 of 2003), noted enterprise development as a critical pillar meant to transform, accelerate growth and development of smallholder producers. Enterprise development involves initiatives intended to assist and accelerate development and financial sustainability of SMEs. Measures of enterprise development range from financial support to non-financial support (see Fig. 4). While the financial support mainly involves facilitating access to finance, the non-financial support involves facilitating market access, incubation and mentoring. Many corporations and big businesses commit a percentage of net profit after tax towards enterprise development expenditure which is aimed at development and growth of SMEs in various capacities, including financial and non-financial support (BBBEE Sector Code for Agriculture, 2012).

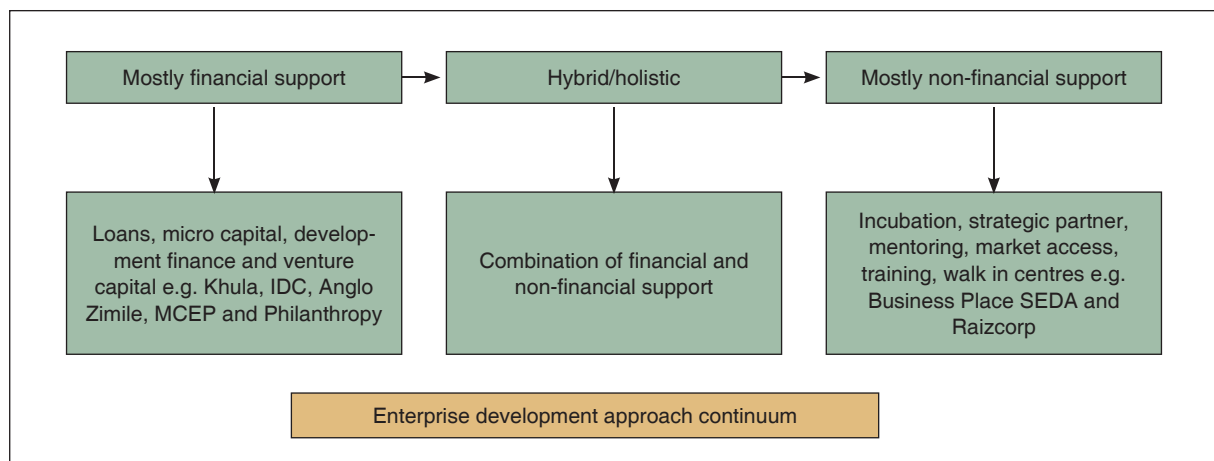


FIG. 4 Approaches to enterprise development

4.2.1 Access to finance

A study done by the Technical Centre for Agricultural and Rural Cooperation (CTA, 2000) on the small-scale food processing sector in South Africa reveals that more than 80% of SMEs cited limited access to finance as the biggest constraint for business operation and expansion. These assertions are further contained in the Global Entrepreneurship Monitor (GEM, 2013) that lack of access to start-up finance remains a major impediment to successful small business initiation. The main reason for inability to access finance was high collateral required by financial institutions considering high-risk profile attached to this segment and the inability to provide a track record of financial statements owing to poor financial record keeping. As a result, producing a bankable business plan for funding to be considered by financial institutions is a huge challenge. Therefore, SME agro-processors cannot obtain appropriate processing facilities and machinery to operate their businesses.

Improving access to finance by SME agro-processors will, therefore, be implemented through:

- establishing networks and ties with various financing institutions focusing on development finance institutions located within the government sphere
- entering into partnerships with accredited and approved financial institutions, specifically those located within government sphere to facilitate positive processing of applications
- lobbying various conglomerates within the agro-processing space for sizable enterprise development spent allocation towards promotion, support and development of SME agro-processors
- training and capacity building of SME agro-processors to appreciate funding pre-requisites and requirements
- lobbying for linkage of grant funding available within government with loan funding to enhance probability of positively assessing loan. This will be done through liaising and engaging provincial department of agriculture and local municipalities.
- lobbying the Department of Trade and Industry to consider grant funding mechanism solemnly dedicated to agro-processing segment of the manufacturing sector noting unique and dynamic nature of this subsector. Currently, Manufacturing, Competitiveness and Efficiency Programme (MCEP) does not adequately and sufficiently meet financing requirements of SME agro-processing segment.
- DAFF to set aside a percentage of grant or loan funds to support agro-processing investments.

4.2.2 Market access

Several studies shows that stringent regulations and standards, including the apparent need for a consistent and large volume supply put SME processors in unfavourable positions to access formal markets. Consequently, SME processors tend to supply to the informal market and therefore are unable to expand their operations. To access formal mainstream markets which is vital to the growth and sustainability of SME agro-processing enterprises, market readiness of rural based small and medium enterprises is critical.

4.2.2.1 MARKET READINESS

Market readiness by SMEs requires complying with the standards, regulation and volume of supply needed by the formal mainstream markets. Findings by Mather (2005) indicate that requirements imposed by the retail sector are so onerous for SMEs that a huge “step-up” investment is needed to qualify in order to be listed as a supply company for the retailers. SME food-processors, for example, are required to obtain Hazard Analysis and Critical Control Points (HACCP) accreditation by retailers before they could be contracted to supply them. Furthermore, formal markets require the SME processing facility to be certified with Food Safety Standards Certification (FSSC 22 000). Complying with all these certifications not only requires huge capital investment by SME agro-processors, which is in short supply, but also an understanding of these standards and regulations is inadequate, which can be imparted through training and mentorship.

To assist SME entrepreneurs in accessing formal mainstream markets, government will play a facilitating role in ensuring market readiness of SMEs by providing assistance in meeting the standards required from the formal markets through quality certification programmes which will be implemented in collaboration with the South African Bureau of Standards (SABS) as the custodian of quality assurance in South Africa.

Other intervention mechanisms will include:

- establishing networks and ties with various retailers and wholesalers focusing on requirements of enterprise development within AgriBEE charter to secure markets for SME agro-processors
- entering into partnerships with various hospitality sectors to provide markets to SME agro-processors
- lobbying government departments to allocate a portion of processed food tenders to SME agro-processors, recognising the huge budget spent by government on procurement of various processed products
- lobbying various conglomerates within the agro-processing space for sizable enterprise development spent allocation towards promotion, support and development of SME agro-processors
- training and capacity building of SME agro-processors to appreciate market pre-requisites and requirements
- capacity building through training and demand-driven technical assistance that relate to HACCP, Good Agricultural Practice (GAP), Good Manufacturing Practice (GMP), identity preservation, traceability methods, product and packaging standardisation, and industry codes of practice, etc. Strengthening producer and industry associations could be one vehicle for this support. This support could be horizontal (across subsectors) or focused on one or a few commodity subsectors.

4.2.3 INCUBATION

Business incubators are organisations that provide a business environment that is protected to assist and capacitate start-up and emerging businesses. Incubators provide floor space, secretarial support, shared office space and IT equipment, mentoring and networking and venture capital. Incubators assist start-up and emerging businesses to develop ideas from conception to commercialisation. They turn ideas into new viable businesses at reduced risks. Incubators assist start-ups and emerging businesses to survive during a period when they are most vulnerable. Incubators are therefore in the business of facilitating entrepreneurship of start-up and emerging enterprises. Various incubator models exist for implementation such as not-for-profit incubator, for-profit incubator and private equity. It has been proven that successful completion of a business incubation programme increases the likelihood that a start-up company will stay in business for a long term (Dees, 2000).

Various government sanctioned incubations like the Limpopo Agro-Food Technology Station (LATS) will be approached for intake of SME agro-processors. The following interventions will also be undertaken:

- establishing networks and ties with various private incubators for absorption of SME agro-processors that are ready and available for incubation
- lobbying various conglomerates within the agro-processing space for sizable enterprise development spent allocation towards promotion, support and development of SME agro-processors through incubation
- entering into partnerships with accredited and approved incubators located within government sphere to facilitate absorption of SME agro-processors. The Department of Science and Technology (DST), for example, has established the agro-processing incubation at the Limpopo Agro-Food Technology Station dedicated to incubate small and medium agro-processing enterprises.

4.3 Industry research and transfer of technology

Most studies have indicated that SMEs lack appropriate agro-processing technologies that are simple to operate and manage. Furthermore, research and development of SME agro-processing machinery

and equipment have not received the adequate support it deserves. As a result, SME agro-processors use rudimentary technologies in their business activities, which hamper their performance, financial sustainability and competitiveness (SEDA, 2008).

There is also a general shortage of basic and applied research that is directed to enhance the participation of rural based SME agro-processing industry. Research on identifying the best practices to promote SME agro-processing, exploring the issues and challenges facing SMEs and evidence-based intervention needed to enhance their participation is critical for the growth and better positioning of the SMEs in the competitive global environment. In addition, understanding the issues and challenges facing the agro-processing industry at large and monitoring the trends and the participation of SME in the industry is useful to evaluate the progress of several governmental and SOE initiatives.

As part of implementation of this strategy, research and the transfer of appropriate agro-processing technologies, and related support services such as the skills needed to operate and maintain the technology to SME agro-processors will be supported through:

- collaborating with, among others, academic institutions, the Department of Science and Technology (DST), Agricultural Research Council (ARC), Council for Scientific and Industrial Research (CSIR) and The Innovation HUB Management Company (TIHMC) in the provision of access to appropriate processing technology for SME agro-processors
- establishing networks and ties with various private companies involved in research and development of SME agro-processing machinery and equipment
- facilitating and supporting basic and applied research for identifying market and investment opportunities
- engaging with international institutions to adopt best practices and business models for SME agro-processing development such as the Indian Institute of Crop Processing Technology.

4.4 Infrastructure investment

Infrastructure is critical to developing, maintaining, and strengthening value chains in the economy. Quality and affordable infrastructure enhances economic productivity and permits economic expansion through exploitation of new opportunities by SME agro-processors. Infrastructure also builds on social capital and encourages entrepreneurship because of reduced transaction costs. Infrastructure obstacles such as poor state of the roads, inadequate road networks, poor communication modes, lack of electricity and poor sanitation hinder market efficiency—resulting in high transaction costs faced by SME agro-processors. This is further exacerbated by the inadequate and acute lack of appropriate agro-processing machinery among SME agro-processors.

Infrastructure, however, has potential to confer competitive and comparative advantage to SME agro-processors. While competitive advantage stems from possession of unique set of various assets such as locational advantages, natural resources, human capital and other elements that give enterprises advantage over others, comparative advantage entails the ability to produce and render a product more efficiently, competitively and effectively than its counterpart.

Some of the intervention mechanisms to implement infrastructural investment for SME agro-processors include lobbying and advancing infrastructure requirements necessary to promote and support the development of SME agro-processing industry through the Presidential Infrastructure Coordinating Commission (PICC), specifically Strategic Integrated Projects (SIP11).

5. ROLES AND RESPONSIBILITIES

The roles and responsibilities of various stakeholders for the implementation of this strategy are as follows:

5.1 DAFF

DAFF has the following central role in providing support on the implementation of the strategy:

- assist in the formulation and designing of the strategy
- facilitate industry research and scout for available technology and information for usage by SME agro-processors
- develop strong market intelligence network to cater for the information needs of stakeholders
- establish networks and ties with training and capacity building institutions that provide entrepreneurial skills development
- enter into partnerships with accredited training institutions such as The Innovation HUB Management Company (TIHMC), Small Enterprise Development Agency (SEDA), incubation centres, non-governmental agencies such as Centres for Entrepreneurship and any other institutions involved in promotion and enhancing entrepreneurial culture
- collaborate with agricultural, forestry and fisheries research institutions to identify research and development (R&D) required by SME's agro-processors
- leverage on mentorship programmes and strategic partnerships between government and private sector to promote entrepreneurial skills of SME agro-processors and smallholder producers
- facilitate hosting of agro-processing information days aimed to improve skills and understanding of requirements
- collaborate with global institutes in the area of processed agriculture, forestry and fisheries products
- ensure participation of provincial Departments of Agriculture, Forestry and Fisheries, the Department of Trade and Industry, Economic Development Department, government agencies, organised agriculture, agro-processing industry and relevant stakeholders in the implementation of the strategy
- facilitate the undertaking of the feasibility study and business planning of the agro-processing hub
- review the strategy on an ongoing basis, depending on changes in the environment and on the requirements of the provinces, producers and other stakeholders
- facilitate investment opportunities for SME agro-processors
- monitor and evaluate the implementation of this strategy.

5.2 The Department of Trade and Industry and the Department of Small Business Development

The Department of Trade and Industry and Department of Small Business Development are expected to:

- broaden capacity of SEDA to cater for SME agro-processing initiatives
- enhance and intensify entrepreneurial support and development
- enhance and facilitate the ease of registering legal entities of SME agro-processors
- enhance and broaden the role of IDC in supporting and developing SME agro-processors
- enhance and intensify formal market access linkages for SME agro-processors
- build global brands on the back of South African SMEs agro-processors' strength
- facilitate the promotion of aggregated exports to meet the minimum order requirement of importers
- undertake industry specific campaign in conjunction with other government agencies including DAFF, EDD and IDC to attract foreign direct investment focusing on SME agro processors
- reconfigure Manufacturing Competitiveness and Efficiency Programme (MCEP) to cater specifically for SME agro-processors taking into consideration the characteristics of the subsector

- providing financial resources towards investment in SME agro-processing machinery and equipment.

5.3 Provincial Department of Agriculture

Provincial departments of agriculture are expected to:

- align the provincial agro-processing strategies with the DAFF agro-processing strategy
- incorporate provisions of strategy into annual performance plans and operation plans of respective departments
- assist in the identification and implementation of agro-processing initiatives
- contribute towards the development and review of the strategy
- interpret, internalise and popularise the strategy amongst key stakeholders to fast track implementation
- mobilise supplementary resources to leverage the available public resources
- continuously investigate agro-processing infrastructure gaps experienced by SME processors in collaboration with the national department and industry bodies
- provide resources both financial and non-financial required to implement agro-processing strategy
- undertake continuous monitoring and evaluation to assess the impact of the strategy on beneficiaries
- evaluate the effectiveness of the strategy.

5.4 Financial Institutions including Development Finance Institutions (DFIS)

Financial institutions are expected to perform the following functions:

- revise evaluation and qualifying parameters for agro-processing enterprise financing (e.g. value chain financing)
- enhance and broaden financial assistance to SME agro-processing projects
- serve as efficient disbursement institutions for financial resources from the state
- promote the public-private partnership and joint ventures
- make financial resources available towards the implementation of the various programmes in this strategy.

5.5 Technology Transfer Institutions

Technology transfer institutions are expected to perform the following functions through MoU with DAFF:

- provide affordable, user friendly and quality agro-processing technologies
- research, develop, and transfer appropriate agro-processing to SME
- train and capacitate SME agro-processors on the usage of agro-processing technology
- continuously research latest innovation and transfer up-to-date agro-processing technology to keep abreast with trend of the industry.

5.6 Research and Academic Institutions

Research and academic institutions are expected to perform the following functions through the MoU with DAFF:

- engage on both basic and applied research, focusing on industry needs
- protect SME agro-processors' interest by ensuring that patents are obtained for all research carried out for processors

- conduct research for agro-processing trade and investment opportunities
- provide potential market access gaps
- conduct research on competitiveness improvement
- conduct demand and opportunity driven technical research on agro-processing
- best practice or lessons on promoting SME agro-processing industry.

5.7 Private Sector and Organised Industry Associations

Private sector and organised industry associations are expected to:

- design and implement special training programmes to upgrade unorganised SME's agro-processors
- assist in facilitating market access linkages
- provide adequate capacity and development training
- assist in the facilitation of the formation of SME agro-processing associations with the relevant provincial departments.

5.8 National Agricultural Marketing Council (NAMC)

National Agricultural Marketing Council is expected to perform the following functions through MoU with DAFF:

- provide infrastructure for the agro-processing hub as a custodian of Strategic Integrated Plan (SIP) 11
- facilitate the development of a network of warehouses at appropriate locations
- participate in public-private partnerships for infrastructure development
- institute evaluation and monitoring mechanism for projects assisted under SIP 11
- facilitate market access linkages
- facilitate and support export promotion.

5.9 Donors and NGO'S

Donors and NGO's are expected to:

- facilitate access to finance assist in training and capacity building of SME agro-processors
- provide seed funding to SME agro-processors
- facilitate the scoping of bankable agro-processing for SME processors
- facilitate the implementation and monitoring of the strategy through public-private partnerships.

5.10 National Agro-processing Forum

The National Agro-processing Forum, is expected to:

- serve as a platform for reporting and reviewing progress regarding the implementation of the strategy
- serve as platform to exchange experiences and best practice models on implementing the strategy
- monitor and evaluate progress on implementation of the strategy.

6. IMPLEMENTATION PLAN

The following framework shows the strategy for implementing the plan.

Outcome	Key Priority Area	Goals	Activities	Output	Indicators	Role players
Vibrant, equitable and sustainable rural communities with food security for all Decent employment through inclusive economic growth	Entrepreneurial support	Develop and enhance entrepreneurship by SME agro-processors	Facilitate the identification of SME agro-processing enterprises requiring entrepreneurial training Facilitate the signing of MoUs and SLAs with and training agencies Facilitate access to entrepreneurial support programmes for SME agro-processing enterprises	SME agro-processing enterprises requiring entrepreneurial training identified Facilitate access to entrepreneurial support programmes for SME agro-processing enterprises Entrepreneurial support programmes accessed by SME agro-processing enterprises	List of SME agro-processing enterprises identified for entrepreneurial training Number of MoUs and SLA's signed with training agencies Number of SME agro-processing enterprises accessing entrepreneurship programmes	DTI, SEDA, DSBD, ARC, CSIR, industry organisations, universities, private companies, service providers, Directorate: Agro-Processing Support, Directorate: Marketing, Provincial Department of Agriculture, training institutions, industry organisations, private sector and SME agro-processors
Decent employment through inclusive economic growth Vibrant, equitable and sustainable rural communities with food security for all An efficient, competitive and responsive economic infrastructure network Skilled and capable workforce to support an inclusive economic growth Environmental assets and natural resources that are well protected and continually enhanced	Access to finance	Access to funding	Facilitate compilation of agro-processing business plans for funding consideration Facilitate submission of agro-processing business plans for screening and funding consideration Monitor the implementation of the funded agro-processing projects	Viable bankable agro-processing business plans Bankable business plans submitted Implementation of funded agro-processing projects	List of viable agro-processing business plans Number of bankable business plans submitted Number of funded agro-processing projects implemented	Land Bank, DBSA, IDC, commercial banks, DAFF, donors, National Empowerment Fund, private sector, government agencies, Provincial Department of Agriculture, industry organisations, private sector and SME agro-processors
Vibrant, equitable and sustainable rural communities with food security for all Decent employment through inclusive economic growth	Market access	Access to mainstream markets	Facilitate the identification of SME agro-processing enterprises for integration into mainstream markets Facilitate the coordination of market sale contracts by SME agro-processing enterprises	Database of SME agro-processing enterprises identified for market linkages Mainstream markets identified and information on market standards provided	List of SME agro-processing enterprises identified for market linkages Number of identified mainstream markets and information provided on market standards	Provincial Department of Agriculture: Directorate: Marketing, Directorate: Agro-processing Support, private sector companies including embassies in South Africa, DTI, DSBD, relevant directorates

Outcome	Key Priority Area	Goals	Activities	Output	Indicators	Role players
Skilled and capable workforce to support an inclusive economic growth	Incubation	Incubation of SME agro-processing enterprises	<p>Facilitate the identification of mainstream markets and provide information on market standards</p> <p>Facilitate markets standard compliance by SME agro-processing enterprises</p> <p>Facilitate the identification of SME agro-processing enterprises that require incubation</p> <p>Facilitate the signing of MoUs and SLAs with incubators</p> <p>Facilitate access to incubation programmes by SME agro-processing enterprises.</p>	<p>SME agro-processing enterprises complied with standards required by the market</p> <p>Market contracts signed</p> <p>SME agro-processing enterprises that require incubation identified</p> <p>MoUs and SLAs signed with incubators</p> <p>Incubation programmes accessed by SME agro-processing enterprises</p>	<p>Number of SME agro-processing enterprises that comply with the market standards</p> <p>Number of sale contracts signed</p>	<p>governmental Departments, organised agriculture, training institutions, industry organisations, private sector and SME agro-processors</p> <p>DTI, DSBD, SEDA, ARC, CSIR, industry organisations, universities, private companies, service providers, Directorate: Agro-processing Support; Directorate: Marketing, Provincial Department of Agriculture, industry organisations, private sector and SME agro-processors</p>
An efficient, competitive and responsive economic infrastructure network Vibrant, equitable and sustainable rural communities with food security for all.	Industry research, and transfer of technology	<p>Transfer of technology to SME agro-processing enterprises</p> <p>Enhance competitiveness and future positioning of agro-processing industry</p>	<p>Identification and selection of appropriate agro-processing technology for transfer to SME agro-processing enterprises</p> <p>Facilitate the signing of MoUs and SLA's with technology institutes and companies</p> <p>Monitoring the transfer of agro-processing technology</p> <p>Monitoring trends in agro-processing industry</p> <p>Conducting demand and opportunity driven research on agro-processing</p>	<p>Appropriate technologies identified and selected</p> <p>MoUs and SLAs signed with technology institutes and companies</p> <p>Agro-processing technology transferred to SME agro-processing enterprises</p> <p>Quarterly and annual industry reviews</p> <p>Research reports</p>	<p>Number of appropriate technology identified and selected for transfer</p> <p>Number of MoUs signed with incubators</p> <p>Number of SME agro-processing enterprises accessing incubation and entrepreneurship programmes</p> <p>Number of quarterly and annual industry reviews</p> <p>Number of research reports</p>	<p>ARC, CSIR, industry organisations, private companies, service providers, Directorate: Agro-processing Support, Provincial Department of Agriculture, industry organisations, private sector, NAMC, ARC, CSIR, IDC, Directorates Agro-processing Support; Directorate: Marketing, SME agro-processors, universities and other research institutions</p>
An efficient, competitive and responsive economic infrastructure network Vibrant, equitable and sustainable rural communities with food security for all.	Infrastructure investment	Adequate agro-processing infrastructure	<p>Facilitate the identification of infrastructure required by SME agro-processing enterprises</p> <p>Facilitate the implementation of infrastructure projects through PICC (SIP11)</p>	<p>Infrastructure needs identified</p> <p>Infrastructure projects implemented</p>	<p>List of infrastructure needs identified</p> <p>Number of infrastructure projects implemented</p>	<p>ARC, CSIR, industry organisations, private companies, service providers, Directorate: Agro-processing Support, Relevant Provincial Department of Agriculture, industry organisations, private sector and SME agro-processors</p>

7. REPORTING MECHANISMS

The following reporting framework will be used by all affected stakeholders on an annual basis to track progress regarding implementation of the strategy. Reporting shall be tabled to the National Agro-processing Forum

Item	Key Priority Area	Objectively verifiable Indicators (OVI)	Target	Actual Achievement	Challenges	Corrective/measures	Budgeted amount	Budget spent
1.	Entrepreneurial Support	List of SME agro-processing enterprises identified for entrepreneurial training Number of MoUs and SLA's signed with training agencies Number of SME agro-processing enterprises accessing entrepreneurship programmes						
2.	Access to finance	List of viable agro-processing business plans Number of bankable business plans submitted Number of funded agro-processing projects implemented						
3.	Market access	List of SME agro-processing enterprises looking for market linkages Number of identified mainstream markets and information provided on market standards Number of SME agro-processing enterprises that comply with the market standards Number of sale contracts signed						
4.	Incubation	List of SME agro-processing enterprises that require incubation Number of MoUs signed with incubators Number of SME agro-processing enterprises accessing incubation and entrepreneurship programmes						
5.	Industry research, and transfer of technology	Number of appropriate technology identified and selected for transferred to SME agro-processing enterprises Number of MoUs signed with technology institutes and companies Number of SME agro-processing enterprises that received technology transfers Published quarterly and annual industry reviews Number of research reports						
6.	Infrastructure investment	List of infrastructure needs identified Number of infrastructure projects implemented						

8. MONITORING AND EVALUATION

A proper monitoring and evaluation plan of government programmes is a central role that central government should fulfill. DAFF, through its Planning, Policy, Monitoring and Evaluation (PME) Programme has put systems in place to monitor departmental performance. The monitoring and evaluation framework presented below will be an input to the bigger DAFF PPME system. It is presented below:

Outcome 4: Decent employment through inclusive economic growth

Outcome 7: Vibrant, equitable and sustainable rural communities contributing towards food security for all

To increase the participation of rural-based small and medium agro-processing industry in the economy								
Entrepreneurial support								
Key Objective	Intervention Pillars	Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Develop and enhance entrepreneurship by SME agro-processors			Facilitate the identification of SME agro-processing enterprises requiring entrepreneurial training	SME agro-processing enterprises requiring entrepreneurial training identified	List of SME agro-processing enterprises identified for entrepreneurial training	Independent evaluator/assessor	Once in five years	SME agro-processing enterprise identified for entrepreneurial training Signed MoUs and SLAs with training agencies Agro-processing enterprises accessing incubation and entrepreneurship programmes
			Facilitate the signing of MoUs and SLAs with training agencies on entrepreneurial support.	MoUs and SLAs signed with training agencies and incubators	Number of MoUs and SLAs signed with training agencies			
			Facilitate access to entrepreneurial support programmes for SME agro-processing enterprises	Entrepreneurial support programmes accessed by SME agro-processing enterprises	Number of SME agro-processing enterprises accessing entrepreneurship programmes			

Outcome 4: Decent employment through inclusive growth

Outcome 5: A skilled and capable workforce to support an inclusive growth path

Outcome 6: An efficient, competitive and responsive economic infrastructure network

Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all

Outcome 10: Protect and enhance our environmental assets and natural resources

To increase the participation of rural-based small and medium agro-processing industry in the economy								
Access to finance								
Key Objective	Intervention Pillars	Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Access to funding			Facilitate compilation of agro-processing business plans for funding consideration	Viable agro-processing business plans	List of viable agro-processing business plans.	Independent evaluator/assessor	Once in five years	Business plan documents.
			Facilitate submission of agro-processing business plans for screening and funding consideration	Bankable business plans submitted	Independent evaluator/assessor			Submission reports of business plans
			Monitor the implementation of the funded agro-processing projects	Implementation of funded agro-processing projects	Number of bankable business plans submitted. Number of funded agro-processing projects implemented			Agro-processing enterprises that are operational

Outcome 4: Decent employment through inclusive growth
Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all

To increase the participation of rural-based small and medium agro-processing industry in the economy								
Market access								
Key Objective	Intervention Pillars	Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Link SME scale agro-processing enterprises to markets		Facilitate the identification of SME agro-processing enterprises for integration into mainstream markets Facilitate the identification of mainstream markets and provide information on market standards Facilitate markets standard compliance by SME agro-processing enterprises. Facilitate the coordination of market sale contracts by SME agro-processing enterprises	Facilitate the identification of SME agro-processing enterprises for market linkages Mainstream markets identified and information on market standards provided SME agro-processing enterprises comply with standards required by the market Market contracts signed	Database of SME agro-processing enterprises looking for market linkages Mainstream markets identified and information provided SME agro-processing enterprises comply with standards required by the market Market contracts signed	List of SME agro-processing enterprises looking for market linkages Number of identified mainstream markets and information provided on market standards Number of SME agro-processing enterprises that comply with the market standards Number of sale contracts signed	Independent evaluator/assessor	Once in five years	List of SME agro-processing enterprises looking for market linkages List of mainstream markets identified and reports on market standards SME agro-processing enterprises that comply with the market standards Signed sale contracts

Outcome 5: Skilled and capable workforce to support an inclusive economic growth

To increase the participation of rural-based small and medium agro-processing industry in the economy								
Incubation								
Key Objective	Intervention Pillars	Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Incubation for SME agro-processing enterprises		Facilitate the identification of SME agro-processing enterprises that requires incubation Facilitate the signing of MoUs and SLAs with incubators Facilitate access to incubation programmes by SME agro-processing enterprises	Facilitate the identification of SME agro-processing enterprises that require incubation identified MoUs and SLAs signed with incubators Incubation programmes accessed by SME agro-processing enterprises	SME agro-processing enterprises that require incubation identified MoUs and SLAs signed with incubators Incubation programmes accessed by SME agro-processing enterprises	List of SME agro-processing enterprises that require incubation Number of MoUs signed with incubators Number of SME agro-processing enterprises accessing incubation programmes	Independent evaluator/assessor	Once in five years	List of incubation programmes required by SME agro-processing enterprise Signed MoUs with agro-processing incubators SME agro-processing enterprises accessed incubation programmes

Outcome 4: Decent employment through inclusive growth**Outcome 5: Skilled and capable workforce to support an inclusive growth path****Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all**

To increase the participation of rural-based small and medium agro-processing industry in the economy						
Intervention Pillars						
Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Technology transfer to SME agro-processing enterprises Enhance competitiveness and future positioning of agro-processing industry	Identification and selection of appropriate agro-processing technology for transfer to SME agro-processing enterprises Facilitate the signing of MoUs and SLAs with technology institutes and companies Monitoring the transfer of agro-processing technology Monitoring trends in agro-processing industry Conducting demand and opportunity driven research on agro-processing	Appropriate technologies identified and selected MoUs and SLAs signed with technology institutes and companies Agro-processing technology transferred to SME agro-processing enterprises Quarterly and annual industry reviews Research reports	Number of appropriate technology identified and selected for transferred to SME agro-processing enterprises Number of MoUs signed with technology institutes and companies Number of SME agro-processing enterprises that received technology transfers Published quarterly and annual industry reviews Number of research reports	Independent evaluator/assessor	Once in five years	List of appropriate agro-processing technology identified for transfer Signed MoUs SME agro-processing enterprises that received technology transfers Published quarterly and annual industry reviews. Research reports

Outcome 6: An efficient, competitive and responsive economic infrastructure network**Outcome 7: Vibrant, equitable and sustainable rural communities with food security for all****Outcome 10: Environmental assets and natural resources that are well protected and continually enhanced**

To increase the participation of rural-based small and medium agro-processing industry in the economy						
Intervention Pillars						
Goals	Activities	Outputs	Indicators	Responsibility	Frequency	Evidence
Facilitate infrastructure investment for agro-processing industry Facilitate implementation of infrastructure through PICC (SIP11)	Facilitate the identification of infrastructure required by SME agro-processing enterprises	Infrastructure needs identified Infrastructure projects implemented	List of infrastructure needs identified Number of infrastructure projects implemented	Independent evaluator/assessor	Once in five years	Database of infrastructure needs identified Implemented infrastructure projects

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