

NON-SUGAR SECTOR STRATEGIC PLAN

EXECUTIVE SUMMARY

1.1 With a view to achieving the objective of a 'modern agriculture', a reorientation of the non-sugar agricultural sector is imperative. The main component of this reorientation strategy is to promote a transition from the traditional practices, towards a more sophisticated, technology-based approach to agriculture with focus on attaining a certain degree of self-sufficiency, meeting quality exigencies, developing the local agro-processing industry, promoting entrepreneurship, optimising export opportunities, conforming to international norms governing food safety and maximising on the potential benefits of regionalisation.

1.2 The need for this reorientation process in agriculture has become essential at this juncture whereby Government is actively promoting the adoption of new technology in all economic sectors. This rethinking strategy for agriculture has also become critical owing to a number of constraining factors, which altogether have proven that the conventional agricultural practices are too obsolete to sustain in the present highly competitive environment. The inherent constraints such as high vulnerability to climatic offsets, depleting cultivable land resources in favour of more remunerative economic activities, and high cost of labour and agricultural inputs have always posed severe impediments to agricultural development in Mauritius. Furthermore, the increasing internal and external challenges, with mounting competition at the market front, increasing food demand, higher customer exigencies, more stringent regulations governing food issues and trade in agriculture and enhanced pressure to attain a certain level of food security on the global scene, have altogether called for a review of the whole agricultural sector in Mauritius.

1.3 Following the implementation of the Strategic Plan for the Sugar Sector, the inception of a 'Strategic Plan for the Non-Sugar Sector' comes to lay the foundation for

restructuring all non-sugar sectors within agriculture. In fact, in light of the difficulties being encountered within the sugar sector, the Mauritian non-sugar sector will be called upon to assume an even more important role in the agricultural economy.

1.4 This plan has been conceived as a comprehensive document elaborating on all the measures to be adopted to bring about the forecasted transition towards a modern agriculture, with a view to rendering the sector more economically sustainable and viable.

The plan for the non-sugar sector has the following main objectives:

- (i) addressing the main direct constraints within the sector;
- (ii) optimising productivity by promoting **transfer of technology**;
- (iii) enhancing **quality** and providing the appropriate framework through the setting up of a *Food Technology Laboratory* to ensure that all agricultural activities are done in strict conformity with international norms governing food safety and quality;
- (iv) attaining a certain degree of **self-sufficiency** in sectors in which Mauritius is not already self-sufficient;
- (v) diminishing imports in the sector, in view of the high Food Import Bill;
- (vi) optimising utilisation of resources by fostering a concept of an **organised agriculture**;
- (vii) reorganising marketing at the local and international market levels, with a view to optimising profitability to stakeholders, based on up-to-date market information through the setting up of a **Market Information System** that will be operated by a *Market Intelligence Unit*;
- (viii) setting-up of a **clustering framework** to foster more productive interaction between agricultural stakeholders and a better public/private sector participation in achieving common objectives and accordingly, establishing the necessary mechanism and incentives;

- (viii) developing potential export avenues, with emphasis on **promotion of value-addition** to primary products and the **promulgation of the local agro-processing industry**;
- (ix) strengthening infrastructural and human capacity to **enhance research and development** support to agriculture with *inter alia*, the setting up of the *Mauritius Agricultural Biotechnology Institute*;
- (x) promoting capacity building and training of agricultural stakeholders in new technology with a view to **encouraging entrepreneurship**;
- (xi) strengthening of administrative, infrastructural and legislative frameworks to achieve the targeted objective of a 'modern agriculture' whilst **ensuring biosafety**;
- (xii) promoting **conservation of natural biodiversity and fostering sustainable utilisation of natural resources**;
- (xiii) ensuring a better, **demand-driven policy orientation** by Government, to optimise utilisation of resources in addressing the needs of the agricultural community and **meeting national priorities**; and,
- (xiv) revamping agriculture in *Rodrigues*.

1.5 It is an inevitable fact that Mauritius is confronted to several constraints that have posed severe impediments to agricultural development. Other than climatic constraints, which has often led to substantial losses to producers, there are many other emerging issues brought about by rapid development in other key economic sectors, which are further limiting the scope of agricultural progress. Nevertheless, despite these constraints, Mauritius is more or less self-sufficient in a number of foodcrops. However, agriculture still holds a lot of promises for Mauritius and it can grow into an even more active contributor to the country's economy. There is enormous scope for development within the limited resources provided the right strategy is devised that would allow optimal benefits to be derived out of the numerous advantages that the country is endowed with.

1.6 In the first place, the strategic plan proposes to judiciously address the most pressing problems faced by the agricultural community. Some of the major measures are discussed below:

(i) Census for Agriculture

In view of major role of agriculture in the economy, it is proposed that the Central Statistics Office *conducts a census for the whole agricultural sector*. This census would greatly assist the Central Statistics Office in the preparation of the economic accounts for the sector, which it is called to do, and which has so far been based on *ad hoc* production cost surveys of planters and on technical coefficients provided by the Ministry and related parastatals. Data collected from the census would also provide more accurate and reliable benchmark data that would assist in the reviewing and readjustment of policies and national plans with a view to channeling resources and targeting priority areas in a more productive manner. This would also help policy decision makers in the productive planning of future development in the sector. It is also proposed to carry out a similar study in Rodrigues.

This census would thus provide a **solid database on agriculture** which was so far lacking and posed a major hindrance in the formulation of policies.

(ii) Planning of Production

The plan also fosters the **concept of an organised production system**. It is evident that production in Mauritius is self-regulated, and not based on any scientific data. Production in Mauritius at the planters level has been done mostly based on experience of planters accrued over the years, which somehow provide useful indications. However, a good reflection of climatic, seasonal, geographical and market indexes is essential in the optimisation of agricultural production, which has however so far not been taken into

consideration while planning production. The vision of a **planned production** within agriculture forms the basis of the proposed reform at the planters' level. The Ministry is accordingly proposing to set up the necessary logistics, which will be centred around a strong informative service coupled with a strengthened extension support, to optimise the accessibility of up-to-date, timely and accurate data to planters. To this end, the proposed **Agricultural Information System** will play a primordial role in reorganising agriculture by serving as a national database for the horticultural sector. The **Land Data Bank** which is proposed to be set up will also assist in the judicious planning and optimal utilisation of agricultural land resources.

(iii) Irrigation

Irrigation is an essential component in successful agriculture. A lot of emphasis is being laid in the plan through a series of measures with a view to ensuring a judicious utilisation of water resources in agriculture. The institution of an '**Irrigation Liaison Committee**' for close monitoring of irrigation related issues island-wide, the sensitisation of planters on efficient irrigation techniques, the promotion of fertigation techniques in modern agricultural systems and the setting up of an '**Irrigation Association**' as joint public/private sector forum to oversee the whole irrigation issue with a view to recommending appropriate policy measures, are a few proposals made along this line.

(iv) Reorganisation of Marketing

Marketing logistics for agriculture is poor in Mauritius. Profitability to planters has often been questionable in view of the poor marketing system under which they operate presently. A majority of planters still resort to auctioneers to market their produce at the local level. However, a lack of transparency in this system has often been reported, and a price control, ensuring a decent margin of profit to producers, seems difficult. Marketing at

market places is also being done under poor sanitary conditions, which affects the overall quality and marketability of the produce, as well as, puts at risk the safety of customers. In view of increasingly stringent norms governing trade in agriculture, it is imperative that **quality and food safety issues** are given due attention. To this end, it is proposed to **review and restructure the present infrastructure at auctions** in conformity with international norms. It is also proposed to **introduce a grading system** for fresh food items with a view to facilitating price setting and control. A **proper price setting mechanism at auction** is also anticipated, along this line.

Also, with a view to maximising profitability to all agricultural stakeholders, it is felt that the proposed planning of production should be contemplated within a proper market-driven approach. Poor marketability is often the major cause of substantial losses incurred by planters in a number of instances. Bad organisation of production is often linked to surpluses of commodities on the market at some times and severe seasonal gluts at others. To this effect, timely availability of market information is essential. Along this line, it is proposed to set up a **Market Information System** in conjunction with the Agricultural Information system. This will act as a readily accessible network that will allow speedy collection and dissemination of market information and thus would also potentially help in regulating prices at the national level and hence ensure a reasonable margin of profit to producers, resolving the present difficulty encountered due to intermediaries.

With a view to achieving the objective of **a planned market-driven production system both for the local and for export markets**, it is proposed to set up a **Market Intelligence Unit**. This Unit, which will fall under the purview of the Agricultural Marketing Board, will serve as a market regulator both at the local and export markets. By operating on the basis of reliable up-to-date database from the Agricultural Information System and the Market Information System, in fine-tuning local production according to the market demand and exigencies, this Marketing Intelligence Unit will play a pivotal role in revitalising the marketing activity within agriculture as a whole and ensuring optimal profitability. It will also

work in close collaboration with the MIDA and Mauritian embassies in identifying new potential market outlets with a view to boosting up exports.

(v) Quality

One of the fundamental objectives of this reorientation process is the **inculcation of quality notion at all levels of agricultural practices**, ranging from production, post harvest handling, processing and sale. With rising customer needs and exigencies, coupled with increasingly stringent norms regulating food and agricultural trade, quality has become a *sine-qua-non* condition for the development of agriculture and for the expansion of export opportunities. The gradual shift towards organic food worldwide is a clear indication that food safety has become an essential parameter in determining market tendencies.

This situation has called for an urgent review of the norms and standards of the local horticultural sector in general, with a view to setting up the appropriate framework to ensure that the local agriculture is in conformity with international norms. To this effect, assistance is being sought from the European Union for the setting up of a **Quality System for the Horticultural Export Sector** and establishing a **National Code of Practice**, along with the necessary supporting services required to attain this objective at the human capacity, technological and information levels. **Capacity building** in quality related issues at the production, handling, processing and sales levels is also being given due attention in the plan.

Quality at the production level is being fostered through the promotion of modern techniques of production such as **greenhouse cultivation and hydroponic system** that allow more efficient monitoring of quality parameters. Emphasis is also being laid on promoting **biological control in integrated pest management systems** with a view to cutting down on chemical control measures.

The efficient **monitoring of food quality**, however, calls for a series of logistics which so far has not been successfully implemented. At this juncture, with emphasis being laid in the expansion of export-oriented activities and the development of the local agro-industry, a suitable analytical facility for quality control has become essential. In this line, it is proposed to set up a **Food Technology Laboratory**, which will be equipped with the finest technologies for quality assurance and monitoring. This facility will also play a key role in ensuring consumer safety by performing a tight regulation over all food products, whether locally produced or imported, entering the local market outlets. Efficient monitoring of quality will also require a tight control mechanism based on a solid inspection service. In this line, it is proposed to review and **strengthen inspection services** with all authorities concerned at points of sales of all food products to ensure that quality and food safety parameters are duly respected.

The functions of this Food Technology Laboratory will in no way overlap those under the mandate of existing laboratories of other institutions including the Mauritius Standards Bureau.

(vi) One-Stop-Shop

The rapid accessibility to information and technical guidance is central to the development of agriculture. Agriculture being a very sensitive sector, often dealing with perishables, and involving problems that can have rapid devastating consequences such as unexpected disease outbreak, timely assistance is critical to its efficiency. Agricultural stakeholders have often experienced difficulty in obtaining assistance on time. This has either been attributed to the distance constraint to the existing service delivery point or to a lack of information on procedures to follow to accede to the required service. As a remedial solution, it is proposed to set up a **'One-Stop-Shop'**, which will act as a facilitating, **rapid problem-solving body** to all stakeholders involved in agricultural activities. This 'One-

Stop-Shop' will be centrally located to allow easy accessibility and will offer a range of specialist services encompassing all local agricultural activities with a view to offering directed, fast track service. It will also be endowed with an up-to-date information system and documentation center on agriculture, which will be open for consultation by agricultural stakeholders.

(vii) Scarcity of cultivable land

Scarcity of cultivable land has been a major constraint for foodcrop growers in sustaining their agricultural activities. In view of unprecedented changes within the sugar sector brought about by the recent reform process, lesser land is being rented out for foodcrop cultivation by sugar estates. With a view to addressing the issue of land scarcity, Government has recently, by way of legislation, increased the acreage of land to be rented out by sugar estates to foodcrop growers from 50% to 65%, i.e. an extra 345 hectares. Furthermore, it is proposed to reach an agreement with sugar estates in order to ensure that land is released to growers at appropriate crop plantation times and at a reasonable cost.

However, considering our geographical limitations as a small island, future agricultural development strategies within Mauritius cannot be based on expansion of cultivable land areas. Instead such strategies have to be in tune with national development plans, which commands the increasing commitment of land in favour of other economic activities. In this context, the adoption of **intensive cultivation techniques based on modern practices** has become essential in optimising our agricultural productivity within the limited land resources. Such a transition away from conventional practices will also assist in raising the standards of agricultural production and will allow better control over quality parameters. In this regard, one of the fundamental aims of the plan is based on the vulgarisation of modern production techniques amongst the planting community. Planters will be

encouraged to shift away from outdoor cultivation towards intensive cultivation techniques under protected environment. In this respect, planters will be sensitised to take advantage of **greenhouse and hydroponic systems**. Cultivation under greenhouses will allow the optimal utilisation of agricultural space and will also contribute in enhancing productivity through a better control over environmental parameters. Another main concern as regards the present production standard is the quality of our produce. In this regard, cultivation under greenhouse conditions based on modern fertigation techniques, by providing more precision in the application of agricultural inputs will play an important role in quality improvement. In addition to providing a certain degree of protection against the entry of pests and diseases, such a system will also assist in limiting the usage of chemicals in control programmes. It is also proposed to promote **soil-less cultivation** techniques in non-arable areas and marginal lands, which are otherwise unproductive. In this respect, planters will be sensitised on the numerous financial facilities that can be extended to them in meeting the initial investment costs. Necessary training will also be imparted to interested growers with a view to aiding this transition process and facilitating the efficient **transfer of technology**. In this new approach to agriculture, planters will be encouraged to adopt a more **professional attitude** in their activities.

The feasibility and application of **new emerging technologies** in the local context that are less land resource dependent is also being looked into. In this respect, it is proposed to investigate into the technical and financial feasibility of **aeroponics culture** on a commercial basis in Mauritius.

(viii) Regional possibilities to expand local agricultural production base

Regional possibilities as potential production bases will also be studied as a means of increasing our production capacity. The objective is to use the technological advantage in agriculture to take optimal benefits of the regional assets such as its high production

capacity and cheap labour. Production in the region, if achieved, will greatly assist in cutting down on local imports within the food sector. This strategy will also be highly beneficial to the local agro-industry, which presently depends almost entirely on imports for its raw materials. The probability of producing seasonal commodities that can be cost effectively grown in the region such as potatoes and onions on a complementary basis could be contemplated. However, it is essential that the feasibility and the financial implications of such an endeavour be assessed, prior to encouraging Mauritian investors to explore regional opportunities. In view of the high costs involved in such **evaluation studies**, it is proposed to look for possible financing sources to support such feasibility studies aimed at identifying suitable areas.

(ix) Strengthening Research & Development support in Agriculture

Science and technology have made such significant breakthroughs in the field of agriculture, that it would be unwise not to take advantage of their benefits. In view of the new technological era that we are operating in, much emphasis is being laid in the plan onto the promotion of modern technology application in agricultural activities. Efficient application of science and technology requires to be supported by a strong research and development back up. It has been noted that the research and development initiatives in the non-sugar agricultural sector have not been efficiently tuned towards meeting national objectives.

To this effect, it is proposed to **strengthen research and development support to agriculture and restructure existing R&D programmes in addressing national priorities**. The plan proposes to direct much effort and resources in R&D programmes that would assist in meeting the objectives of the plan of an enhanced agricultural productivity both in terms of quantity and quality. In this respect, emphasis would be laid, *inter alia*, on enhancing research and development support towards the provision of:

- i. high-yielding planting materials to the planting community;
- ii. precise and rapid disease diagnosis and treatment services to the horticultural and livestock sector;
- iii. efficient biological control methods as an alternative to chemical pest methods;
- iv. modern production systems, including greenhouses and hydroponic systems, specifically fined-tuned to suit the local context;
- v. alternative growing substrates for soil-less cultures in view of shortage of bagasse;
- vi. efficient post harvest techniques and handling methods to minimise losses;
- vii. optimise techniques for food preservation and processing to support the development of the local agro-industry; and,
- viii. protect the endemic biological diversity of Mauritius.

Research and development towards the judicious application of new emerging technologies to meet national goals is also being given paramount attention in the plan. In this context, **Biotechnology** in particular, in view of the enormous possibilities it offers as a potential tool in addressing emerging challenges in agriculture, is being placed at the centre of the agenda of the plan in catalysing this targeted technological reform. Much of the benefits of biotechnology are of great relevance in the local context in raising agricultural productivity, particularly taking into account the inherent constraints such as limited land availability for agricultural activities, high vulnerability to adverse climatic conditions and constant exposure to pest and disease infestations. **The vision of the modern agriculture is in fact based on the adoption of new emerging technologies, one of which is biotechnology.**

Convinced of the fact that the traditional conventional agricultural practices are too obsolete to sustain in the present highly competitive agricultural environment, much effort is being geared at imparting a new technological edge to the Mauritian agriculture through

biotechnology. Biotechnology holds a lot of promise for Mauritius, and will play a key role in achieving its long-term objective of a **regional hub and a regional nursery**. One of the major assets that the country holds in this respect, is a rich pool of scientific human resource capacity, which confers to it a strong comparative advantage with its regional counterparts in this technological strive. In order to strengthen its technology base in the field of agriculture, it is proposed to set up a **Mauritius Agricultural Biotechnology Institute**. This institute will provide a sophisticated infrastructural and strong scientific skill-base, that will cater for high-caliber, applied research in agricultural biotechnology. It will focus on optimising agricultural productivity in the non-sugar agricultural sector, including livestock, through the efficient application of biotechnology. With its primary objectives being to address issues of national priority, the eventual aim is to make the Institute emerge as a '**Centre of Excellence**' and assume a leading national and regional role as a service provider and know-how disseminator in the field of agricultural biotechnology.

(x) Capacity Building

Capacity building is a major focus in the proposed plan in order to ensure the judicious uptake of new technology. Transfer of technology will be a central tool in achieving the objective of a modern agriculture and, in this respect, it is important to ascertain that every party concerned is adequately technically prepared to deliver and/or to adopt these technologies appropriately. The issue of capacity building has been considered at two main levels: the service/technology providers and the technology users. Accordingly, at the level of the Ministry, it is proposed to **enhance the scientific capability of technical staff** through **specialised training courses** with a view to facilitating the efficient delivery of targeted services to stakeholders in the proposed agricultural reform process. Provision is also made to sensitise and train agricultural stakeholders including planters, farmers, agro-industrial entrepreneurs, in the adoption of new technology and modern practices in their respective domains, with a view to **promoting entrepreneurship and professionalism** in the sector.

(xi) Legislative reforms

Considering that this new approach will require a major shift from the usual conventional practices, the plan has been conceived from all fronts, with a view to facilitating the proposed transition process. In addition to major reforms proposed at the institutional, infrastructural, technical and stakeholder levels, provisions have also been made at the **legislative level** to legally support this reorientation process. The proposed Genetically Modified Organisms (GMO) Bill and amendments to the Plants Act are the two major legislative measures that would have significant impact in the implementation of the plan. The GMO Bill is being proposed to ensure that the uptake of biotechnology is fostered within a sound environment and that all dealings with GMO's are efficiently regulated with adequate biosafety precautionary measures, in line with the Cartagena Protocol. The Plants Act is being amended with a view to providing for important measures that would, *inter alia*, ensure the protection of Plant Breeders Right in conformity with the WTO TRIPS agreement, strengthen phytosanitary measures and thus facilitate trade in agriculture and provide for adequate protection of the natural biodiversity. Additionally, a number of existing legislations would be strengthened with a view to legally empowering institutions to efficiently deliver their respective services.

(xii) Agro-Industry

The future of the Mauritian agriculture and expansion of its export opportunities rests largely on the development of its agro-industry, in view of the highly perishable nature of fresh food together with the distance of Mauritius from its traditional niche markets. In this plan, much emphasis is laid on strategies to give a new dimension to the local agro-industry with a regional approach. Endowed with a strong technological back-up and know-how in the field of agriculture and agro-processing, as compared to its regional counterparts, coupled with its ideal strategic location and its efficient infrastructural and

communication logistics, Mauritius has all the credentials to emerge as a **potential agro-processing hub in the region**. The objective is to open up the avenue for Mauritius to use advantageously the resources and facilities available in neighbouring countries for the mass production of primary products at competitive prices to support its local agro-industry. In this respect, it is proposed to **take optimal advantage of opportunities arising from regional trade protocols and the AGOA**. This strategy is also being supported with a number of measures that would facilitate the process including the training of potential agro-industrial entrepreneurs, provision of incentives to attract foreign investment in this sector as well as financial and marketing facilities.

The plan also aims at encouraging and strengthening private sector partnership in this agricultural reform process. Along the same line, the private sector will be called upon to assume a very active role in this agro-industrial development process, with the setting up of a **permanent Government/private sector joint committee** that will have the responsibility of mapping out an organised development strategy for this sector.

(xiii) Clustering

The plan also fosters a tighter collaborative approach between all agricultural stakeholders, with a view to achieving common objectives in a more productive manner. Interaction between agricultural players has so far been almost absent. The **clustering** mechanism, by providing an efficient interactive platform, and triggering a constructive synergy between various stakeholders within a system based on the sharing of resources, has made its proof as a catalyst to product development. Such an interplay is particularly vital for the agricultural sector which is frequently confronted to new challenges and relies heavily on prompt responses to problems encountered. To this effect, it is proposed to set up two clusters within agriculture.

The **Food and Agricultural Cluster** will be an institutional cluster, grouping all public and private organisations involved in agricultural activities, including *inter alia*, research institutions, extension services, academia and the service users. Its role will be to promote a coordinated approach between them, in order to avoid duplication of activities and ensure a demand-oriented delivery of services and product development. This will allow public institutions to be in tune with the national priorities and accordingly ensure a more judicious channeling of resources.

The **Agro-Industrial Cluster** will be exclusively constituted to assist in the development of the local agro-industry. Whilst regrouping major local agro-industries, research and institutions and all other support organisations in agro-processing, it will foster an efficient sharing of resources, information and know-how to address the needs and weaknesses of the sector, and at the same time maintaining the specificity of each player. Such a mechanism, through an integrated national effort, will impart a better competitive advantage to local entrepreneurs at the export front to access bigger market shares.

(xiv) Livestock Sector

The plan also elaborates on a number of measures to revitalise the local livestock sector. Although, in general, the future prospects of the local livestock sector appear rather bleak, in the wake of the trade liberalisation process, due attention has nevertheless been given to specific subsectors that hold enormous potential in Mauritius. Also, on a social concern, measures have been proposed towards **sustaining and reviving the activities of the small farmers** who are experiencing difficulties.

It is proposed to encourage farmers to expand to larger-scale farming activities through a number of support measures, whilst respecting applicable environmental norms and regulations, which are getting increasingly stringent. Such measures *inter-alia* include a

strengthened extension service and regular provision of high yielding breeds of certain farm animals at the livestock breeding stations of the Ministry of Agriculture. Along the same line, it is proposed to strengthen the Veterinary Services of the Ministry of Agriculture, with a view to providing a more reliable and timely service to avoid losses at the breeders' level. **Training of farmers in modern farm management practices** towards achieving quality is also provided for. The applicability of integrated farming systems in the local context will also be studied.

The plan also projects to strengthen research and development support to this sector. Focus is laid on the **diagnosis and prevention of diseases** including the production of vaccines locally, identification and breeding of promising high-yielding breeds of farm animals and conservation of fodder for periods of scarcity.

In view of the current high imports of live animals and recent disease outbreaks, it is proposed to strengthen quarantine measures in order to safeguard the country from foreign phytosanitary threats and maintaining its disease-free status. **Strategic stocks of the local animal breeds** will be permanently maintained at the national level to constitute a genetic pool.

The food safety aspect of locally disposed meat is presently a matter of great concern. Accordingly, means to ensure conformity to food hygiene and safety norms at the production, slaughtering, processing, and specifically at points of sales have been given paramount importance in the plan. It is also proposed to **modernise the central abattoir** to ensure that slaughtering is done under appropriate conditions in conformity with international norms. Activities at the central abattoir would also be rendered more transparent with a view to gaining customers' confidence.

Considering the high volume of dairy imports, and in view of the fact that the local milk production is not being optimised, it is proposed to revive the local dairy sector through a

number of policy measures. In addition to maintaining the current milk marketing scheme that many small farmers benefit from, the main measures in this respect provide for a review of the current price of milk, investigating into the prospects of **value addition of locally produced milk**. The Agricultural Marketing Board will be called upon to assume a more dynamic role in enhancing the marketing potential of the local milk.

Venison is one of the few promising subsectors within the local livestock sector, that has been given a lot of consideration in the plan. Measures have been primarily centred around **prospects of expansion of the deer rearing activity**, in view of the high demand of venison. It is proposed to promote research into finding efficient means to increase production on feedlot systems through enhanced breeding efficiency and nutrition.

Export of venison has ceased as a result of the inability of Mauritius to conform to international food quality and safety norms. For Mauritius to be in a position to revamp its export activities, it is essential to ascertain that the appropriate slaughtering logistics are in place to ensure conformity with export norms. To this effect, it is proposed to carry out a feasibility study on the setting up of a modern slaughterhouse for deer. Meat quality as regards carcasses emanating from 'chassées', is also a matter of concern, where currently no control is being exercised on the quality of the meat that ultimately reach the consumers. To this effect, it is proposed to set up a Technical Committee that would study this issue and make necessary recommendations on actions to be initiated for inspection of meat produced on 'chassées' to ensure conformity with required norms. Strengthening legislative measures to address the acute problem of poaching is also proposed.

The plan aims at encouraging **value addition of livestock derived products** as a means to enhance export opportunities within the sector. The services of the proposed Food Technology Laboratory would also be extended to local meat agro-processing industries, which will act as a catalyst to this sector, by providing timely, rapid, and cheaper analytical facilities. Research and development initiatives to devise efficient meat processing techniques are also being promoted to sustain the development of this industry.

(xv) Agriculture in Rodrigues

Agriculture in Rodrigues has its own specificities. The plan proposes measures to address its major hindrances to agricultural development as well as means to optimise on its assets. The **'Organic Status' of Rodrigues** is a pivotal element in its agricultural development strategy that needs to be capitalised upon. The plan accordingly proposes means to preserve and harness the organic label of the Rodriguan agricultural produce, with emphasis on the development of its export opportunities. Means to revitalise the main typical Rodriguan endemics such as chilli, lemon, red beans etc, to commercial ends forms another important aspect of this strategy. The importance of inculcating a higher degree of professionalism and quality notion amongst agricultural stakeholders in Rodrigues has been highlighted. **Promotion of value-addition and enhancing the marketability** of the typical Rodriguan specialities and recipes have also been given due attention. **Training of farmers and planters in Rodrigues in modern farm practices, the adoption of new technology and in agro-processing** with a view to enhancing their agricultural productivity has also been elaborated. Other important issues that have been addressed include, *inter alia*, means of improving irrigation infrastructure, setting up of appropriate storage and mechanization facilities, strengthening research and development support and extension services to farmers and ensuring a regular supply of high yielding young animals to interested farmers. The **development of the apicultural sector** is another important arm of agricultural development strategy of Rodrigues. Provisions have been made to establish a sustainable development programme for this sector based on the appropriate research and development, technical and analytical supports. A major consideration has been given to the rehabilitation of Rodrigues with potential melliferous plants, which is currently a major hindrance to this sector.

(xvi) Institutional Reform

This reform process within the non-sugar agricultural sector, along with a major conceptual transition in the approach to agriculture, also involves significant changes at the level of the institutional framework within which services are currently being provided. In order to meet the objectives of the plan for an enhanced agricultural productivity, it is essential that support institutions fulfill their respective roles in an efficient and proactive manner, without duplication of activities. In this new vision of a 'modern agriculture', certain existing institutions will also be required to assume new responsibilities. To this effect, for the proper implementation of the plan, a reorganisation at the level of existing institutions will be essential. The objective is to restructure the whole agricultural set-up with a more productive, demand-driven and target-oriented approach ensuring a judicious utilisation of resources. This responsibility will be assigned to an **'Institutional Review Taskforce'** which is proposed to be set up. In this context, the Agricultural Marketing Board and the Tobacco Board have been identified as the two institutions that need to be reviewed with utmost priority in view of the recent changes and new challenges emerging in the two respective sectors.

1.7 The Strategic Plan for the Non-Sugar Sector is a five-year plan projected for the years 2003-2007. In addition to the measures elaborated above, this plan constitutes several other essential elements that would be crucial in driving the proposed reorientation process towards a 'modern agriculture'. The implementation of this plan would no doubt bring about a turning point in the Mauritian agriculture, as well as major changes for Rodrigues. By the year 2007, Mauritius would have achieved its ultimate vision of a high-technology base in agriculture, and the way to making it emerge as a leading regional nursery and regional agro-processing hub, would be paved.