



# **MINISTRY OF AGRO INDUSTRY AND FOOD SECURITY**



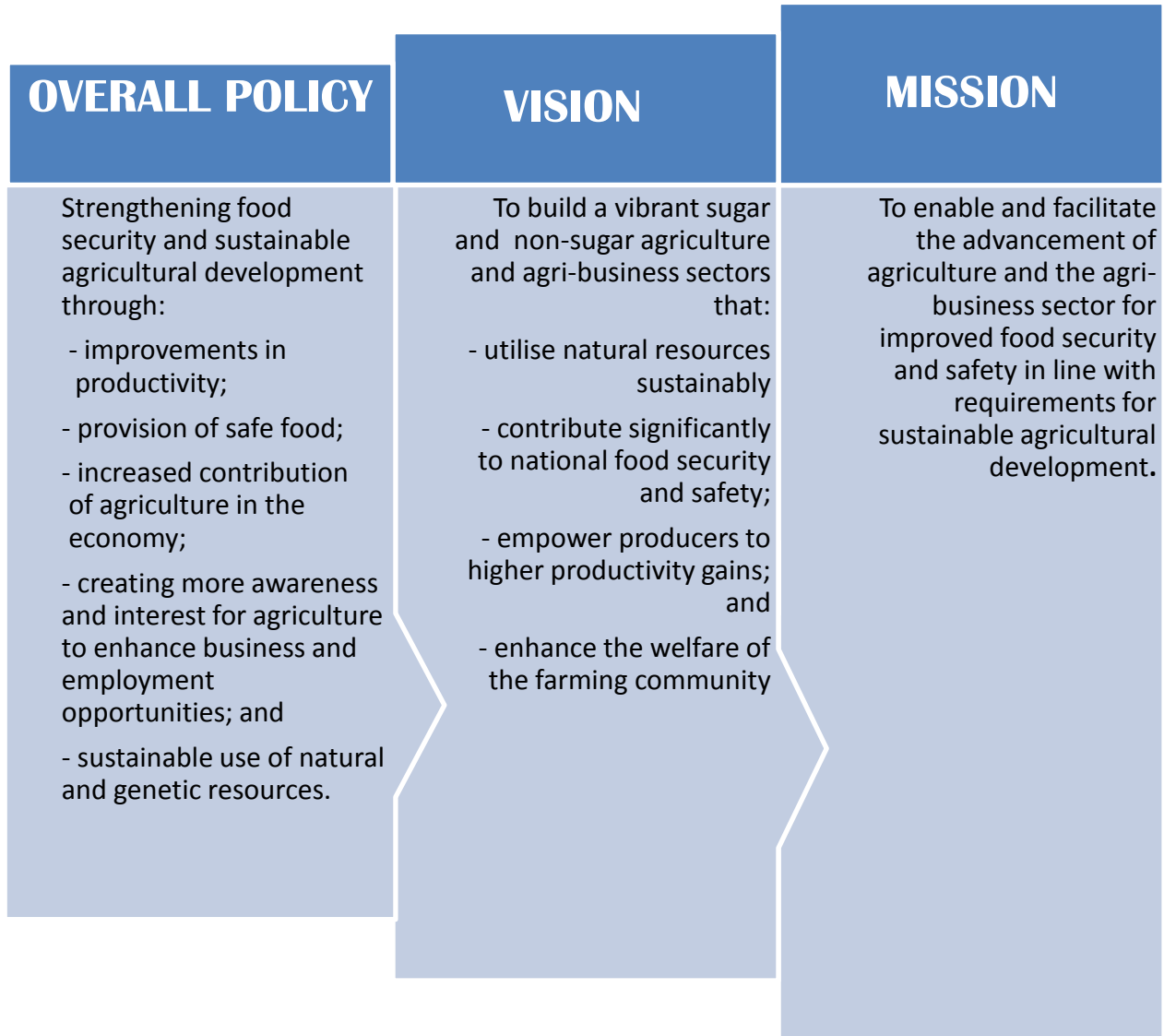
**ANNUAL REPORT  
for the Financial Year  
2016-2017**

## CONTENTS

<b>PART I – ABOUT THE MINISTRY/DEPARTMENT .....</b>	<b>2</b>
<b>VISION AND MISSION .....</b>	<b>2</b>
Message from the Honourable Minister.....	3
Message from the Supervising Officer .....	5
Roles and Functions of the Ministry / Department .....	7
About Our People .....	13
<b>PART II – MINISTRY/DEPARTMENT ACHIEVEMENTS &amp; CHALLENGES.....</b>	<b>15</b>
Major Achievements.....	15
<b>STATUS ON IMPLEMENTATION OF BUDGET MEASURES .....</b>	<b>18</b>
Status on Implementation of Key Actions .....	23
Risk Management, Citizen Oriented Initiatives & Good Governance.....	26
Events hosted by MAIFS in 2016/2017.....	27
International Meetings/Conferences attended by Hon. Minister .....	28
<b>PART III – FINANCIAL PERFORMANCE.....</b>	<b>29</b>
Statements of Revenue and Expenditure .....	32
<b>PART IV – WAY FORWARD.....</b>	<b>34</b>
Trends and Challenges.....	34
Strategic Direction .....	46
Annex.....	51

## PART I – ABOUT THE MINISTRY/DEPARTMENT

### VISION AND MISSION



## Message from the Minister

On my assumption of office some two years ago, I set myself the goal of reviving our agricultural sector which was in a state of turmoil, overwhelmed with consequences due to dismantling of market protected agreements for sugar, inflationary food prices and ever increasing risks associated with effects of climate change.



The direct impact of these factors caused growth in the sector to slow down and its contribution to G.D.P gradually declining over the years. Nonetheless, I firmly believe that agriculture still holds an important place and will continue to play a key role in the national development plan as the country moves upscale to a higher income economy.

Indeed, the role of agriculture in the economy cannot be overemphasized. Albeit a major foreign exchange earner having high employment creation potential especially when harnessed to agro-industrial ventures, the sector, more importantly provides sole source of income to a significant part of the rural population, besides being the country's main supplier of fresh food.

Since 2016, several initiatives were steered in a short lapse of time to turn around the situation and revive development in the sector. A five-year strategic plan for the food crop, livestock and forestry subsectors was elaborated to complement structural reforms already underway in the sugar industry.

The strategic plan identified priority areas of intervention and highlighted as well, appropriate reforms to be brought in our legislations and administrative systems so as to boost production in a sustainable manner and facilitate gradual shift from conventional to bio-farming.

The same year equally witnessed launching of the National Wholesale Market Project and further consolidation of analytical capacity for the Food Technology Laboratory which are critical steps in our plan for modernisation of the sector in a bid to provide better quality assurance and safer fresh foods to the consumers.

I commissioned publication of this report on purpose to provide stakeholders with easy access to key information presented in a simple form which hopefully will communicate our vision of development in the agricultural sector as well as a glimpse on progress being achieved in implementation of major projects.

Lastly, I would like to acknowledge efforts of all the staff of the Ministry of Agro-Industry & Food Security, especially those who have directly contributed to realisation of this report.

Let me seize this same opportunity to pay tribute to late Mr Cassam Kureemun, our Ex-Manager, Financial Operations, for his high sense of integrity, professionalism and commitment to excellence.

**M. K. Seeruttun**

**Minister**

## Message from the Supervising Officer

I am pleased to be associated with the preparation of the Annual Report of the Ministry of Agro-Industry and Food Security for the financial year 2016/17.

I welcome the initiative taken by Government calling for the submission of an Annual Report by Ministries and Departments on their activities during the year, particularly in regard to the implementation of budgetary measures. The Annual Report will definitely bring to public attention the performance and achievements of the different Government Bodies and may dissipate the general perception that the public sector is inefficient and ineffective.



The Ministry of Agro-Industry and Food Security has a vast mandate which covers the sugarcane sector, the foodcrop, livestock and forestry sector, the conservation of biodiversity and the welfare of animals. It has a total workforce of around 3,000 people. In addition, it has 10 parastatal bodies under its jurisdiction.

The Ministry has been striving hard to address the challenges faced by the different sub-sectors. We have come up with numerous initiatives, measures and schemes during the past years to accompany the producers both in the sugar and non-sugar sectors. We are grateful to the Ministry of Finance and Economic Development for introducing new measures and providing adequate funds in the budget 2016-17 to help relaunch the agricultural sector.

The overall performance of the Ministry for the period under review has generally been good due to the dedication, efforts and hardwork of the staff. The credit should also go to the Honorable Minister of Agro-Industry and Food Security who has been a great source of inspiration and motivation to the staff.

My congratulations and thanks to all them for the good work done.

**V. Gondeea**  
**Permanent Secretary**

## **Roles and Functions of the Ministry / Department**

### **Role**

The role of the Ministry is to devise and implement policies for the sustainable development of the agricultural sector in Mauritius and to support the farming community through different measures and schemes to enhance production of safe food and ensure food security.

### **Functions**

The Ministry maintains and also enhances Mauritius agricultural production and food safety by exercising control, regulating, advising, and disseminating information through various acts, policies, and programmes. Besides, the Ministry supports the preservation of our forestry resources and biodiversity. A detailed list of all departments and parastatal bodies with their functions is available at Annex 1.



# Ministry of Agro-Industry and Food Security



Agricultural Services with 14 Departments



National Agricultural Products Regulatory Office



Forestry Services



National Parks and Conservation Service



10 Parastatal bodies

1. Agricultural Services	<ul style="list-style-type: none"> <li>• technical arm of the MAIFS</li> <li>• regulatory and policy functions</li> <li>• Supply inputs to the farming community</li> </ul>
2. Mauritius Cane Industry Authority (MCIA)	<ul style="list-style-type: none"> <li>• promote the development of the cane sector and its clusters</li> <li>• create an enabling environment with innovative and efficient services, research and development in the sugar sector</li> </ul>
3. Forestry Services	<ul style="list-style-type: none"> <li>• management of the State Forest Lands including 'native' forests and Nature Reserves</li> <li>• protection as well as raising awareness about forest conservation and protection</li> <li>• promotion of ecotourism</li> </ul>
4. National Parks and Conservation Service	<ul style="list-style-type: none"> <li>• sustainable management and restoration through in-situ and ex-situ conservation,</li> <li>• ecosystem restoration, public awareness,</li> <li>• research and implementation of international conventions</li> </ul>
5. National Agricultural Products Regulatory Office (NAPRO)	<ul style="list-style-type: none"> <li>• control and regulate the import, export, production and sale of meat, tea, tobacco and derived products as well as their preparation, processing, manufacturing and packing.</li> </ul>
6. Small Farmers Welfare Fund	<ul style="list-style-type: none"> <li>• promote the economic and social welfare of small farmers and their families.</li> <li>• register farmers and deliver farmers' cards</li> <li>• implement schemes for the benefit of small farmers.</li> </ul>
7. Mauritius Society for Animal Welfare	<ul style="list-style-type: none"> <li>• catching and disposal of stray dogs and cats,</li> <li>• humane education and the prevention of cruelty to animals,</li> <li>• promotion of the welfare and good treatment of animals</li> <li>• conducting sterilisation campaign</li> </ul>

<p>8. Food and Agricultural Research and Extension Institute (FAREI)</p>	<ul style="list-style-type: none"> <li>• conduct research in non-sugarcane crops, livestock, agro-forestry</li> <li>• provide extension services to farmers</li> </ul>
<p>9. Mauritius Meat Authority (MMA)</p>	<ul style="list-style-type: none"> <li>• slaughter, dressing and transportation of cattle, goats, pigs, sheep and deer meat to markets</li> </ul>
<p>10. Irrigation Authority</p>	<ul style="list-style-type: none"> <li>• ensure that planters in irrigation zones are adequately supplied with water</li> <li>• implement and manage irrigation projects</li> <li>• maintain irrigation networks in good conditions.</li> </ul>
<p>11. Agricultural Marketing Board (AMB)</p>	<ul style="list-style-type: none"> <li>• expand the local production of strategic crops like onions, potatoes and garlic</li> <li>• operate or provide for the operation of such storage, handling, transport processing facilities</li> <li>• import potatoes, onions and garlic to ensure uninterrupted supply of these commodities on the local market.</li> </ul>
<p>12. Sir Seewoosagur Ramgoolam Botanical Garden Trust (SSRBG)</p>	<ul style="list-style-type: none"> <li>• Proper maintenance of biological garden</li> <li>• Conservation and Research of biodiversity</li> <li>• Education Programmes.</li> </ul>
<p>13. Rose Belle Sugar Estate Board</p>	<ul style="list-style-type: none"> <li>• manage the assets of the Rose Belle Sugar Estate Board efficiently and effectively for wealth generation, welfare and modernisation, thus benefiting the employees, stakeholders and society at large</li> </ul>

The following divisions fall under the purview of Agricultural Services:

1. Agricultural Chemistry Division	<ul style="list-style-type: none"><li>• To provide reliable and timely analytical support to planters, breeders, research institutions and other stakeholders for the chemical analysis of agricultural materials for good agricultural practice, food production and safety.</li></ul>
2. Agricultural Engineering Division	<ul style="list-style-type: none"><li>• To provide necessary processes and mechanism to identify and launch emerging technologies and provide support services</li></ul>
3. Agricultural Information Division	<ul style="list-style-type: none"><li>• To update and manage agricultural databases with a view to provide timely and reliable statistics/information on food and agriculture</li></ul>
4. Agronomy Division	<ul style="list-style-type: none"><li>• To produce viable vegetable seeds.</li><li>• To experiment, advise and share information in the field of Hydroponics and Organic Vegetable Production</li></ul>
5. Animal Production Division	<ul style="list-style-type: none"><li>• To promote safe and quality livestock production throughout the value chain, to enhance self-sufficiency for food security to improve the revenue of small farmers.</li></ul>
6. Food Technology Laboratory- (Dairy Chemistry Division, Food Hygiene Laboratory, Chemistry Laboratory)	<ul style="list-style-type: none"><li>• To ensure the safety and quality of both locally produced, exported and imported food products through microbiological and chemical analysis of foods (pesticide residues, heavy metals, toxins), animal feeds and water for our export and import requirements.</li></ul>
7. Entomology	<ul style="list-style-type: none"><li>• To preserve the insect biodiversity of Mauritius and ensure food security.</li></ul>

8. Horticulture Division	<ul style="list-style-type: none"> <li>• To contribute towards national agricultural production through the provision of quality vegetable seeds, fruit trees and ornamentals.</li> </ul>
9. Land Use Division	<ul style="list-style-type: none"> <li>• lease of agricultural state land.</li> <li>• Preparation of lease agreements in respect of agricultural state land</li> <li>• Managing and monitoring of agricultural state land.</li> </ul>
10. Livestock Feed Production Scheme/Agricultural Development Division	<ul style="list-style-type: none"> <li>• To provide quality feed to breeders in order to improve livestock production and enhance food security</li> </ul>
11. National Plant Protection Office	<ul style="list-style-type: none"> <li>• To ensure the protection of the country's agricultural economy against introduction of destructive pest.</li> <li>• To help towards plant health improvement.</li> <li>• To develop market access through bilateral agreement for export of agricultural product.</li> </ul>
12. Veterinary Service Division	<ul style="list-style-type: none"> <li>• To provide quality veterinary service to breeders in order to ensure healthy and disease-free livestock.</li> <li>• To achieve a conception rate of more than 50% in artificial insemination of livestock.</li> </ul>
13. Support Services Unit	<ul style="list-style-type: none"> <li>• To provide Maintenance and support services</li> </ul>
14. Transport Section	<ul style="list-style-type: none"> <li>• Provide safe, reliable, effective and fully integrated transport operations to enable the personnel of the Ministry to perform their duties effectively</li> </ul>

## About Our People

All organizations are made up of people. It is people who provide leadership, stewardship, and follower-ship in every organization. People constantly learn new and innovative ideas to help transform their organization to greatness.

Human resources have always been essential to this Ministry, because they provide inspiration, creativity, vision and motivation that help the Ministry to achieve its mission. They formulate strategies and provide the skills and competencies necessary to achieve the goals and objectives of the Ministry. They are the most important resource of this Ministry.

### Staffing Structure

The overall supervision of the Ministry is under the responsibility of the Permanent Secretary who is assisted on the administrative side by the Deputy Permanent Secretaries and Assistant Permanent Secretaries. On the technical side, assistance is provided by heads of three main Divisions namely, Agricultural Services, Forestry Services and National Parks and Conservation of Service as well as by officers of the Agricultural Planning and Analysis Unit (APAU). Support services are provided by officers of the Human Resources Cadre, Finance Cadre, Procurement Cadre, General Services Cadre and Workmen's Group.

### Senior Management Team

Section	Title	Contact Details
ADMINISTRATION	Permanent Secretary	Mrs Nirmala BHEENICK Phone : 210 2713 Fax : 212 4427 E-mail: nbheenick@govmu.org ,moa- pssecretariat@govmu.org
	Deputy Permanent Secretary Forestry Sector	Mrs C JHOWRY Phone : 213 2576 Fax : 211 6448 E-mail:cjhowry@govmu.org
	Deputy Permanent Secretary Sugar Sector	Mrs S.D. GUJADHUR-NOWBUTH Phone : 211 0541

		Fax : 210 4809 E-mail: <a href="mailto:snowbuth@govmu.org">snowbuth@govmu.org</a>
AGRICULTURAL PLANNING & POLICY ANALYSIS UNIT	Deputy Permanent Secretary Crop Sector	Mrs I. RUGJEE Phone : 210 4123 Fax : 211 6916 E-mail : <a href="mailto:irugjee@govmu.org">irugjee@govmu.org</a>
	Deputy Permanent Secretary Livestock Sector	Miss G CALLYCHURN Phone : 211 0541 Fax : 210 4809 E-mail: <a href="mailto:grcallychurn@govmu.org">grcallychurn@govmu.org</a>
	Chief Agricultural Policy and Programme Development Officer	Mr. R BAHADOOR Phone: 208 2168 E-mail <a href="mailto:rbahadoor@govmu.org">rbahadoor@govmu.org</a>
AGRICULTURAL SERVICES	Director	Mr. V. A. PUNCHOO Phone: 464 3136 /401 2800 Fax: 464 8749 Email: <a href="mailto:vpunchoo@govmu.org">vpunchoo@govmu.org</a>
	Deputy Director	Mr. B. B. S. LUTCHMEEA Phone: 211 8550 Fax : 208 6990 Email: <a href="mailto:slutchmeea@govmu.org">slutchmeea@govmu.org</a>
FORESTRY SERVICES	Conservator of Forests	Mr. V. TEZOO Phone: 675 8485 Fax: 674 3449
NATIONAL PARKS & CONSERVATION SERVICES	Director	Mr. V. BACHRAZ Phone: 464 4016 Fax: 465 1184 E-mail: <a href="mailto:vbachraz@govmu.org">vbachraz@govmu.org</a>

## Managing and Developing Staff

There is a growing emphasis in the Public Sector on the need to provide high quality services to citizens. One of the ways in which the Public Sector can improve its delivery of services is by improving the performance of its people. The Performance Management System is an efficient tool for managing and developing the performance of employees, planning work, identifying gaps in performance, identifying the relevant training required for employees and to achieve the goals and objectives of the Ministry.

Major Achievements

## Sugar Sector

Total exports and sales of all types of sugars produced amounted to 441,829 tons in 2016/17

Volume of special sugar exported for the crop year 2016/17 was around 118,530 tons.

Total export earnings from sugar of all types amounted to Rs 9.3 billion based on a sugar production of 386,277 tons of sugar for the Crop 2016, representing an increase of 32.8% in the sugar proceeds over the previous crop.

## Tea Sector

Distribution of fertilisers to enhance production of tea leaves and pruning shears to facilitate harvest.

Rehabilitation of tea mother bushes at Petit Merlo Nursery.

Setting-up of a new tea nursery at Curepipe Experiment Station

100A of land has been released to revamp the tea sector and increase tea production.

## Crop Sector

**19** new crop varieties tested and released for commercial cultivation.

Production of food crops increased by 4.7% from **102,663** tonnes in 2015 to **107,457** tonnes in 2016

Launching of the National Wholesale Market.

**1583** small planter obtained a total of **1915** tons of compost free of charge for application on some **2935** arpents.

**20** agro processors obtained grant under the Pre Market Test & Certification Scheme for a total of **4.13** million rupees.

The Food Technology Laboratory is an internationally accredited laboratory for testing 25 parameters.

Some **7,000** tests on about **1,900** food, feed and water samples were carried out by the Food Technology Laboratory.



## Bio-farming

Sensitisation of 2,000 farmers on sustainable agriculture and bio-farming.

The Mauritius Agricultural Certification body is operational under the aegis of the Ministry of Agro-Industry and Food Security and 8 planters have been Mauri-GAP Level 1 certified.

Conversion of 6A at Pamplémousses Experiment Station as an organic research and demonstration plot.

Setting up of organic zone at Britannia on 63 Arpents.

Development of support packages to promote organic farming: bio-fertilisers, bio-pesticides, soil conditioner and hot water treatment.

## Bee keeping

Two bee reserve zones were set up and 12,000 melliferous plants planted at Bras d'Eau on 20 ha and Les Salines, Riviere Noire on 5 ha.

165 beekeepers received a beekeeping kit (upgraded organic bee hive, hat & veil, smoker and hive tool).

160 beekeepers were trained on new techniques of beekeeping.

## Combatting of Foot and Mouth Disease

The Ministry with the assistance of Indian Ocean Commission and the European Union and other international organisations was successful in containing the outbreak of foot and mouth disease within a relatively short period of time.

All breeders affected by the disease have been compensated for a total amount of Rs 35.2M

The third vaccination campaign has been completed for more than 80% of the national herd. A sero surveillance has been successfully conducted to monitor the status of the disease.

## Livestock Sector

- Implementation of the heifer farm and livestock zone projects at Melrose over a total extent of 40A of land has started. It is expected that the farms will be operational in 2018.
- The Salle de Decoupe for processing and sale of pork products at Argy, Flacq is already operational.
- The Ministry through the setting up of a squad to track illegal slaughter has been successful in increasing the slaughter of pigs at the Central Abattoir by 13% and therefore decrease illegal slaughter by the same rate.
- 17 MQA approved training courses on livestock production were run and attended by 284 trainees.
- 100 farmers have been trained in basic animal health care. The 'Heifer Productivity Incentive Scheme' (HPIS) of Rs5,000 was launched to encourage farmers to rear a female calf up to lactation stage.
- 7 farmers benefitted from the scheme for the purchase of equipment and upgrading of livestock/poultry farms.

## Forestry and Conservation Services

Some 30 km of firebreaks were created/maintained in fire prone areas.

Protected Area Network Expansion strategy(2017 -2026) and National Biodiversity strategy and Action Plan (2017 -2025) finalised

Management Plans for Bras d'Eau National Park and Black River Gorges National Parks ready for public consultation and for Government endorsement.

About 75, 000 trees have been planted under the National Tree Planting Programme.

## STATUS ON IMPLEMENTATION OF BUDGET MEASURES

Para budget	Budget Measure	Status
72	Setting up of an Agricultural Land Management System to bring unutilized abandoned cane lands of small planters under productive use.	Database created and validation of fields data completed. Awareness among stakeholders initiated through liaison meetings.
73	Increase of the grant facility for sheltered farming from Rs 250,000 to Rs 400,000 to encourage planters to undertake crop production under protected structures.	147 applications received and 68 persons have benefitted from the scheme. Rs 21 M have been disbursed.
74	Setting up of an exclusive Bio-Farming/Organic zone with comprehensive modern infrastructural facilities at Britannia.	The Britannia Organic Zone was launched on 27 February 2017. 49 Arpents have been allocated to 10 promoters
	Compost Subsidy Scheme (CSS)	Vouchers for 1,915 tons of compost valued at Rs 13,551,216 have been issued to 1583 planters.
76	Establishing a new tea nursery at La Brasserie	The construction of 8 shade tunnels (each 2.6 X 5 m) completed.
	Provision of seedlings free to tea growers	Potting of seedlings in progress: about 20,000 seedlings established
	Provision of subsidy on fertilizers to tea growers	About 1,150 planters benefitted from the scheme.
77	Re opening of the ex-Dubreuil tea factory to	Valuation Assessment exercise

	promote tea and other agro processing activities.	of property to be leased at Dubreuil completed. Terms and conditions of lease Agreement finalized Architectural Design and layout plan of new factory completed.
78	Setting up of a heifer farm at Melrose	Design for the Heifer farm has been completed. Contract for the construction of this Heifer farm has been awarded and operation is due to start by March 2018.
	The Incentive for Milk Production where a cash incentive of Rs 5000 is paid to farmers for every heifer reared up to first lactating phase as from 1st July 2016. The Scheme was officially launched and implemented in March 2017.	Rs 205,000 have been disbursed to 29 breeders in respect of 41 heifers.
	Calf Productivity Incentive Scheme	Rs 1,202,500 have already been disbursed to 259 breeders representing 481 calves.
80	Provision of Rs 7 million to support bee-keepers through the creation of bee-keeping zones in different regions.	2 Bee reserve zones have been set up at Bras d'Eau on 20 Ha and les Salines Rivière Noire on 5 Ha. 3,900 melliferous plants planted and 22,000 eucalyptus trees undergone coppicing
81	Extension of the subsidy on freight costs for horticultural products to flowers and exotic vegetables.	Amount disbursed for 47 beneficiaries: Rs 2,452,831

83	<p>Renewal of schemes to support some 11000 sugarcane planters:-</p> <ul style="list-style-type: none"> <li>• Planters producing up to 60 tonnes of sugar will benefit from an additional revenue of Rs 1,820 per tonne of sugar;</li> <li>• The 80 per cent advance provided to sugar cane planters will be maintained through arrangements with the Mauritius Sugar Syndicate.</li> </ul>	<p>Scheme being implemented under the Sugar Cane Sustainability Fund:</p> <ul style="list-style-type: none"> <li>(i) Rs1,100 per tonne of sugar paid to planters producing up to 60 tonnes; and</li> <li>(ii) Rs 300 per tonne of sugar paid to planters producing above 60 tonnes.</li> </ul>
84	<p>Provision of Rs 25 million for acquisition of sophisticated equipment for the testing of fruits and vegetables by the Food-Tech Lab of the Ministry of Agro Industry and Food Security.</p>	<p>Equipment has been received and have already been commissioned.</p>
85	<p>Waiving of fifty per cent of the outstanding balances on loans, together with interest due, which were contracted by pig breeders, under the Pig Sector Re-structuring Programme, provided that they pay back the remaining balance before 30 June 2018.</p>	<p>As at 31 December 2017, out of the 476 accounts existing at the DBM, 80 pig breeders have refunded 50% of the outstanding loans and have thus benefitted from the Pig Sector Restructuring Scheme. 130 pig breeders have made payment on the outstanding balances of their loans. 266 accounts are irresponsive.</p>
86	<p>Waiving of all outstanding interests on start-up loans taken by planters, breeders and fishermen prior to 1st July 2012, under certain schemes, provided they pay back all capital balance before 30 June 2017.</p>	<p>2463 accounts are being settled for planters, fishermen, breeders and other micro enterprises. For 3690 cases there has not been any response from the planters.</p>

87	Rs 30 Million for the setting up a new unit for mass rearing and sterilization of fruit flies.	Specifications of equipment have been finalised, Building Plan finalised and Architectural Plan submitted.
87	Provision of Rs 16 million to litchi and banana growers for the purchase of protective nets and bags.	Applications are being processed and a communique has been issued.
90	Rs 10 million for the setting up a contributory insurance scheme for non-sugar crops.	QED Actuaries conducted a preliminary exercise for the preparation of the tender documents for launching of the expression of interest for setting up of the Scheme. Phase I has already completed, SFWF is preparing to move to Phase II.
93	Implementation of a quantitative restrictions system (to curb use of pesticides & herbicides) coupled with a more rigorous and intensive test of fresh produce.	FAREI has started work on alternative measures to substitute the utilisation of Ethephon on a pilot basis in the first instance. A communique was issued and the registration of planters undertaken.
<b>B.6 Agro- Industry</b>		
B.6a	Blending of Ethanol with MOGAS The Ministry of Agro Industry and Food Security will prepare a policy framework, which will be ready before end-June 2017, on, inter-alia, the use of ethanol produced from molasses and the mandatory blending of the ethanol with MOGAS.	The Sugar Industry Efficiency Act was amended in Dec 2016 to, inter alia, empower the Mauritius Cane Industry Authority is developing - an Ethanol and Molasses Framework to allow the mandatory blending of ethanol and mogas.

B.6b	Insurance Premium waiver for Crop 2016. Financial resources equivalent to the total amount of insurance premium payable by planters with up to 60 tons of sugar accrued in respect of the 2016 sugar crop will be made available to the Sugar Insurance Fund Board (SIFB).	Implemented through Finance (Miscellaneous Provisions) Act 2016  SIFB has already implemented this measure, with the disbursement of funds from Government to SIFB through the MCIA.
B.6c	Abolition of the Shooting and Fishing Lease Tax The Shooting and Fishing Lease Tax will be abolished as a consequence of the review of the lease rental of state land.  <b>Amendment will be brought to the Shooting and Fishing Lease Act to provide for eco-tourism activities.</b>	Implementation through Finance (Miscellaneous Provisions) Acts 2016. Shooting and Fishing Lease Tax Act repealed.
<b>C.6. Mauritius Cane Industry Authority Act</b>		
C.6	The Mauritius Cane Industry Authority Act will be amended to give effect to the recommendation contained in the Landell Mills Report to increase the contribution made by distiller-bottler from Rs 20 to Rs 40 per litre of absolute alcohol. The contribution is paid to the Mauritius Sugar Syndicate which distributes same to sugar planters.	Implemented through Finance (Miscellaneous Provisions) Act 2016 with amendments brought to the Mauritius Cane Industry Authority Act. The provision was effective as from 7 Sept 2016.  This also includes the setting up of sugar cane sustainability fund.

## Status on Implementation of Key Actions

Key Action	Key Performance Indicator	Target (as per Budget Estimates)	Status
1. Implementation of an aggressive marketing strategy geared toward increasing exports of value added sugar	Value added sugar exported (tonnes) (Estimated 2015/2016: 435,000)	470,000	397,120 tonnes of value added sugar have already been exported
2. Increase the extent of de-rocked land belonging to small farmers	Additional land derocked (hectares)	1,000	<p>The Mauritius Cane Industry Authority (MCIA) has already identified 1,000 ha under the Sugar Cane Planter Regrouping Project (SPRP).</p> <ul style="list-style-type: none"> <li>• Planters' contract agreements have been signed for a total extent of 950 ha.</li> <li>• Land preparation has been completed on some 758 ha and plantation of fields completed on 626 ha.</li> <li>• Work is ongoing on the remaining extent.</li> </ul>
3. Prevent abandonment of cane lands and encourage cultivation of such lands i) increasing the number of management contracts between planters and millers	1. Additional number of management contracts negotiated	55	<p>MCIA has already had consultations with the Corporate sector to enlist for their supports.</p> <ul style="list-style-type: none"> <li>• The number of management contract signed is 67 (283.63 ha), which involved the total management of the fields operations by the corporate sector.</li> <li>• In addition, the corporate sector have signed 495 contracts (868 ha involving 67,717 tonnes of cane)</li> </ul>



from 54 (over an extent of 333 ha) to 109 (over 558 ha)			with planters for the cutting, loading and transport of cane for the Crop 2016.
ii) leasing out abandoned lands to other interested planters through the MCIA Agricultural Land Management System	2. Extent of abandoned cane lands leased out (hectares)	400	<p>Out of the 200 ha of abandoned lands earmarked for replantation under SPRP, some 85 ha have been planted and work is ongoing on the remaining extent.</p> <ul style="list-style-type: none"> <li>Existing contract for the lease of abandoned land has been reviewed and vetted by the Attorney General's Office.</li> <li>MCIA has canvassed planters for an extent of approximately 200 ha to be leased for agricultural purposes, including sugarcane cultivation.</li> </ul>
4. Improve farm productivity and reduce post-harvest losses for strategic food crops by 20% by promoting value addition agribusinesses	Percentage reduction in post-harvest losses in non-sugar crops	20%	<p>Study to identify and quantify post-harvest losses in potato, onion and tomato to start with this season's harvest;</p> <p>279 entrepreneurs trained in value addition of agricultural produce; and 127 entrepreneurs trained in upgrading of their products.</p>
5. Dedicate more State land for bio-farming activities	Additional land area put under bio-farming activities (hectares)	40	Total extent of State Land dedicated for bio-farming is 81.5 Arpents for 18 promoters (34.2 ha), thereby representing 85.6% of target 2016/2017.
Increase meat and milk production through the setting up of livestock zones, heifer farms	1. Additional meat produced (tonnes)	2,400	There has been a 1.2% decrease in local meat production from 47,084 tonnes in 2015 to 46, 523 tonnes in 2016 (includes poultry meat which was due to the outbreak of

and modular dairy farms on State lands			salmonella).
	2. Number of dairy units set up	$\geq 1$	Construction works will be completed by end of January 2018.
6. Boost up the tea sector through the allocation of 40 ha of State lands and setting up of nurseries for production of planting materials	Tea nursery set up	June 2017	(i) Construction of 8 shade tunnels completed. (ii) About 20,000 seedlings potted. (iii) Construction of shade house and potting shed almost completed.
7. Relaunch apiculture and honey production through the setting up bee reserve zones on state forest lands	Number of bee reserve zones set up	$\geq 2$	2
8. Control invasive species by increasing the area of land under conservation management and increase number of endangered plant and animal species maintained in the wild	1. Land under conservation management (hectares) (Actual 2015: 455 ha)	600	527
	2. Number of endangered plant and animal species maintained in the wild (Actual 2015: 98)	150	150

## Risk Management, Citizen Oriented Initiatives & Good Governance

**The customers of the Ministry are:**

- All Ministries and Parastatal Organisations

- Planters (sugar cane, tea, crop, and flowers)
- Farmers/Breeders
- Sugar Companies
- Tea Companies
- Cooperative Federations and societies
- Trade Unions and Federations of planters and farmers
- Planters' Associations
- Importers and Exporters

**The commitment of the Ministry to its customers**

Proper service delivery to all stakeholders and capacity building of the farming community.

Adheres to all the principles and commitment of the Strategic Plan and Customer Charter of the ministry.

**Events hosted by MAIFS in 2016/2017**

Date	Events
------	--------

<b>25 July 2016</b>	The India-Mauritius Global Partnership Forum Break out Session: Challenges and opportunities in the agro economy and progressive farming –
<b>29 July 2016</b>	International Pulse Day
<b>31 August 2016</b>	Signature Ceremony of the Two Technical Cooperation Projects Agreements
<b>6 October 2016</b>	Launching of MauriGap
<b>15-16 October 2016</b>	World Food Day- Domaine Les Pailles
<b>22-23 October 2016</b>	World Food Day- Mahebourg
<b>24 November 2016</b>	Release of new litchi variety Yuk Ho Pow
<b>24 January 2017</b>	Workshop on The Setting Up of The Mauritius Agricultural Biotechnology Institute
<b>02 February 2017</b>	World Wetlands Day 2017
<b>20 February 2017</b>	Workshop on The Validation of Regulations Under The Seeds Act 2013 – IFAD
<b>28 February 2017</b>	Launching of Britannia Organic Zone
<b>21 March 2017</b>	International Day of Forests 2017
<b>30 May 2017</b>	International Day for Biological Diversity
<b>31 May 2017</b>	Workshop On Genetically Modified Organisms
<b>2 June 2017</b>	Launching of Pamplermouses Organic Research Station
<b>22 June 2017</b>	Release of Pink Pigeons at Vallée De Ferney

### **International Meetings/Conferences attended by Hon. Minister**

- *Global Forum for Agriculture and 9th Agricultural Minister's Conference –*

*19 - 21 January 2017 (Germany)*

- *40th Session of Governing Council of IFAD - 13- 15 February 2017 (Rome)*
- *Turkey Africa. 1st Agriculture Minister's Meeting - 27 -28 April 2017 (Turkey)*
- *2017 Annual Meetings of the African Development Bank Group - 22-26 May 2017 (Ahmedabad, Republic of India)*
- *La Foire Internationale de l'Agriculture – 14-17 September 2017 (Antananarivo, Madagascar)*

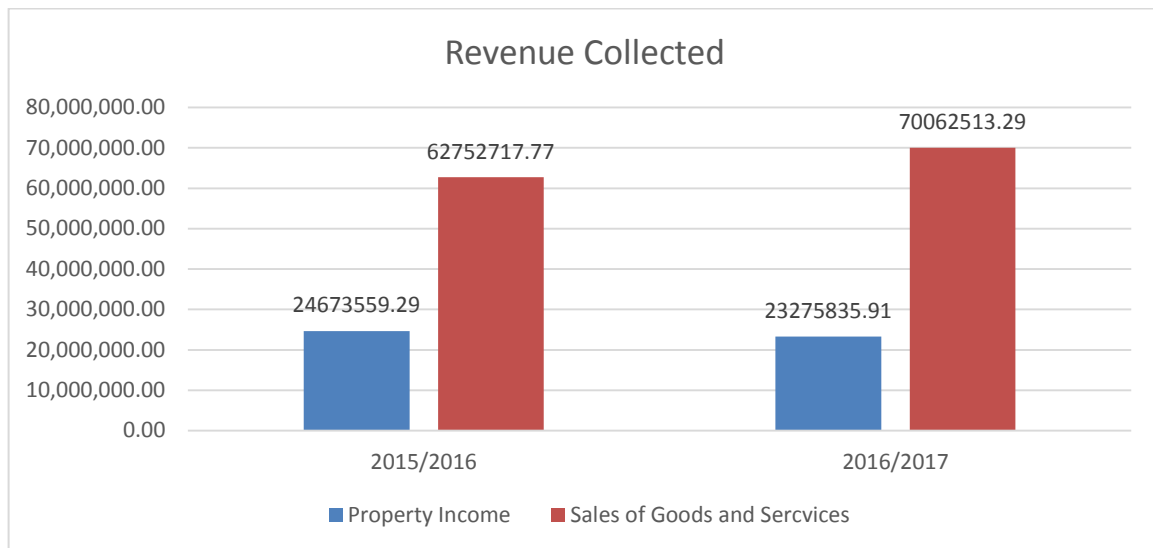
### **PART III – FINANCIAL PERFORMANCE**

In the 2016/2017 Budget Estimates, the Vote of the Ministry of Agro-Industry and Food Security is 16-1 and is made up of six Sub-Heads as follows:

- **16-101 General**
- **16-102 Competitiveness of the Sugar Cane Sector**
- **16-103 Development of Non-Sugar (Crop) Sector**
- **16-104 Livestock Production and Development**
- **16-105 Forests**
- **16-106 National Parks and Conservation**

During the year under review, total revenue for the Ministry amounted to Rs 93,338,349.20 and falls under two broad categories:

- Property Income (other land lease ,shooting and fishing rights)
- Sales of Goods and Services (Clearance fees for tea and tobacco, Sales of plants, seeds, fruits and agricultural produce etc.)



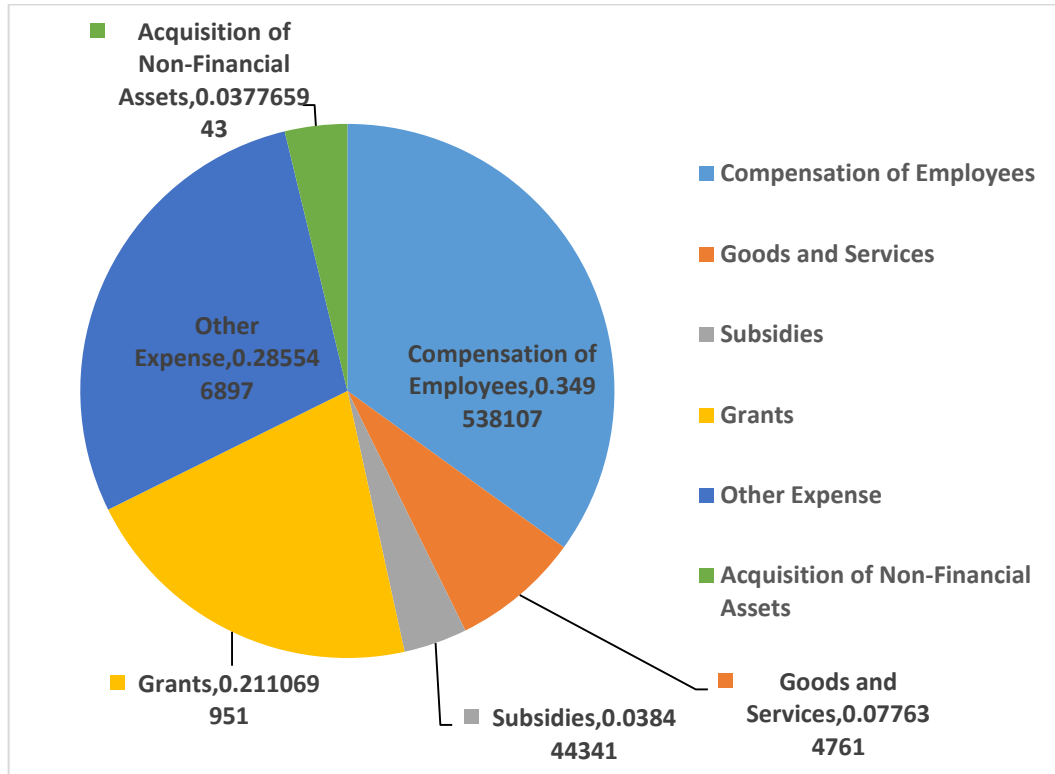
On the expenditure side, the original estimates were Rs 2,611,000,000- and an additional amount of Rs 45,000,000- was provided from Contingencies following the outbreak of “Foot and Mouth Disease” . Thus the total provision attained Rs 2,656,000,000.

The total expenditure for 2016/2017 amounted to Rs 2,295,117,146-

### Total Expenditure 2016/2017

Economic Classification	Head/Sub-Head of Expenditure	2015-2016	2016-2017	2016-2017	% Spent on total Estimate 16-17
		Actual (Rs)	Estimates (Rs)	Actual (Rs)	
21	Compensation of Employees	801,790,844	865,464,000	802,230,903	35%
22	Goods and Services	176,683,820	254,181,000	178,180,871	8%
26	Subsidies	75,131,392	107,800,000	88,234,266	4%
28	Grants	426,934,494	511,575,000	484,430,263	21%
28	Other Expense	312,871,753	727,780,000	655,363,580	28%
31	Acquisition of Non-Financial Assets	456,996,600	189,200,000	86,677,263	4%
Total Expenditures Rec+Cap		2,250,408,903	2,656,000,000	2,295,117,146	100%

**Figure 2 below provides an illustration of expenditure incurred by Ministry of Agro-Industry and Food Security under 16-1 in 2016/2017.**



### Special Fund

“The National Parks and Conservation Fund” is the only Special Fund falling under the purview of the Ministry of Agro-Industry and Food Security. This Fund is established under Section 46 of the Native Terrestrial Biodiversity and National Parks Act 2015. Expenditure incurred during the year has been to the tune of Rs 6,294,936.22.



## Statements of Revenue and Expenditure

### Statement of Revenue

<i>Revenue (Rs)</i>	<i>2015-2016 Actual</i>	<i>2016-2017 Estimates</i>	<i>2016-2017 Actual</i>
Property Income	24,673,559.29		23,275,835.91
Sales of Goods and Services	62,752,717.77	*131,150,000.00	70,062,513.29
Fines, Penalties and Forfeits			
Miscellaneous Revenues			
Total Revenue from property Income, User Fees and other Sources	87,426,277.06	131,150,000.00	93,338,349.20

\* Includes: Estimates of Rs 40 M for Overpayment made in Previous Years for all Ministries/Departments

NOTE:	2015-2016 Actual	2016-2017 Actual
Property Income includes: Other Land Leases (RHO)	9,949,263.70	7,984,349.00
Sales of Goods and Services includes:		
Rental of Government Property (Building) (RGEN)	3,411,200.00	5,870,650.00
Overpayment Made In Previous Years (RGEN)	52,223.13	1,181,478.54

*Statement of Expenditure*

<b>Head/Sub-Head of Expenditure</b>	<b>2015-2016</b>	<b>2016-2017</b>	<b>2016-2017</b>
<b>(Rs million)</b>	<b>Actual</b>	<b>Estimates</b>	<b>Actual</b>
Compensation of Employees	801,790,844.00	865,464,000.00	802,230,903.00
Goods and Services	176,683,820.00	254,181,000.00	178,180,871.00
Subsidies	75,131,392.00	107,800,000.00	88,234,266.00
Grants	426,934,494.00	511,575,000.00	484,430,263.00
Social Benefits	-		
Other Expense	312,871,753.00	727,780,000.00	655,363,580.00
Acquisition of Non-Financial Assets	456,996,600.00	189,200,000.00	83,269,193.00
Acquisition of Financial Assets	-		
<b>Total</b>	<b>2,250,408,903.00</b>	<b>2,656,000,000.00</b>	<b>2,291,709,076.00</b>

### Trends and Challenges

The present analysis provides an insight in terms of its strengths, weaknesses, opportunities and likely threats in the agricultural sector.



### SUGAR SECTOR

#### Strengths

- The sugarcane sector still plays an important multifunctional role in the country, which is a huge net earner of foreign exchange, with cost of inputs for sugar production representing 20% of export earnings, generating valuable foreign exchange for food procurement.
- Many stakeholders of the industry, including Government, the producers and SPIs, strongly believe in the sustainability of the industry for supporting the development of the national economy and social fabric of the country. The sugarcane cluster now forms an integral part of the social, environmental and economic fabric of Mauritius.

- Proven expertise in production of sugar, especially special sugars, which are exported on foreign niche markets.
- The Sugarcane industry has taken extensive and appropriate measures over the past decade to adapt to the change in market conditions resulting from EU policy reform. This has been achieved through diversification and adding value through the production of special and refined sugars, electricity cogeneration from bagasse and ethanol production from molasses.
- Invaluable asset in terms of the production of renewable environment friendly energy, and which has the potential of being an efficient multiproduct bio-factory for the production of high value-added products.
- Some 15% of the energy requirement of the country is generated from bagasse thus avoiding the import of approximately 20,000 tonnes of coal or 80,000 tonnes of high sulphur heavy fuel oil. Bagasse and coal burnt at power plants located at cane mills account for 57% of the electricity on the national grid.
- The sugar cane plant is assisting in the preservation of the local environment and natural sceneries as well as the most important carbon dioxide sequestrator of our local ecosystem and the prevention of the erosion of top soil from the highlands from affecting out beautiful beaches and pristine lagoons.
- Cane fields provide a pleasant landscape. As such, it has important environmental benefits and its aesthetics play an important role for the tourism industry.
- To adapt to the situation of declining production, the industry has already implemented its rationalisation, centralisation and modernisation processes, with the number of mills reduced to four.
- The cost of running service-providing institutions has been reduced by nearly 50%.
- The liberalisation of the import of sugar for the local market has eliminated losses incurred by producers subsidising the domestic market.

“Made in Mauritius” is a label of quality for special sugars. As one of the leading world exporters, Mauritius currently supplies no less than 120,000 tons of unrefined cane sugars

to some 40 destinations worldwide, comprising 20 countries in the European Union, the United States, and Canada, in the Middle East, Far East, Australasia and Eastern Europe. The products are all marketed by the Mauritius Sugar Syndicate which has become a reference for these unrefined special sugars.

The special sugars produced by Mauritius have different attributes. At one extreme is the one named “Golden Granulated”, a subtly flavoured free-flowing sugar, a perfect substitute for white refined sugar. At the other extreme are the Muscovado and Molasses soft sugars that will add intensity of colour and flavour to products. These specialty products are praised not only by connoisseur good food magazines but have, a number of times, been listed in the new products catalogues of specialized international food fairs.

### **Weaknesses**

- With a population of just 1.3 million, local demand for sugar is small and as a result, the sector exports most of its output, with the EU being its largest destination, accounting for 90% of sales. Thus, the sector is too much dependent on the EU market for its export.
- The extent under sugarcane cultivation has declined by approximately 30% during the last 18 years from a production of 570,000 tons sugar in 2004 to an estimated production of 350,000 tons in 2017. The decline in output is attributable to conversion and abandonment of cane land.
- At present, the cost of cane sugar production in Mauritius is among the highest due to a low milling capacity (3700 tonnes cane crushed per day by the existing mills), a short milling season (an average of only 132 days per year), a high ratio of labour to total production costs with field labour making up to 80% of the total labour costs.
- Owing to the high production costs, coupled with the decreasing sugar proceeds, increasing labour cost, costs of agricultural inputs and transport costs, and

problem of availability of labour, many vulnerable small individual sugarcane planters are abandoning their cultivation or are diversifying out of sugar.

- The total area under sugarcane has decreased from 71,580 ha in 2005 to approximately 56,000 ha in 2016. Most of the land loss within this period cannot be recovered back to sugarcane as part of it has already been converted into non-agricultural activities following amendments to the SIE Act. The number of small and medium planters had fallen to below 14,000 in 2016, a drop of 49% compared to 2004 figure. This has occurred despite the fact that small and medium planters benefit from many facilities and incentives put at their disposal by Government to encourage and maintain them into production. Production and productivity are also constrained by the relatively high labour cost compared to our competitors in the regions. The labour cost over the past years have increased by approximately 70% compared to the sugar proceeds which have decreased on average by 30%.
- There are rigidities and uncertainties in the labour market for this sector compared with other emerging sectors of the economy.
- Mauritius is limited and constrained in availability of land and other resources to expand its production in case there is a need.
- The continued decline in cane supply would result in a real threat to the viability of the industrial set-up, which has a large fixed cost asset base that underpins the country's agro-energy base.

## **Opportunities**

The reform of the Sugar Industry is geared towards:-

- i. Cost reduction;
- ii. Additional revenue;
- iii. Optimal use of by-products;
- iv. The pro poor dimension;
- v. Debt alleviation: measures to address the problems posed by the current indebtedness;

- vi. Adapting regulation: removal of regulatory constraints in respect of the use of cane and cane juice;
  - vii. Synergies:
    - (a) the fostering of cane cultivation agreements between millers and planters to ensure an adequate supply of canes to the former and remove the sugar loss constraints faced by the latter; and
    - (b) enhanced participation in equity.
- There is the possibility to invest in R&D and innovate further in other value added co-products of the industry which can increase the revenue of producers and maintain the viability and sustainability of the sector.
  - The industrial set-up that has been established could allow further value addition through a *filière* approach, which was not possible until recently, when the industry still exported mainly raw sugar.
  - The industry's exports now exceed the total output of sugar from cane grown locally. This is because it makes use of the 15% tolerance level for non-originating sugars (NOS), which is a provision of the Economic Partnership Agreement (EPA) and applies to all products exported by African, Caribbean and Pacific (ACP) Group of States. This rule allows it to incorporate up to 15% (by value) NOS sugars in its shipments to the EU. The ability for Mauritius to divert sugar from the EU to remunerative regional markets is an important means of mitigating the loss of EU preference. However, regional markets are limited in size and access is often restricted by trade barriers, even within established free trade areas (FTAs).
  - The Fairtrade Initiative has helped certified small cooperative planters to continue growing cane and, by supporting cane supply to support mill. Possibilities should be explored to increase the volume of sugar exported under this label, which could also be extended to large growers.
  - Some small and medium enterprises (SMEs) have emerged to produce, for instance, value added sugar cubes and spice-scented sugars.

- The setting up of the Sugarcane Sustainability Fund for the purpose of fostering the production of sugarcane and bagasse.
- Furthermore, the development of a Renewable Sugarcane Industry Based Biomass Framework will also foster the promotion of production of energy from biomass, including sugarcane, cane trash, high fibre cane, fuel canes, gramineae and other related biomass, generated by the sugarcane industry.
- The development of a Sugar Based Agro Industry Framework will assist in the promotion of a sugar based agro industry and to generate value added sugar or other sugar products through the use of local raw materials.
- Mauritius will have to pursue more in depth discussion with the EU to explore the possibility for another Accompanying Measures Support Programme (AMSP) from the EU for Sugar Protocol Countries.

## **THREATS**

- This major upheaval on the EU market with the abolition of EU sugar country quotas and the liberalisation of intra border trade, will lead to consequential price instability.
- Further reduction of the extent under cane due to the declining revenue on the sugar proceeds post the abolition of production quota on the EU market.
- The problem in the labour sector is characterised by three elements: an ageing labour force; a mechanism whereby yearly increases in remuneration exceed the inflation rate against a backdrop of lower sugar prices; and no recourse to foreign labour, in particular, for small planters.
- During the past years, a decline in the sale of Mauritian special sugars has been recorded on the EU. This has resulted from greater competition in this niche market, especially since the EU granted access to countries in Central and South America under recent Free Trade Areas (FTAs).
- Although the sugars are not of the same quality, they are close substitutes with special sugars and compete with Mauritian sugars, resulting in a loss of market share for ACP producers.



- The Mauritian sugar industry has invested massively in the reforms of the EU sugar regime and is heavily indebted.
- With Brexit, UK will be called upon to re-negotiate or restart new bilateral negotiations with other countries / trading blocks. Based on this principle, the other countries will longer be able enjoy preferential market access in UK. In the specific case of Africa with which EU has signed or is negotiating EPAs might lose preferential access to the UK market.
- Given that Mauritius exports most of its sugar on the EU market, this implies that the impact of Brexit will be more significant for our sugarcane industry. However, until Brexit has not been finalised there will be no disruption in the trade with EU and UK during the transitional period.

In the EU, a major development has intervened when in the context of the discussions on the future of the post-2013 Common Agricultural Policy (CAP) with the decision for the end of the sugar quota system in the EU as from September 2017.

### **FOOD CROPS (Non- Sugar Sector)**

#### **Strengths**

- Government initiatives to enable development through agri-business promotion and SME development; setting up of a national wholesale market; and a wide array of supporting institutions.
- A high level of self-sufficiency in fresh vegetable production based on an experienced farming community and interest of the private sector;
- An island-wide coverage for research and extension, manned by qualified professionals.

#### **Weaknesses**

- Limited land availability; small size of land holdings debars from economies of scale for mechanisation; and the absence of Specialised Agricultural Production Areas dedicated to organic or agro-processing;
- Relatively low farm productivity associated with limited uptake of modern management techniques; an over-reliance on manual methods and agro-chemicals; low level of investment, and unwillingness to take risks; farmers' resistance to cluster to gain on economies of scale and productivity; no entrepreneurial aptitudes for vertical integration up the value chain;
- High cost of labour and agricultural inputs; weak supply chains in terms of lack of planting material, storage infrastructure and agri-service support; shortage of skilled and unskilled labour;
- Unstructured marketing; absence of norms and standards, and enforcement
- Weak co-ordination and linkage between institutions, farmers and other stakeholders;
- Inadequate investment in research, intensive technologies and capacity development;
- Unattractive to youth, and an ageing farming community.

### **Opportunities**

- Useful option for diversification on abandoned sugarcane lands;
- Emergence of investors in the agro-industrial sector; and agri-business opportunities developing out of economic integration and free trade areas in the region e.g. SADC, IOC, AU and COMESA;
- Growing awareness for eco-friendly agriculture, Green Agriculture and Natural/Bio-Farming; possibilities under fair-trade label and other niche markets;
- Growing demand for variety in diets, nutritious food out of health concerns; innovative and convenience products to match modern lifestyle of the population; and a growing tourism industry;
- Potential for clustering to benefit from economies of scale.

## **Threats**

- Ageing farming community and the new generation unwilling to embark in agriculture;
- Inheritance issues and ever-decreasing size of land holdings; and conversion for urban development;
- Dominance of market intermediaries;
- Climate change;
- Competition from cheaper imports from large-scale producing countries;
- Adverse agro-climatic conditions, climate change risks and natural disasters; increasing threats from introduction of new pests and diseases; and lack of insurance;
- Competition for resources (human, land and water) from other economic sectors.

## **LIVESTOCK SECTOR**

### **Strengths**

- Government initiatives to boost up livestock production and supply of safe food to the population, plus a strong commitment to deploy resources, release land and implement special schemes.
- Existing institutions for provision of support services such as training, research, extension and veterinary care, with a pool of experienced staff, technical skills and essential infrastructure.
- Farmers' experience
- Emergence of some medium-sized and market-oriented producers.
- Easy trainability of the existing operators and most of the potential operators.
- No major notifiable animal diseases

- Increased vigilance in disease control and prevention (early warning system, rapid alert system and contingency plans)
- Responsiveness of the Ministry to monitor and contain outbreak of diseases related to livestock.

### **Weaknesses**

- High cost of production, inputs and technologies, hence adversely affecting competitiveness
- Limited access to land, labor, capital and agricultural machinery
- Low adoption of good animal husbandry practices
- Difficulties to import good quality breeding animals
- Lack of cooperation among farmers to cluster for economies of scale
- Inadequate infrastructure, market intelligence and value addition
- Difficulties to comply with environmental exigencies
- Inadequate food safety system
- Inappropriate legislation in the sector
- Lack of organised market structure and market intelligence
- Ageing farming community
- Labour scarcity
- Research and development in livestock and constraint

### **Opportunities**

- Possibility to improve service delivery by joint review processes and by better coordination across the Ministry
- Setting up of regional livestock zones and multiplier farms for goats and heifers;
- More land available for non-sugar sector following reforms in the sugar industry
- High demand for livestock products; increasing consumer awareness for safer food
- Increase vigilance in disease control and prevention (early warning system, rapid alert system and contingency plans)

- Public Private Partnership for operating small scale abattoirs
- Possibility for updating and harmonizing regulations
- Increased scope of accreditation of Food Technology Laboratory.
- Availability of by-products for use as animal feeds
- Emergence of new target groups in the sector (agribusinesses, investors, sugar planters)
- Diversifying, vulnerable groups, retrenched workers, women, unemployed, youth).

### **Risks**

- Failing to improve service delivery (implications for beneficiaries and services)
- Low interest of stakeholders in the livestock sector due to low return on investment compared to other economic sectors
- Cheap imports of dairy, meat and meat products, and risks of dumping from other countries.
- Risks of introducing animal diseases and zoonoses.
- Urbanisation and development of non-agricultural activities
- Climate change
- Competition for land for infrastructure and bio-mass production for fuel.

## **FORESTRY AND BIODIVERSITY SECTORS**

### **Strengths**

- Development of a National Biodiversity Strategy and Action Plan and a Protected Area Network Strategy to protect and restore native biodiversity and habitats.
- Adherence to recommendations of multilateral environment agreements such as the Convention on Biological Diversity, the Ramsar Convention and the Convention on

International Trade in Endangered Species of Wild Fauna and Flora (CITES) among others.

- Collaboration with international institutions such as the United Nations Development Programme, l'Agence Francaise de Développement, the Missouri Botanical Garden and the Durrell Wildlife Conservation Trust amongst others.

### **Weaknesses**

- Fragmentation of responsibilities over the management of biodiversity and protected areas.
- Knowledge gaps on identification, inventorying and characterizing local terrestrial biodiversity.
- Shortage of qualified and experienced technical and administrative staff.
- Inadequate information sharing between institutions and stakeholders.
- Conflicts of interest between conservation and economic activities (e.g. human-bat conflict).

### **Opportunities**

- Regroup responsibilities under the aegis of a sole institution.
- Revision of the Forest Code and Institutional Reform.
- Recruitment and training of staff.

### **Threats**

- Deforestation/ forest degradation and fragmentation due to urban development.
- Threats to native biodiversity including competition and predation pressure from invasive species and outbreaks of pests and diseases.
- Vulnerability to climate change and extreme weather events.

## Strategic Direction

This vision will be supported by the following outcomes:

- Strong sustainable growth in profits from agriculture, driven by increased market-orientation, competitiveness and resource-efficiency
- Accent on Diversification of Agriculture and Value Addition
- Agriculture, and the wider agri-food supply chain, is resilient to shocks and to future challenges
- High levels of training, education and skills enable farmers to improve their profitability and become greener
- Mauritius is increasingly undertaking organic / green farming
- Agriculture is recognized as an exciting and rewarding career and there are a range of routes into the industry for new entrants
- Agriculture is valued for its contribution to the economy
- Maintenance of Forest Cover and Conservation of Biodiversity

### **Strong sustainable growth in profits from agriculture, driven by increased market-orientation, competitiveness and resource-efficiency**

- Farmers become more market oriented, anticipating demand from customers and from other parts of the agri-food supply chain and meeting consumers' expectations for quality and sustainability
- Farmers use energy, feed and fertilizer efficiently, saving money on inputs while reducing greenhouse gas emissions and improving water quality
- Farmers monitor their productivity, using benchmarking data and other tools to identify opportunities for improvement

- Use demonstration farms, training, education and advice to promote green farming and increased profitability through innovative techniques and best practices
- Proportionate and effective regulation

### **Accent on Diversification of Agriculture and Value Addition**

In the face of shrinking natural resources and ever increasing demand for larger food and agricultural production arising due to high population and income growths, agricultural intensification is the main course of future growth of agriculture in the region. Research for product diversification should be yet another important area.

Besides developing technologies for promoting intensification, the country must give greater attention to the development of technologies that will facilitate agricultural diversification particularly towards intensive production of fruits, vegetables, flowers and other high value crops that are expected to increase income growth and generate effective demand for food. The per capita availability of arable land is quite low and declining over time. Diversification towards these high value and labour intensive commodities can provide adequate income and employment to the farmers dependent on small size of farms. Due importance should be given to quality and nutritional aspects. High attention should be given to develop post-harvest handling and agro-processing and value addition technologies not only to reduce the heavy post-harvest losses and also improve quality through proper storage, packaging, handling and transport. The role of biotechnology in post-harvest management and value addition deserves to be enhanced.

The Cane industry has an important role to play in terms on increasing its contribution to the energy production by at least 5 %. This is based on research being carried out in high-fibre cane varieties. Moreover, the Cane industry is geared towards valued added products in terms of valorizing co-products such as Ethanol and special sugars.



Contributions of small holders in securing food for growing population have increased considerably even though they are most insecure and vulnerable group in the society. The off-farm and non-farm employment opportunities can play an important role.

Greater emphasis needs to be placed on non-farm employment and appropriate budgetary allocations and rural credit through banking systems should be in place to promote appropriate rural enterprises. Specific human resource and skill development programmes to train them will make them better decision-makers and highly productive. Human resource development for increasing productivity of these small holders should get high priority. The ultimate goal here is to develop a culture of entrepreneurship and encourage youngsters to become agro-entrepreneurs.

**Agriculture, and the wider agri-food supply chain, is resilient to shocks and to future challenges**

- Farmers increase their efficiency and market focus and adopt high standards in biosecurity, traceability, health and welfare
- Collaboration between farmers (both informally and through co-operatives) to take advantage of economies of scale, share best practice, market produce and benefit from a stronger price-negotiating position
- Collaboration between farmers, processors and retailers to increase the resilience of the whole supply chain, with farmers benefiting from improved price security and transparency, shared risk management and feedback from retailers
- Farmers develop new supply chain models e.g. by diversifying products and markets and establishing farmers' markets

**High levels of training, education and skills enable farmers to improve their profitability and become greener**

- Promote training and education as an investment for farmers that will recoup rewards

- Ensure that a wide range of learning opportunities are available: including Modern Apprenticeships, as well as one-off training events, demonstration farms, mentoring and on-farm advice on best practice and green farming
- Identify the skills needs of farmers and plan and promote learning activities to address these
- Farmers boost their performance by embracing innovative techniques and best practice

### **Mauritius is increasingly undertaking organic / green farming**

- Encourage a step-change in agriculture, where farmers combine environmentally and commercially successful management in the running of their businesses. Support this through advice, training, education and demonstration farms
- Make sure regulation sets an effective standard for environmental performance
- Drive further improvements in the green credentials of our food and farming industries e.g. using marketing tools
- Promote agriculture as an exciting career and inform young people on how to get started in the industry
- Identify and address barriers to entry.
- Provide training, mentoring and advice to ensure new entrants have the skills and knowledge needed to develop successful businesses, and promote opportunities for Modern Apprenticeships
- Encourage better succession planning, to make sure farmers can retire when they wish and create opportunities for generational renewal

### **Maintenance of Forest Cover and Conservation of Biodiversity**

Our forests are invaluable assets harbouring a rich biodiversity, and they protect our watersheds and environmentally sensitive areas. They need to be protected from degradation, conserved and further enhanced. Given their new roles in mitigating climate change impacts, management will aim at increasing our tree cover, and will favour non-consumptive uses and those activities that are sustainable, less destructive and more rewarding in the long term.

Invasive alien species are a major cause of bio-diversity loss. A comprehensive programme will therefore be implemented for their control. In addition, it would be important to mainstream Biodiversity implementation in development frameworks and the valuation of ecosystem services. Agro-biodiversity has special significance for the enhancement of productivity in crops and livestock and as a source of natural resistance to pests and diseases. As such, it can support the drive for biopharming and food security, more so under threat of climate change. Adequate resources will be devoted to advance on-going conservation efforts for both plant and livestock genetic resources.

## **ANNEX 1**

### **1. Mauritius Cane Industry Authority (MCIA)**

With the promulgation of the Mauritius Cane Industry Authority Act (Act No 40 of 2011) on 19 March 2012, the Mauritius Cane Industry Authority (MCIA) was established as a corporate body and became operational with the merging of six cess funded institutions. The mission is to promote the development of the cane sector and its clusters through systematic policy measures, creating an enabling environment with innovative and efficient services, research and development, technology transfer and value addition to meet current and future challenges. The objects and functions of the MCIA have been broadened to empower the MCIA to manage the Sugar Cane Sustainability Fund, to keep and maintain land conversion rights register, to develop a Renewable Sugar Cane Industry Based Biomass Framework, to develop an Ethanol and Molasses Framework and to develop a Sugar Based Agro Industry Framework. The MCIA has also established a Board of Directors assisted by an Advisory Council.

### **2. Forestry Services**

The Forestry Service, headed by the Conservator of Forests is responsible for the management of the State Forest Lands including 'native' forests and Nature Reserves for the protection of the ecosystem. It has to contend with increasing pressure for conversion to unrelated activities. Its main activities are shifting to soil, water and biodiversity protection as well as raising awareness about forest conservation and protection.

### **3. National Parks and Conservation Service**

NPCS was established in 1994 under Section 8 of the Wildlife & National Parks Act of 1993 and now replaced by the Native Terrestrial and National Parks Act of 2015. This institution is headed by a Director who is the government's adviser on all matters relating to terrestrial flora and fauna conservation, and works to protect and conserve biodiversity for future generations. The mission statement of NPCS is the "sustainable management and restoration through in-situ and ex-situ conservation, ecosystem restoration, public awareness, promotion of ecotourism, research and implementation of international conventions".

### **4. National Agricultural Products Regulatory Office (NAPRO)**

NAPRO was set up under the National Agricultural Products Regulatory Office Act 2013. It operates as a division within the Ministry of Agro-Industry & Food Security and is mandated to control and regulate the import, export, production and sale of meat, tea, tobacco and derived products as well as their preparation, processing, manufacturing and packing. It also regulates the activities and the premises related to slaughtering of animals, and determine the sale price for tea / tobacco leaves to manufacturers.

### **5. Small Farmers Welfare Fund**

The Fund has been created to promote the economic and social welfare of small farmers and their families. It registers farmers and operates schemes and projects for their wellbeing.

### **6. Mauritius Society for Animal Welfare**

Following the introduction of the Animal Welfare Act 2013, the Mauritius Society for Animal Welfare (MSAW) has been set up and has replaced the MSPCA. The objects and functions of the MSAW have been broadened as they include not only the catching and disposal of stray dogs but also of stray cats, sensitization of the general public in respect of the need to treat animals humanely and, the prevention of cruelty to animals and the promotion of the welfare and good treatment of animals.

## **7. Mauritius Meat Authority (MMA)**

The Meat Authority was established by the Meat Act 1974. It regulates the fresh meat market. Its main activities involve slaughter, dressing and transportation of cattle, goats, pigs, sheep and deer meat to markets. It ensures that slaughtering is done in line with hygienic, sanitary and environmental norms, and that only carcasses fit for human consumption are released for sale. In addition, it ensures that slaughtering of animals follows international norms, namely LTACCP.

## **8. Irrigation Authority**

The Irrigation Authority has been set up under the Irrigation Authority Act No. 39 of 1978 and devise schemes for irrigation of specific areas; to implement and manage irrigation projects and to do all other acts incidental thereto; and to undertake research into the optimum use of water made available for irrigation.

IA is contributing towards food security by providing irrigation facilities to some 500 ha of lands and producing some 15,000 tonnes vegetables/onions. The main activities of the Irrigation Authority include carrying out feasibility studies for new irrigation projects; design, construction, supervision and implementation of irrigation projects; operation and maintenance of irrigation projects; provision of irrigation at subsidised rates and other incentives to planters; and advice to planters on matters related to irrigation and water management.

## **9. Agricultural Marketing Board (AMB)**

The Agricultural Marketing Board (AMB) was established in 1964 under the Mauritius Agricultural Marketing Act of 1963 as a measure to promote diversification of agriculture. Its mission is to maximize consumer satisfaction by providing high quality, innovative products and services reliably and cost effectively.

## **10. Food and Agricultural Research and Extension Institute (FAREI)**

FAREI was established in 2014 through the FAREI Act 2013 to take over the functions of the Food and Agricultural Research Council (FARC) and the Agricultural Research and Extension Unit (AREU) as part of reforms to ensure cost-effective and quality services, and optimise human resources.

It has the responsibility to conduct research in non-sugarcane crops, livestock, agro-forestry and to provide an extension service to farmers. Its mission is to support and implement priority research, development and training programmes and appropriate technologies for food security and to enhance competitiveness, sustainability and stakeholder equity across the agri-food value chains.

Its objectives include:

1. Introduce, develop and promote novel technologies in the food and non-sugar agricultural sector within a sustainable framework;
2. Co-ordinate, promote, and harmonise priority research activities in the non-sugar agricultural, food production and forestry sectors;
3. Promote and encourage agricultural and agri-business development through the setting up of agricultural youth clubs, agricultural women clubs and agricultural entrepreneur clubs; and
4. Promote dissemination and practical application of research results.