

# MAURITIUS CANE INDUSTRY AUTHORITY

REPORT AND ACCOUNTS **2018-2019**



Farmers Service Agency | Agricultural Mechanization Unit | MSIRI | Control & Arbitration Department  
Sugar Storage & Handling Unit ( Sugar Terminal ) | Sugar storage & Handling Unit ( Bagged Sugar )



Mauritius Cane Industry Authority

**REPORT AND ACCOUNTS**

**1 JULY 2018 to 30 JUNE 2019**

### **VISION**

To ensure a sustainable cane industry as an important pillar within the socio-economic framework of the country

### **MISSION**

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



## MAURITIUS CANE INDUSTRY AUTHORITY


Date: 13 July 2021

**The Honourable Maneesh GOBIN**  
**Attorney General**  
**Minister of Agro-Industry and Food Security**  
**PORT LOUIS**

Sir

I have the honour to submit the Annual Report and Accounts of the Mauritius Cane Industry Authority for period 1 July 2018 to 30 June 2019.

Yours faithfully



Medha GUNPUTH

**CHAIRPERSON**



## CORPORATE INFORMATION

Chairperson of Board of Directors	Mr Medha GUNPUTH
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### Introduction

The sugar cane industry crossed another milestone with the establishment of the Mauritius Cane Industry Authority (MCIA), bringing under its ambit the operations and functions of the six Service Providing Institutions. This merger formed part of the reform process within the industry, as a consequence of Government's policy to sustain the planting community subsequent to the 36% drastic cut in the price of sugar. For the MCIA, the objective was to bring down cess not to exceed 4% of the ex-Mauritius Sugar Syndicate price as from crop 2011.

The Ministry of Agro-Industry and Food Security took the initiative to provide for the establishment of the Mauritius Cane Industry Authority with a view to render the sugar cane industry more effective and efficient. With the Proclamation of the Mauritius Cane Industry Authority Act (No. 40 of 2011) on 19 March 2012, the Mauritius Cane Industry Authority was created as a body corporate to take over the powers and objects of the following six cess funded institutions, namely:

- (i) Cane Planters and Millers Arbitration and Control Board
- (ii) Farmers Service Corporation
- (iii) Mauritius Sugar Authority
- (iv) Mauritius Sugar Industry Research Institute
- (v) Mauritius Sugar Terminal Corporation
- (vi) Sugar Planters Mechanical Pool Corporation

The Mauritius Cane Industry Authority became the apex organisation of the sugar cane industry and the relevant Acts of the six cess funded institutions were repealed and the operations and activities of the institutions were vested with the MCIA.

### Establishment of the Authority

The Mauritius Cane Industry Authority was established as a body corporate on 15 December 2011 with the enactment of the Mauritius Cane Industry Authority Act (No. 40 of 2011). The Act came into force by Proclamation on 19 March 2012.

### Objectives of the Authority

The objects of the Authority are to:

- (a) monitor, oversee and coordinate all activities relating to, and ensure a fair, efficient and effective administration and operation of the cane industry;
- (b) promote and support the sustainable development, efficiency and viability of the cane industry;
- (c) formulate and implement policies, strategies, plans, programmes and schemes in relation to the cane industry;
- (d) promote and facilitate the sustainable development of the cane cluster in Mauritius and in the region;
- (e) by means of research and investigation, ensure the technical progress and efficiency of the cane industry;
- (f) monitor and co-ordinate the activities of the cane industry, including planting, milling, processing, transport, bulk handling and marketing;
- (g) co-ordinate the activities of organisations concerned with the cane industry in the private and public sectors;
- (h) overview the storage, sampling, bagging, packing, loading and unloading of sugar;
- (i) maintain a pool of machinery for agricultural purposes;
- (j) resolve disputes between planters, millers and middlemen;
- (k) overview the registration of cane contracts;
- (l) promote the development and use of co-products;
- (m) facilitate the participation of employees and planters in the cane industry;
- (n) ensure that necessary essential services are available to planters;
- (o) promote the setting up of cane nurseries and the supply of cane setts to planters;
- (p) facilitate the adoption of modern and efficient agricultural practices by planters.

The following additional objectives were conferred on the MCIA after amendments were brought to the SIE Act:

- (q) foster the use of biomass, including sugar cane, cane trash, high fibre cane, fuel canes, gramineae and other related biomass, in the production of electricity and biofuels for transport ; and
- (r) foster competitiveness of all segments of production in the cane industry.

The Sugar Industry Efficiency (Amendment) Act 2016 was proclaimed on 23 December 2016 and became operational on 1 January 2017.

## Functions of the Authority

The Authority has such functions as are necessary to further its objectives most effectively and may, in particular:

- (a) set up and manage such agricultural or other centres as the Minister may determine;
- (b) hire the agricultural machinery of the Authority to such persons and on such terms and conditions as the Board may determine;
- (c) provide technical advice, assistance and training to planters on cane cultivation, harvesting and transport of canes and post-harvest operations;
- (d) manage agricultural land and, in particular, abandoned fields in Sugarcane Planters' Regrouping Project (SPRP) or such other similar projects;
- (e) enter into management contracts on behalf of planters;
- (f) devise agricultural credit schemes in consultation with financing agencies;
- (g) ensure that arrangements are made so that canes of small planters are harvested at their optimal sucrose content;
- (h) assist cooperative societies in benefiting from the Fair Trade Initiative or such other similar projects;
- (i) provide, operate and maintain facilities for the storage, sampling, bagging, packing, loading and unloading of sugar or such co-product or other commodity as the Minister may approve;
- (j) set up a planters' data bank;
- (k) commission studies and consultancies in respect of any specific or general issue affecting the cane industry;
- (l) review, on a regular basis, the economic and financial performance as well as the problems and prospects of the cane industry;

- (m) periodically commission a revaluation of the fixed assets of the cane industry;
- (n) commission long-term master plans for the viability and sustainability of the cane cluster, with due regard to the interests of all parties concerned;
- (o) make recommendations to the Mauritius Revenue Authority regarding a rational and uniform system of granting capital allowances, including allowances in respect of equipment depreciation, in relation to the cane industry ;
- (p) as and when appropriate, examine the accounts of millers and planters and offer advice on the forms to be used in connection with the presentation of those accounts;
- (q) collect contribution from the sale of sugar on the local market for the purposes of compensation under section 46 (2) (k) of the MCIA Act;
- (r) advise the Minister on:
  - (i) the formulation and management of policies, strategies and schemes in relation to the cane industry;
  - (ii) the provision of adequate means of inland access or, after consultation with the Mauritius Ports Authority, sea access, to the sugar terminal;
  - (iii) the transport of sugar to and from the sugar terminal;
  - (iv) all measures necessary to ensure the viability of the cane industry.

By virtue of the SIE (Amendment) Act 2016, the following functions have been added:

- (ra) manage, for the purpose of fostering the production of sugar cane and bagasse, the Sugar Cane Sustainability Fund set up under the Sugar Industry Efficiency Act;
- (rb) keep and maintain, for the purpose of sugar reform under the Sugar Industry Efficiency Act, a Land Conversion Right (LCR) register;
- (rc) promote the production of energy from biomass generated by the sugar cane industry, develop and monitor the Renewable Sugar Cane Industry Based Biomass Framework specified in the Sugar Industry Efficiency Act;



(rd) determine, under the Sugar Industry Efficiency Act, the sale price of molasses to distillers producing ethanol for blending or export or potable alcohol for export;

(re) establish, under the Sugar Industry Efficiency Act, the Joint Molasses Allocation Committee for the allocation of molasses between distilleries;

(rf) promote the Sugar-Based Agro-Industry and to generate sugar through the use of local raw materials, develop and monitor the Sugar Based Agro-industry Framework referred to in the Sugar Industry Efficiency Act;

(rg) provide value addition from ethanol obtained from molasses or from other raw material obtained from sugar cane, develop and monitor the Ethanol and Molasses Framework referred to in the Sugar Industry Efficiency Act.

For the purposes of section 5(1) (i) of the MCIA Act, the facilities to be provided by the Authority shall include:

- (a) loading and unloading quays;
- (b) buildings, sheds and other structures; and
- (c) plant, machinery and equipment.

## Powers of Authority

The Authority has such powers as are necessary to attain its objectives and discharge its functions most effectively and may, in particular, subject to the MCIA Act:

- (a) enter into a contract, in accordance with the Public Procurement Act, including a contract for the supply of goods, services, plant, equipment or materials for the execution of works;
- (b) receive grants and donations, and raise funds;
- (c) subject to para e (i), fix and levy fees and charges;

(d) enter into an agreement with any person for the performance, or provision, by that person, of any service or facility which the Authority is authorised to perform or provide;

(e) with the Minister's approval:

- (i) fix the rate of charges in respect of the storage, bagging, packing, loading or unloading, at the sugar terminal, of sugar or any other commodity;
- (ii) undertake, by agreement with the Mauritius Ports Authority, the execution of bulk handling or automated or semi-automated cargo handling operations in respect of any commodity other than sugar;
- (iii) give such guidelines as it considers appropriate to the Mauritius Sugar Syndicate for the purpose of formulating, coordinating and harmonising the policies of those organisations in keeping with the objectives of the MCIA Act.

## Monopoly of Authority

1. Subject to section 7(1)(b) of the MCIA Act, no person, other than the Authority or an authorised body shall:

- (a) as from the appointed date, store or load into a ship any sugar manufactured in Mauritius; or
- (b) during such time as may be specified, store such other commodity as may be prescribed.

2. (a) Subject to section 7(1) b) of the MCIA Act and to such conditions as may be prescribed, as from the appointed date:

- (i) every miller shall cause all the sugar manufactured at his factory to

- be delivered to the Authority or, with the approval of the Authority, to an authorised body;
- (ii) any sugar delivered under para (a) shall be consigned to the Mauritius Sugar Syndicate in the name of its owner;
- (iii) the Authority or an authorised body, as the case may be, shall receive any sugar manufactured and delivered to it under para (a).
- (b) The Board of Directors may authorise a miller to store sugar at his factory or at such other place as it may approve.
- are maintained, and applied throughout the organisation. The report has been prepared as far as practicable in accordance with the 'Code of Corporate Governance for Mauritius'. The Chairperson and Members of the Board of Directors fully understand the importance of Corporate Governance, and believe that the adoption of high standards of governance are imperative for the enhancement of all stakeholders' trust and confidence including the planters' community and continuously take steps to improve governance within the framework of the Mauritius Cane Industry Authority Act (No. 40 of 2011) and other applicable legislations.

## Corporate Governance Report

### *Compliance and Enforcement*

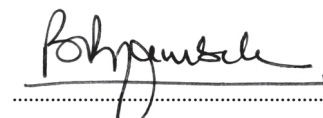
The Board of Directors is responsible for ensuring that proper standards of Corporate Governance

### *Statement of Compliance*

We confirm to the best of our knowledge that the Mauritius Cane Industry Authority has complied with all its obligations and requirements under the Code of Corporate Governance.



Vikraj RAMKELAWON  
Lead Analyst, MoFED  
BOARD MEMBER



Bojrazsingh BOYRAMBOLI  
Senior Chief Executive,  
MoA&FS  
CHAIRPERSON

### Structure and composition of the MCIA Board of Directors

The structure, composition and the manner of appointment of members have been established by Section 8 (1) of the Act.

The composition of the Mauritius Cane Industry Board of Directors during the period 1 July 2018 to 30 June 2019 is shown in the Table below:

**Table 1. Composition of the Board of Directors during the period 1 July 2018 - 30 June 2019**

Mr Bojrazsing Boyramboli (as from 23 .8 2018)	<b>Chairperson</b>
Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018)	<b>Ag. Chairperson</b>
Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018)	Representative of the Ministry of Agro-Industry and Food Security
Mrs Chandanee Jhowry (as from 23.8.2018)	
Mr Vikraj Ramkelawon	Representative of the Ministry of Finance and Economic Development
Mr Jacques M D'Unienville, G.O.S.K	Member having wide experience in the sugar industry sector
Mr Nundlall Basant Rai, P.D.S.M	Member having wide experience in the sugar industry sector
Mr Jean Li Yuen Fong	Member having wide experience in the sugar industry sector
Mr Amal Kumar Mohabeer Mungur	Member having wide experience in the sugar industry sector

### Tenure of Office

Every member of the Board, other than the ex-officio member, holds office for a period of 2 years and shall be eligible for reappointment. The Chief Executive Officer is in attendance at Board Meetings and may take part in its deliberations, but

does not have the right to vote. The other Directors, Assistant Director and Managers are also called to be in attendance as and when required. The Administrative Manager acts as Secretary to the Board.

## Powers of the Board of Directors

As per the new section 9(1)(a) of the Mauritius Cane Industry Authority Act, the Board of Directors shall meet at least once every month.

Sections 10 (1) to (6) of the Act stipulate the powers of the Board of Directors as follows:

- (1) (a) The Board may, on the recommendation of the Chief Executive Officer, set up one or more departments, split one of those departments into two or more, or merge two or more of those departments into one.
- (b) For the purpose of ensuring the efficient and effective operation of any department, the Board may set up within that department such number of sections or units as it may determine.
- (2) The Board may set up such committees of not more than five persons as may be necessary to assist it in the discharge of its functions and the exercise of its powers. The persons may be members and non-members.
- (3) The persons referred to above shall:
  - (a) be appointed by the Board on such terms and conditions as it may determine; and
  - (b) be paid such allowance as the Board may, with the approval of the Minister, determine.
- (4) A committee shall:
  - (a) be chaired by the Chief Executive Officer or such other person as the Board may determine;
  - (b) meet as and when required by the Board or as often as the Chairperson of that committee thinks necessary; and
  - (c) within such time as may be fixed by the Board, submit a report which shall contain its observations, comments and recommendations on any matter referred to it by the Board.

- (5) The committee shall regulate its meetings in such manner as it may determine.
- (6) The Board shall not concern itself with any matter relating to the exercise by the MSIRI or the Control and Arbitration Committee of their powers or the discharge of their functions.

## Conflicts of Interest

Section 9 (3) of the Mauritius Cane Industry Authority Act provides that where a member has any interest, direct or indirect, in any matter before the Board, he shall, as soon as reasonably practicable, disclose to the Board the nature of the interest and shall not take any part in the deliberation of the Board relating to that matter.

## Role and Function of the Chairperson of Board of Directors

The Chairperson of the Board of Directors is non-executive and is appointed by the Minister of Agro-Industry and Food Security under Section 8(2)(a) of the Act. The role and functions of the Chairperson are set out below:

- (a) to preside over meetings of the Board and to ensure its smooth functioning in the interest of good governance;
- (b) to encourage and ensure active participation of members in discussions and Board matters;
- (c) to ensure that all relevant information and facts are placed before the Board to enable members to reach informed decision;
- (d) to execute contracts, jointly with the Chief Executive Officer, on behalf of the Authority.

## The Advisory Council

The new Section 10A of the Mauritius Cane Industry Authority Act provides for the setting up of an Advisory Council which shall assist the Board in the discharge of its functions.

The structure, composition and the manner of appointment of members have been established by the new Section 10A (2) of the Act.

Four (4) meetings of the Advisory Council were held from 1 July 2018 to 30 June 2019.

The composition of the Advisory Council is as follows:

**Table 2. Composition of the Advisory Council**

Mr Marie Joseph Jacques Gerard Chasteau De Balyon	Chairperson
Mrs Soovidama Ponien Vencatachellum	Representative of the Ministry responsible for the subject of cooperatives
Mr Keshore Heeramun (Retired as from March 2018)	Representative of the Ministry responsible for the subject of environment
Dr P.M. K. Soonarane	Representative of the Ministry responsible for the subject of public utilities
Mr Devesh Dukhira	The Chief Executive Officer of the Mauritius Sugar Syndicate
Dr Rajun Jugurnath Replaced by Mr Newk-Fon Hey Tow Y. K. J.	The General Manager of the Sugar Insurance Fund Board
Mr Rishi Raj Sharma Hauzaree (Replaced by Mr D. Jhugaroo as from January 2018)	Representative of the Irrigation Authority
Mrs Jacqueline Sauzier	Representative of the Chamber of Agriculture
Mr Satyanand Govinda	Representative of the Fair Trade Cooperative Federation
Mr Louis Lindlay Clifford Verny	Representative of the employees of the MCIA
Mr Sebastien Lavoipierre	Representative of millers
Mr Louis Jean Francois S��n��que	Representative of power producing companies
Mr Ajay Parsan	Representative of refiners and agro-processors
Mr Rafick Ahmad Chatharoo, MBE Mr Hemant Rao Anand Sonoo Mr Trilock K. Ujoodah	3 representatives of planters, one of whom shall represent small planters
Mr Pranjeewan Ramjuttun Mr Serge Jauffret Mr Sachidanand Rajaram Mr Lan Hing Po Hee Foon	4 representatives of recognised trade unions of the sugarcane industry, including a representative of staff, overseers, non-agricultural employee and agricultural employee

### ***Tenure of office***

Every member of the Council holds office for a period of 2 years and shall be eligible for reappointment.

### ***Role and Function of the Chief Executive Officer***

Section 11 (1) (a) of the MCIA Act provides that there shall be a Chief Executive Officer who shall be appointed by the Board on a fixed term performance contract and or on such other terms and conditions as it may determine, subject to the approval of the Minister of Agro-Industry and Food Security. The Chief Executive Officer:

- (a) is responsible for the execution of the decisions policy of the Board and for the control and management of the day-to-day business of the Authority;
- (b) acts in accordance with such directives as he may receive from the Board;
- (c) seeks to achieve such annual performance targets as may be set by the Board;
- (d) submits to the Board, every 3 months, a report on the activities and finances of the Authority.

In addition, the Board may, subject to such instructions as it may give, delegate to the Chief Executive Officer such of its powers and functions as may be necessary for the efficient management of the day-to-day business and activities of the Authority, other than the power to:

- (i) sell or exchange any property or make any investment or donations;
- (ii) borrow money; or
- (iii) enter into a contract which exceeds the prescribed amount.

With the approval of the Board, the Chief Executive Officer may also delegate his powers and functions to such employee as he may determine.

### ***Role of the Executive, non-Executive and Independent non-Executive Directors***

The Board of Directors of MCIA and the Advisory Council, their composition and the manner they

are constituted are set out in the new Sections 8 and 10A of the Act. None of the members are executive. However, given the strategic importance of the Mauritius Cane Industry Authority, the Act has ensured that members of its Board of Directors and the Advisory Council represent appropriate Ministries and other stakeholder groups that have a direct interest in the different operational aspects of the Authority for its efficient, effective and smooth running.

### ***Statement of Remuneration Policy***

Section 8 (4) of the Mauritius Cane Industry Authority Act provides that every Member of the Board of Directors shall be paid such fees and allowances as the Board may, with the approval of the Minister, determine. In practice, the remuneration of the members of the Board is determined by the Pay Research Bureau. The fees paid to the Chairpersons of the Board and other Committees during the 12-month period under review to 30 June 2019 amounted to MUR 942,748 and fees paid for other Board Members and Committees amounted to MUR 331,315. The salary paid to the key management personnel during the year under review amounted to MUR 14,466,490. The new Section 10 (3)(b) of the MCIA Act provides that every appointed member of the Council shall be paid such fees and allowances as the Board may, with the approval of the Minister, determine.

### ***Board and Sub-Committees***

The Board has two sub-committees appointed under its powers conferred by Section (10) (2) of the Act:

- (a) a Finance Committee which recommends to the Board in respect of financial matters; and
- (b) a Staff Committee which recommends to the Board on all staff matters relating to recruitment, etc.



## Composition of Finance Committee

The Finance Committee was constituted of the following Board Members:

**Table 3. Finance Committee**

Mr Jacques M d'Unienville, G.O.S.K	Member having wide experience in the sugar industry sector (as Chairperson)
Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018) Mrs Chandanee Jhowry (as from 23.8.2018)	Representative of Ministry of Agro-Industry and Food Security
Mr Vikraj Ramkelawon	Representative of Ministry of Finance and Economic Development

## Composition of Staff Committee

The Staff Committee is constituted of the following Board Members:

**Table 4. Staff Committee**

Mr Amal K M Mungur	Member having wide experience in the sugar industry sector (as Chairperson)
Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018) Mrs Chandanee Jhowry (as from 23.8.2018)	Representative of the Ministry of Agro-Industry and Food Security
Mr Jean Li Yuen Fong	Member having wide experience in the sugar industry sector

## Other Committees

### (1) Audit and Risk Committee

The Audit and Risk Committee has met only once during the financial year 2018/2019. It monitors and reviews the effectiveness and integrity of MCA's internal financial controls, audit functions and risk management systems. In carrying out its responsibilities, the Committee has full authority to investigate all matters that fall within its terms of reference.

The Audit and Risk Committee's role is to assist the Board in discharging its responsibilities and duties in relation to specific matters pertaining to financial reporting process, internal controls, internal audit function, external audit and risk frameworks.

The Audit Committee was restyled as Audit and Risk Committee and was approved by the Board of Directors on 30 March 2017.

**Table 5. Audit and Risk Committee**

Mrs Chandanee Jhowry as from 23 August 2018 Deputy Permanent Secretary Ministry of Agro-Industry and Food Security Representative of Ministry of Agro-Industry and Food Security	Chairperson
Mr Jean Li Yuen Fong Member having wide experience in the sugar industry sector	Members
Mr Nundlall Basant Rai, P.D.S.M Member having wide experience in the sugar industry sector	

**(2) The Anti-Corruption Committee**

The MCIA has established the Anti-Corruption Committee. It discharges the following responsibilities:

- overseeing and coordinating the implementation of corruption prevention strategies
- advising on corruption prevention issues
- reviewing the Anti-Corruption Policy of MCIA which comprises risk assessments for all major activities of the institution

The Anti-Corruption Committee is composed of the following members:

1. Mr. Leeladhanjiv Jhuboo    Senior Internal Auditor  
**(Chairperson)**
2. Mr. Satish Purmessur        Director
3. Mr. Ip-Yam Fong Yan        Director

**(3) Management Committee**

The Chief Executive Officer holds fortnightly management meetings with all the Directors, Assistant Directors and Managers to ensure the smooth running of all the departments of the Authority.

**Access to Independent Advisers**

The Board and the sub-committees have the right to retain independent external legal or other advisers as they deem necessary.

**Board Information**

The members of the Board are given accurate, timely and clear information so that they can maintain full and effective control over the strategic, financial and operating policies of the Authority.

## Board and Sub-Committee Meetings

Eight (8) Board of Directors meetings were held during period 1 July 2018 to 30 June 2019. The following table shows the attendance at the Board of Directors Meetings.

**Table 6. Attendance at the Board of Directors Meetings**

Names	Board of Directors Meeting
Chairperson: Mr Bojrazsingh Boyramboli (as from 23 August 2018)	7
Ag. Chairperson: Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018)	1
<b>MEMBERS</b>	
Mrs Shakuntala Devi Gujadhur-Nowbuth (up to 22.8.2018)	1
Mrs Chandanee Jhowry (as from 23.8.2018)	6
Mrs Damyantee Takoory (6.12.18 in the absence of Mrs C Jhowry) Representative of Ministry of Agro-Industry and Food Security	1
Mr Vikraj Ramkelawon Representative of Ministry of Finance and Economic Development	6
Mr Jacques M D'Unienville, G.O.S.K Member having wide experience in the sugar industry sector	5
Mr Nundlall Basant Rai, P.D.S.M Member having wide experience in the sugar industry sector	7
Mr Jean Li Yuen Fong Member having wide experience in the sugar industry sector	8
Mr Amal Kumar Mohabeer Mungur Member having wide experience in the sugar industry sector	7

## Secretary

Section 8(9) provides that the Board shall designate an employee to act as Secretary. The Administrative Manager of the Authority acts as Secretary to the Board and other sub-committees. He is responsible *inter alia* to:

- prepare and attend every meeting of the Board;
- keep minutes of proceedings of every meeting of the Board; and
- have such other duties as may be conferred on him by the Board.

## **Environment Risk**

The Mauritius Cane Industry Authority does not operate in a manner that may cause harm to the environment in general nor does it use materials of risky nature which may affect the environment. The Authority complies with the relevant environmental laws and regulations.

## **Corporate Quality**

A key aspect of risk management is to ensure high operational and service standards to all its stakeholders, especially the planters, so as to maintain a good corporate image.

## **Operation Risk**

The Authority maintains its fleet of vehicles, tractors, etc. so as to ensure continuous service to the planters' community. The Sugar Storage and Handling Unit is ready to receive sugar at any time. The Authority has never delayed any operation due to operating failures.

## **Security**

The Sugar Storage and Handling Unit being a national strategic facility is under the surveillance of the Police on a 24 h-basis. Access to the Sugar Terminal is restricted and controlled. The Authority ensures that security is maintained at all times.

## **Foreign Exchange Risk**

The Authority is not exposed to foreign exchange risk. It is financed mainly by means of a cess from sugar proceeds. The cess is levied each year and in such a manner and at such rate not exceeding 4% of the ex-Mauritius Sugar Syndicate price as may be prescribed and after consultation with the Board.

## **Insurance Risk**

All the assets and potential insurable liabilities are covered by appropriate insurance policies.

## **Internal Control**

The Board is primarily responsible for the effectiveness and efficiency of the system of internal control, while the design, implementation and monitoring of the system devolves on Management.

## **Internal Audit**

The system of internal control at the Authority includes checks and balances through the operation of internal checks. The internal control system ensures the efficiency and effectiveness of the Authority.

## **Auditing and Accounting**

### **Accounting**

The Board is responsible for the preparation of accounts which fairly present the state of affairs of the Authority and the results of its operations and complies with International Public Sector Accounting Standards (IPSASs). In this context, the Board is responsible for adequate accounting records, maintenance of an effective system of internal control, and choice of accounting policies supported by reasonable and prudent judgment.

### **Audit**

Section 52 (3) of the Mauritius Cane Industry Authority Act provides that the Auditor to be appointed under Section 5 (1) of the Statutory Bodies (Accounts and Audit) Act shall be the Director of Audit.

## **Integrated Sustainability Reporting**

The Authority is a not-for-profit organisation. It *inter alia* provides services to the sugarcane industry. The Authority has throughout acted responsibly both as a service provider in a strategic position and as a 'responsible citizen'.

### **Ethics**

The Authority is committed to the highest standards of integrity and ethical conduct with all its stakeholders. It has built up a culture of efficiency and effectiveness at work and follows the general code of ethics prevailing in the public sector.

### **Environment**

The Authority carries out its activities in such a manner that they do not constitute any threat to the environment.

### ***Health and Safety***

Security and safety assessment is carried out periodically by the Health and Safety Committee. A Safety and Health Officer is employed to ensure compliance with the Authority's safety, health and environment policies and existing legislations and regulatory framework. Security and safety assessment of the Sugar Terminal is carried out periodically by a Registered Machinery Inspector. The Authority complies with all relevant Health and Safety legislations.

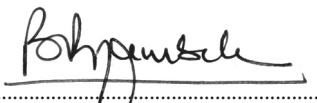
### **Corporate Social Responsibility**

The Authority is a not-for-profit entity and as such endeavours to minimise operating costs for the benefit of the planters' community.

The Sugar Storage and Handling Unit of the Authority organises guided visits to the Sugar Terminal during the crop season on Tuesdays and Thursdays for students of primary school. From feedback received, such visits have been very beneficial to the students.

### ***Donations***

No donations have been made to any political party or organisation.

A handwritten signature in black ink, appearing to read 'Bojrazsingh', written over a horizontal dotted line.

Bojrazsingh BOYRAMBOLI  
Senior Chief Executive,  
MoA&FS  
CHAIRPERSON

A handwritten signature in black ink, appearing to read 'Vikraj', written over a horizontal dotted line.

Vikraj RAMKELAWON  
Lead Analyst, MoFED  
BOARD MEMBER

## A (2) HUMAN RESOURCE MANAGEMENT

### Introduction

The role of the Human Resource Division is primarily to make an effective contribution towards the achievement of the Authority's corporate objectives as well as fulfilling its social responsibilities. To accomplish this role, the Human Resource Department is, *inter alia*, committed to:

- (i) Assist in the design and development of an effective structure which will respond to changing environment and needs of the Authority.
- (ii) Obtain and develop the human resources required by the Authority and to use and motivate them effectively.
- (iii) Assist in creating and maintaining a co-operative climate of relationships within the Authority through effective communication channels and cross-functional team work.

(iv) Assist in meeting the Authority's social and legal responsibilities.

(v) Promote a safe working environment and general welfare of staff at the Authority.

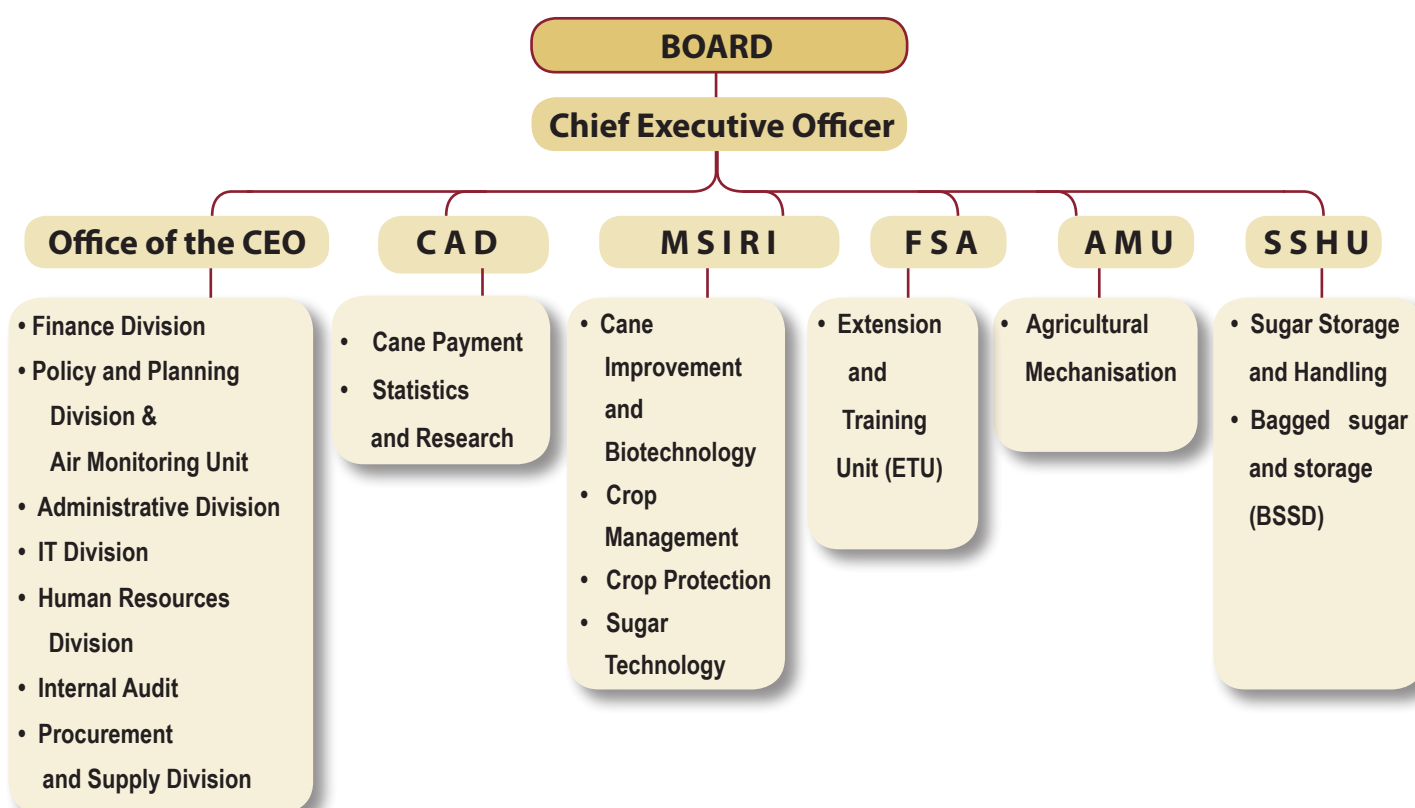
The Authority has a total workforce of 552 employees as at 30 June 2019 on its permanent and pensionable establishment.

### Organisational Structure

The organisational structure of the MCIA, as approved by the Mauritius Cane Industry Board, provides for six departments, namely:

- (a) Office of the Chief Executive Officer
- (b) Control and Arbitration Department (CAD)
- (c) Mauritius Sugarcane Industry Research Institute (MSIRI)
- (d) Farmers Service Agency (FSA)
- (e) Agricultural Mechanization Unit (AMU)
- (f) Sugar Storage and Handling Unit (SSHU)

The Organisation Structure is depicted in the figure below:-





## (a) OFFICE OF THE CHIEF EXECUTIVE OFFICER

This Department is responsible to provide corporate services throughout the Authority, ensuring that all resources and facilities are made available to facilitate all other departments to achieve their respective objectives. The Department comprises of the Chief Executive Officer who is responsible for the execution of policies and the overall administration and management of the MCIA. It comprises of the following divisions:-

**I. Finance Division** – responsible, *inter alia*, for the proper administration of the general fund of the Authority, preparation of the annual budget estimates, statement of accounts and annual reports. It also has to provide accurate and timely financial information and statistics to internal and external bodies. Fifteen (15) employees were attached to the Division.

**II. Policy and Planning Division** – responsible, *inter alia*, for the preparation and reviewing of the strategic plan of the Authority, carrying out regular assessment of the challenges and opportunities of the industry, both in the local and international scene and preparation of plans and policies with the objective of ensuring long term viability and sustainability of the sugar cane cluster. It is also responsible for the Air Monitoring Unit. Ten (10) employees were attached to this Division.

**III. Administration Division** – responsible, *inter alia*, to provide secretarial facilities to the Board and its sub committees, to establish and implement administrative procedures for the efficient functioning of the Authority, management of office space and general maintenance of building and premises and also for internal and external communication. Seventeen (17) employees were attached to this Division.

**IV. Information Technology Division** – The IT Section is responsible for the overall design,

implementation and management of the IT infrastructure and applications within the MCIA. The unit provides support services to all the other sections in the organization including the sub-offices (outstations) and is also responsible for ensuring that all the hardware/system owned by the Authority are in good working conditions. Assistance is also provided to any user having difficulties with either a software/program or with hardware such as printers, scanners and workstations.

Two (2) employees were attached to this Division.

## V. Human Resources Division

The Human Resource Division is responsible, *inter alia*, for the development and implementation of HR policies and procedures, monitoring disciplinary cases, employees' grievances and promotion of a safe work environment and general welfare of staff. This department has also to undertake a constant review of the organisational structure in view of the changing needs of the Authority. Seven (7) employees were attached to this Division.

## VI. Internal Audit Division

The Internal Audit function is to provide independent, objective assurance aimed at adding value and improving MCIA's operations, governance, risk management and internal controls.

The MCIA's Internal Audit Division reports functionally to the Board's Audit and Risk Committee and administratively to the Chief Executive Officer. The internal audit function is governed by an Internal Audit and Risk Charter approved by the Audit and Risk Committee. In addition, the internal audit function's mandate and annual audit coverage plans are approved by the Audit and Risk Committee.

Three (3) employees were attached to this Division.

## VII. Procurement and Supply Division

The Procurement and Supply division is

the office responsible for the acquisition of supplies and services to support the MCIA activities. It is the entity, within the MCIA, authorized to do the procurement and supply such as seeking for quotations for small value items, issuing of purchase orders, following up of deliveries, receiving of goods, stocking at the right locations and issuing to users.

Five (5) employees were attached to this Unit.

## **(b) CONTROL AND ARBITRATION DEPARTMENT (CAD)**

Prior to the setting up of the MCIA, the Control and Arbitration Department was a department of the Ministry of Agriculture, known as the Cane Planters and Millers Arbitration and Control Board.

The objectives of the Control and Arbitration Department are, *inter alia*, to control milling activities, arbitrate disputes among Millers, Planters and other stakeholders and determine the quantum of sugar and by-products accruing to producers. Twenty (20) employees were attached to this Department

## **(c) MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE (MSIRI)**

The MSIRI, a Research Centre of international repute, was, prior to the creation of the MCIA, an autonomous statutory body, governed by its own terms and conditions of service as approved by its Board. With the creation of the Mauritius Cane Industry Authority, the MSIRI has now become a department of the Authority. This department is mainly responsible to carry out research on sugarcane with a view to enhance the competitiveness of the cane industry and also on technical and engineering options for improving efficiency of factories and for value addition to co-products. One hundred and twenty-eight (128) employees were attached to this Department.

## **(d) FARMERS SERVICE AGENCY (FSA)**

This department is, *inter alia*, responsible for:

- (a) organising training/seminars with a view to improve the cane yield of planters
- (b) ensuring the supply of planting materials to planters.

Prior to the setting up the MCIA, this Department was an autonomous parastatal body, that is, the Farmers Service Corporation. Sixty (60) employees were attached to this Department.

## **(e) AGRICULTURAL MECHANISATION UNIT (AMU)**

This Unit is primarily responsible for the provision of mechanical cultivation services to the sugarcane planters. The preparation of land prior to replantation after a sugarcane crop cycle is the main activity. It also provides cane loading facilities during the crop season.

Like other departments, this unit was, prior to the creation of the MCIA, also an autonomous parastatal body and was known as the Sugar Planters Mechanical Pool Corporation. In the execution of its activities, the unit has one hundred and fifty-nine (159) employees in its establishment.

## **(f) SUGAR STORAGE AND HANDLING UNIT (SSHU)**

This Unit comprises of two sections:

### **(i) Bulk Sugar Storage**

This Unit is responsible, *inter alia*, for the receipt, storage and loading of sugar into ships. This unit was, prior to the setting up of the MCIA, an autonomous parastatal body, known as the Mauritius Sugar Terminal Corporation. Thirty-seven (37) employees were attached to this Division.

### **(ii) Bagged Sugar Storage Distribution**

This unit also falls under the supervision of the Director, SSHU and is responsible, *inter alia*, for

the receipt, handling and storing of bagged sugar from the Sugar Estates and for the distribution of sugar for local consumption and for export. Prior to it being merged with the MCIA, this Unit was a private company, known as, the Bagged Sugar Storage and Distribution Co. Ltd. The unit had eighty-nine (89) employees in its establishment.

## Senior Management Profile

**Table 7. Senior Management Profile**

Name	Post	Qualifications
Mr Bundhoo Jugdis	Chief Executive Officer (on contract)	BSc (Salford), MSc Soil Chemistry (Reading), MSc Information Science (City) Member of the Institute of Information Scientists
Mr Soniah Rajkamal	Director, Farmers Service Agency	BSc, MSc (Maur)
Dr Saumtally Salem	Director, MSIRI	BSc (Dund) MPhil (Cantab) PhD (Reading)
Mr Ip-Yam Fong Yan	Director, Agricultural Mechanisation Unit	BTech (Maur) Registered with the Council of Professional Engineers
Mr Purmessur Satish	Director, SSHU	BSc, MSc (Maur)
Mr Busgeeth Devendranath	Assistant Director (Ag. Director, CAD)	BSc, (Maur)
Mr Santbakshsingh Sunil	Manager, Human Resource	BA, MBA (Delhi), Master in Public Policy and Administration, (Maur)

**Table 7. Senior Management Profile**

<b>Name</b>	<b>Post</b>	<b>Qualifications</b>
Mr Deena Sachim Duth	Manager, Finance	FCCA
Mr Ramchurn Narottam Sharma	Manager, SSHU (Bagged Sugar)	LCCI (H), ACCA II
Mr Jhurry Luckraj	Analyst/Senior Analyst (Ag. Manager Policy and Planning)	BSc (Maur), MSc (London)
Mr Khoodoruth M. Hassen	Administrative Officer (Ag. Administrative Manager)	BCom (India), MBA HR Management (Maur)
Mr Woodun Ritesh	Manager, IT	BSc (Maur), MSc (Maur)
Dr (Mrs) Dookun-Sauntally Asha	Principal Research Manager	BSc MSc (Newcastle) PhD (Reading)
Dr Seeruttun Sumantlall	Research Manager	BSc (Maur), MSc (Cranfield), PhD (Pretoria), MIAgre
Mr Rivière Vivian	Research Manager	BSc (Maur), MSc (Cranfield)
Dr Ng Cheong Ronald	Research Manager	BSc (Reading), MSc (Cranfield), MBA (Maur), PhD (Free State)
Mr Mungroo Ishwurduth	Field Manager	MSc (Maur), Registered Professional Engineer
Mr Ramdharee Yashwantsingh	Manager, ETU	BSc, MBA (Maur)
Mr Awotarowa Anil	Manager, ETU	BSc, MBA (Maur)
Mr Baboolall Chandradeo	Manager, ETU	BSc, MBA (Maur)

## Internal Audit

<b>Name</b>	<b>Post</b>	<b>Qualifications</b>
Mr Leeladhanjiv Jhuboo	Internal Auditor/ Senior Internal Auditor	LLB (Maur) BSc (Oxford Brooks), MBA (Maur) ACCA, MIPA, IIA

## Industrial Relations

The majority of the employees at MCIA are members of unions.

To ensure sound employee relations, regular meetings are held with representatives of the unions, where most disputes are discussed and resolved. The union representatives have appointed a Coordinator in the person of Mr P. Ramasawmy. Meetings are also held with non-unionised employees and their grievances are, as far as possible, attended to.

## Health and Safety

The policy at the Authority is to provide a safe and healthy work environment and to bring to the minimum, potential accident hazards and risks of injury.

## Safety and Health Committees

The Safety and Health Committee provides the platform where Management and representatives of employees jointly identify potential hazards and find ways and means to eliminate or reduce them.

The following employees attended the following courses/workshops for period 1 July 2018 to 30 June 2019.

For the Authority, Health and Safety is an absolute priority. Therefore, the safety-related objectives are mandatory components for each unit/department while carrying out its activities. The MCIA is committed to implementing its Health and Safety Policy, through compliance of legislative requirements as a minimum standard. To achieve the objective, the Authority has appointed a full-time Safety and Health Officer.

During year 2018/2019, the Health and Safety Committee held twenty-two (22) meetings.

## Training and Development

The Authority is aware that its objectives can be achieved only if it has a knowledgeable Human Resource.

The main objective of training is to establish a sound relationship between the employee and his job, the optimum man-task relationship. Such a relationship is at its best when employees' attitude to the job is right, when his knowledge of the job is adequate and he has developed the necessary and required skills. Thus training is a continuous activity to provide employees with the desired knowledge, skill, aptitude and habit to manage external pressure and competition.

**Table 8. Courses/Workshops**

Course Title	Name	Organised by	From	To
Action Planning Session on "Cultivating Africa champions for biennial review report African agriculture transformation scorecard and heads of state dashboard"	Pillay Samoo K (Mrs) & Dookun-Saumtally A Dr (Mrs)	Food Agriculture and Natural Resources Policy Analysis Network (FANRPAN)	03-Aug-18	
Pest Risk Analysis Training on Emerging Transboundary Pests and Diseases	Behary-Paray N (Mrs) and Mungur H	Ministry of Agro-Industry and Food Security	27-Aug-18	31-Aug-18
ISO 450001:2018 Implementation Course	Purmessur S, Ramchurn N S and Deeljur-Brizmohun A (Mrs)	SGS Academy	05-Sep-18	

**Table 8. Courses/Workshops**

Course Title	Name	Organised by	From	To
Talks on Electrical Safety	27 employees of MCIA (Employees from Different Sections/ Departments)	Training Unit, Ministry of Labour, Industrial Relations, Employment and Training	18-Sep-18	
Detection of Plant Parasitic Nematodes	Soma A	Ministry of Agro- Industry and Food Security	18-Sep-18	20-Sep-18
A fire safety practical training	35 employees of SSHU and BSSD	Training Unit, Mauritius Fire and Rescue Service	21-Sep-18	
Talks on Stress Management	31 employees of MSIRI	Training Unit, Ministry of Labour, Industrial Relations, Employment and Training	26-Sep-18	
Training on Fire Safety	29 employees of FSA	Training Unit, Mauritius Fire and Rescue Service	28-Sep-18	
Talks on Chemical Safety	28 employees of MSIRI	Training Unit, Mauritius Fire and Rescue Service	16-Oct-18	
Training on Occupational Safety and Health	26 employees of SSHU	Training Unit, Ministry of Labour, Industrial Relations, Employment and Training	26-Oct-18	
Training on Manual Handling	30 employees of AMU	Training Unit, Ministry of Labour, Industrial Relations, Employment and Training	15-Nov-18	
Talks on Stress Management	32 employees of FSA	Training Unit, Ministry of Labour, Industrial Relations, Employment and Training	16-Nov-18	



**Table 8. Courses/Workshops**

Course Title	Name	Organised by	From	To
BRC Global Standard for Storage and Distribution Course - Understanding the Requirements	Purmessur S and Ramchurn N S	SGS Academy	27-Sep -18	
Fire Safety	Deeljur-Brizmohun A (Mrs)	Ministry of Labour, Industrial Relations, Employment and Training	10-Oct-18	
Programme on e-Procurement System (E-PS)	Senrundon I, Cahoolessur S, Doorgachurn R(Mrs), Ramlogun S, Mungroo I and Rambhujun H (Mrs)	Civil Service College	26, 28 and 30 Nov 2018, 3 and 5 Dec 2018	
Biomass Utilisation Technology	Neermul K	Japan International Corporation Agency (JICA)	08-Jan-19	02-Feb-19
Machinery Safety Training	3 employees of AMU	Safety and Health Officer/Snr Safety and Health Officer	14-Jan-19	
Preparation of a Biosecurity Plan for the Agricultural Sector in Mauritius	N Behary Paray (Mrs), N Joomun & H Mungur	Ministry of Agro-Industry and Food Security	16-Jan-19	
Support for Strengthening the National Food Safety and Plant Health Protection Systems in Mauritius	N Behary Paray(Mrs) & H Mungur	Ministry of Agro-Industry and Food Security	28-Mar-19	
Enabling Strategic HR Capabilities in Parastatals	Santbakshsingh S and R Woodun	State Informatics Limited (SIL)	30-Apr-19	
First Aid at Work	39 employees of MCIA	St. John Training Institution, Curepipe	3, 6, 8, 10 and 13 May 2019	
Government e-Procurement System (E-PS)	Woodun R, Senrundon I, Jeebodhun C, Mungroo I and Ramlogun S	Procurement Policy Office	13 May 19	14-May-19
Implementing ISO 9001:2015 Quality Management System	Veerigadu D A and Brojolall M	University of Mauritius	18 May & 25 May 2019	
The Pertinence of Human Resource Management in Fighting Corruption in the Public Sector	Seeruttun P (Mrs)	Independent Commission Against Corruption (ICAC)	13-Jun-19	

**Table 8. Courses/Workshops**

Course Title	Name	Organised by	From	To
Gender Awareness	Santbakshsingh S	Ministry of Agro-Industry and Food Security	18-Jun-19	
Strengthening Integrity for a better Service Delivery	Santbakshsingh S, Khoodoruth M H and Jhuboo L	Independent Commission Against Corruption (ICAC)	20-Jun-19	
<i>Convention de Partenariat FEXTE Tripartite - Bioelectricity Workshop in Mauritius</i>	Cahoolessur Kumari (Mrs)	Ministry of Energy and Public Utilities	6 July 2018	
Capacity Building Workshop for preparation of Climate Finance Bankable projects	Cahoolessur Kumari (Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	23 October 2018	24 October 2018
Biennial Update Report-First Inception mission Greenhouse Gas Inventory, Mitigation, Reporting and Verification	Cahoolessur Kumari (Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	12 February 2019	
Biennial Update Report-Second mission on Capacity Building for Greenhouse Gas Inventory, Mitigation Assessment and Measuring, Reporting and Verification	Cahoolessur Kumari (Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	15 April 2019	16 April 2019
Talk on Chemical Safety	Bundhoo Dharmashrit Pudaruth Nilesh	Training Unit, Mauritius Fire and Rescue Service	16 October 2018	
Talk on Electrical Safety	Bundhoo Dharmashrit Pudaruth Nilesh Ramessur Teeviraj	Training Unit, Ministry of Labour, IR, Employment and Training.	18 Sept 2018	
First Aid at Work	Bundhoo Dharmashrit	St John Training Institution	10 May 2019	

The following overseas missions were carried out during the period 1 July 2018 - 30 June 2019:

**Table 9. Overseas Missions**

Name	From	To	Objective of Mission
Parmessur Y Dr	20-Jul-18	27-Jul-18	Presented a Report for Africa entitled “Challenges and Opportunities for Food and Nutrition Security in Africa” at the S20 meeting held in Argentina.
Mardamootoo T (Mrs)	09-Jul-18	13-Jul-18	Attended a training course on “LCMS: A hands on approach: from sample preparation to data interpretation”, at Jomo Kenyatta University of Agriculture and Technology, Kenya.
Umrit G	20-Aug-18	27-Aug-18	Attended the Co-Products Workshop of the International Society of Sugar Cane Technologist (ISSCT), Brazil.
Parmessur Y Dr	17-Sep-18	20-Sep-18	Attended Scientific Conference and Ministerial Roundtable on FNSA and IAP-R SDG Carnegie’s Africa Workshop, Nairobi, Kenya.
Gaungoo A Dr	23-Sep-18	28-Sep-18	Attended Agronomy Workshop of the International Society of Sugar Cane Technologists (ISSCT), Réunion Island.
Parmessur Y Dr	24-Sep-18	24-Dec-18	Attending exchange at Max Planck Institute for Development Biology, Germany
Ng Cheong R Dr	21-Oct-18	25-Oct-18	Visit to Rodrigues re: FAO Project TCP/MAR/3711 - Strengthening rural development planning in Rodrigues through Land Suitability Map of Natural Resource Information System
Badaloo G Dr	22-Oct-18	26-Oct-18	Attended ISSCT Joint Breeding & Germplasm and Molecular Biology Workshops - Improvement of sugarcane for stress environments - Okinawa, Japan.
Behary Paray N (Mrs)	03-Dec-18	07-Dec-18	Attended the ISSCT Workshop, Univ of Florida, USA.
Ng Cheong R Dr	09-Dec-18	15-Dec-18	Visit to Rodrigues re: FAO Project TCP/MAR/3711 - Strengthening rural development planning in Rodrigues through Land Suitability Map of Natural Resource Information System
Saumtally A S Dr	15-Dec-18	24-Dec-18	Consultancy visit to Sucrivoire, Cote d’Ivoire.
Mungur H	15-Dec-18	24-Dec-18	Consultancy visit to Sucrivoire, Cote d’Ivoire.

**Table 9. Overseas Missions**

Name	From	To	Objective of Mission
Behary-Paray N (Mrs)	16-Feb-19	25-Feb-19	Consultancy mission in connection with entomological issues pertaining to sugarcane at Borotou and Zuénoula, Sucrivoire, Cote d'Ivoire.
Seeruttun S Dr	31-Mar-19	09-Apr-19	Request from Regional Training Centre (RTC) for training of officers of SOMDIAA, Cameroon.
Mulleegadoo K (Mrs)	19-May-19	01-Jun-19	Visit to Queensland University of Technology, Australia re: MRC Project RIB-Ao1: Turning trash into bioplastics.

## Retirement

The following Officers retired during the period 01 July 2018 - June 2019:

**Table 10. Retirement**

Name	Post	Department /Section	Date
Dr Payandi Pillay Kessawa	Research Manager	MSIRI	20 November 2018
Mr Jugdis Bundhoo	Chief Executive Officer	CEO's Office	01 February 2019
Mr. Jose Pierre Bahary	Sugar Technologist/ Senior Sugar Technologist	CAD	01 March 2019
Mr. Ogram France Emilien	Baghandler	BSSD	05 March 2019
Mr. Visnoo Maran	Driver	MSIRI	02 April 2019
Mr Basant Rai Umeshlall	Manager, Operations & Research	CAD	08 May 2019
Appassamy Sydney Alain	Baghandler	BSSD	22-Jun-19
Lafrance Christian	Welder	AMU	22-Jun-19

## Termination of Employment

The contract of the officer named below was terminated during the year 2018/2019:

**Table 11.Termination of Contract**

SN	Name	Post	Department /Section	Date
1.	Shuatkhetoo Chintamunee	Office Attendant	FSA	01-Jul-18

## Resignation

Ms Geetanjali Bissessur, Assistant Procurement and Supply Officer, AMU, resigned on 22 October 2018.

## Death in Service

1. Mr. John Wickinson Legoff, Baghandler at BSSD, passed away on 2 January 2019.
2. Mr. Berty Michel Narroo, Workshop Vehicle and Machinery Attendant, at AMU, passed away on 13 May 2019.

## Leave without pay

Mr Ranveersingh PURMESSUR, Stores Superintendent, has been granted one year leave without pay with effect from 3 September 2018, to take employment at the National Transport Corporation from 3 September 2018 to 02 May 2019 and thereafter to the Mauritius Examination Syndicate with effect from 03 May 2019.

## **B. POLICY AND PLANNING**

### **Mandate and Functions**

The mandate of the Policy and Planning Division revolves around the following main components:

- Formulating policies, programmes and projects to promote the development of the sugar cane cluster;
- Directing the implementation of such policies, programmes and projects with a view to achieve the sectorial and national objectives within agreed timelines; and
- Monitoring, reviewing and reforming all systems and procedures to ensure the conduct of business in an efficient manner deploying modern management techniques and technology where applicable.

### **Activities related to Amendments of the SIE Act, MCIA Act and Budgetary measures**

The following sections deal with status and progress achieved during the period related to provisions of the law and budgetary measures 2018-2019.

#### **Ethanol and Molasses Framework- Provision of the SIE Act**

The components of this framework are:

- the revenue to planters from molasses;
- allocation of molasses to distillers; and
- blending ethanol with mogas.



## Molasses pricing mechanism

With the amendments brought to section 15C of the SIE Act in December 2016, the changes made in the current pricing mechanism are presented as follows for the different users of molasses:

**Table 12. Current pricing mechanism**

Year	AMCO/MMCO export molasses	Distillers who produce alcohol for the local market and export market	Livestock sector who use molasses for animal feed
Prior to 2014	Ex-factory price	Local market and export MUR 3,000/t	MUR 3,000/t or FOB whichever is higher
2014	FOB	Local market MUR 3,500/t Export market FOB (Omnicanne FOB for 3 years only 2014-2016)	MUR 3,000/t
2015	FOB	Local market MUR 3,500 Export market FOB	MUR 3,000/t
2016 (SIE Act)	Deemed FOB	Local market 1.75 x deemed FOB Export market deemed FOB	MUR 3,000/t changed to MUR 2,500/t in March 2017 by CAD

The MCIA had set the deemed FOB price of molasses at MUR 2,147.18 for the crop 2018, similar to what it was for the crop 2017, with the understanding that the Price Mechanism would be addressed by the World Bank appointed in 2019 to review the sustainability of the sugar sector in Mauritius.

A new regulation was made by the Minister in February 2019 under section 63 of the MCIA Act

namely “Mauritius Cane Industry Authority (Sale Price of Molasses) Regulations 2019. The purpose of this regulation was to set the price of molasses sold to distiller-bottlers producing potable alcohol for the domestic market or any person using molasses to produce syrup and beverages and which shall not exceed Rs 3,500/ t molasses. The regulation was applicable for the crop years 2017, 2018, and 2019. The regulation was published in Government Notice No 39 of 2019.

The table below shows the blended price paid to planters (2004 to 2018)

**Table 13. Price payable to planters**

Year	Tonnes molasses produced tel quel	Tonnes molasses sold at 86° Brix after deducting amount in kind	LEI USD	Freight USD	Other costs USD	FOB USD payable by users of molasses	Price payable to planters (MUR/t)
2004	154,987	n.a	103.78	44.96	17.22	41.6	911.57
2005	144,423	n.a	135.24	55.91	21.51	57.82	1,563.31
2006	139,081	n.a	152.42	69.13	20.0	63.29	1,898.18
2007	129,752	n.a	160.48	98.75	10.82	50.91	1,361.69
2008	141,847	n.a	187.60	94.05	15.60	77.95	2,181.32
2009	145,338	n.a	215.57	90.64	15.12	109.81	3,016.29
2010	144,137	n.a	206.09	96.06	12.21	97.82	2,689.33
2011	136,324	n.a	204.96	120.15	11.86	72.95	1,981.64
2012	123,916	n.a	201.67	116.07	11.10	74.5	2,235.18
2013	125,837	n.a	218.64	140.59	13.52	64.53	1,970.98
2014	139,309	137,379	207.48	130	12.94	64.54	2,316.51
2015	132,107	130,952	187.55	126.7	10.63*	50.22	2,074.00
2016	117,675	117,215	175.04	112.7	5.59	56.75	2,242.89
2017	121,815	121,367	Deemed FOB price of MUR 2,147.18				2,390.88
2018	102,769	101,939	Deemed FOB price of MUR 2,147.18				2,376.10

Note: (a) Prior to 2014, molasses were traded by MMCO and AMCO. No data available on quantity sold @ 86° Brix. For 2014 and onwards when MMCO ceased operations, MCIA has recorded the volume traded.

(b) For 2014 crop: freight taken as indicative (available from MSS)

(c) For 2015 crop: freight taken as average 4 years period 2011 - 2014 and the \$2 commission computed in other costs that is deducted from LEI reference price was abolished

(d) For 2016, freight taken as average 5 years period 2009-2013

(e) For crop 2017: molasses sold is at 86° Brix and excludes molasses taken in kind.

Price paid to planters is on basis of a deemed FOB price of MUR 2,147.18 and MUR 3,500 for distiller-bottlers producing potable alcohol for domestic market.

(f) For crop 2018: molasses sold is at 86° Brix and excludes molasses taken in kind.

Price paid to planters is on basis of a deemed FOB price of MUR 2,147.18 and MUR 3,500 for distiller-bottlers producing potable alcohol for domestic market.

With a distiller bottler contribution of MUR 1,464.34/t of molasses at 86° Brix, the total paid to planters for molasses was MUR 3,840.44 for the crop 2018.

## Molasses Allocation to Distillers and Distiller-Bottlers- Provision of the SIE Act

Based on certified installed capacities as at January 2016 as provided for in the law, the molasses allocation by the Joint Molasses Committee was as follows after deducting an amount for the livestock sector.

For the crop 2018 the production of molasses was some 102,769 tonnes, tel quel and the allocation was as follows:

Molasses allocation tel quel (tonnes)	
Grays distillery	19,488.42
Medine distillery	11,127.21
Omnican distillery	57,551.52
Livestock sector	143.79
Molasses in stock at AMCO	13,773.37
Molasses taken in kind	685.171
<b>Total Molasses produced</b>	<b>102,769.481</b>

At the time of writing this report some 13,773.37t of molasses were still in stock at AMCO and molasses taken in kind was 685.171t.

The issue of allocation of refinery/ molasses was set aside.

## Blending Ethanol with Mogas- Provision of the SIE Act

The work plan for development of the Ethanol Blending framework consists of the following activities:

- (i) Recruitment of a consultant
- (ii) Capacity Building for the stakeholders through a study tour
- (iii) Development of standards for the ethanol and the mogas
- (iv) Procurement of the ethanol by the State Trading Corporation

Daily Capacity	% Available molasses HLA/Day	
Grays Distillery	291.1	22.97%
Medine Distillery	234.3	18.49%
Omnican Distillery	742	58.55%

- (v) Pricing Mechanism for the blended product
- (vi) Commissioning and installation of the blending, storage and distribution network by the oil companies
- (vii) Trial test runs and use by the public.

A draft Terms of Reference for the recruitment of the consultant was discussed and finalized by all the stakeholders concerned in June 2019.

The European standards adopted as Mauritian Standards are namely:

- (i) EN 15376: 2014 –Automotive fuels- Ethanol as a blending component for petrol  
**Scope:** The standard specifies requirements and test methods for marketed and delivered ethanol used as an extender fuel for petrol engine vehicles in accordance with requirements of EN228. It is applicable to ethanol used for blending at all levels up to and including 85% (v/v).
- (ii) EN 228:2012+A1:2017-Automotive fuels-unleaded petrol

**Scope:** This standard specifies requirements and test methods for marketed and delivered unleaded petrol. It is applicable to unleaded petrol for use in petrol engines.

The standards are available at the MSB upon payment of a fee.

## Biomass Framework- Provision of the SIE Act

The Government has announced plans to increase the use of renewable sources of energy from the current 22% to 35% by 2025.

It is recalled that the Ministry of Energy and Public Utilities (MEPU) had signed a Tripartite Partenariat convention with FEXTE (*Fonds d'Expertise Technique et d'Echanges d'Expériences*) L'Agence de L'Environnement et de la Maitrise de L'Energie (ADEME) and l'Agence Française de Développement (AFD). The aim was to reinforce renewable energy development in Mauritius and Reunion Island in non-interconnected zones.

The second workshop was held in Mauritius during the period 5-6 July 2018. The purpose of this workshop was to enhance further the dialogue between the French and the Mauritian counterparts in the field of renewable energy in particular for the development of a regulatory framework, utility licensing and tariff determination, and financial support mechanisms related to bioelectricity generation. The workshop was marked by the following presentations:

- (i) Regulatory Framework to facilitate integration of renewable energy into the grid (presentation by CEB).
- (ii) The role of URA (Utility Regulatory Authority) in licensing, tariff setting and complaints handling – (presentation by the URA).
- (iii) Assessment of the biomass potential that can be mobilized for bioelectricity development in Mauritius and optimization of biomass resources- (presentation by MSIRI/CIRAD) \*.
- (iv) The missions of the CRE (*Commission de Regulation de L'Energie*) in France to promote renewable energy in particular in non-interconnected zones- (presentation by CRE).
- (v) Renewable Energy Roadmap 2030 – (Presentation by Ministry of Energy and Public Utilities).

It is to be noted that the MSIRI was awarded a consultancy for the study at (iii) above whilst the Farmers Service Agency was instrumental in

carrying out a survey to establish the interest of planters in energy cane.

The first phase of the study ended in July 2018. The second phase of the study was commissioned by the Ministry of Energy and Public Utilities, with the support of the AFD in October 2018. The Firm Nodalys of France was awarded the consultancy contract in June 2019 and is expected to complete in November 2019. The purpose of the second phase of the study is to develop the appropriate institutional framework and the necessary financial and legal instruments to implement the strategy for the development of bioelectricity designed in the first phase.

It was understood that the outcomes of the studies would serve as an input for development of the Biomass Framework.

### **Contribution from Distiller Bottlers - Budgetary measure (Finance and Miscellaneous Provisions) Bill 2017**

It is to be recalled that amendments were brought to section 47 of the MCIA Act through the Finance (Miscellaneous Provisions) Bill to allow the Mauritius Revenue Authority to collect the contribution.

The contribution for crop 2018 both from the distiller-bottler based on potable alcohol derived from cane or cane products and on imported potable alcoholic products manufactured from sugar cane or its by-products reached MUR 149.27 million including arrears from Saint Aubin Ltd. This was generated from some 3.7 million litres of potable alcohol sold on the local market. Planters were paid at the rate of MUR 585.94 per tonne of sugar tel quel or MUR 1,464.34 per tonne of molasses @ 86° Brix after deducting molasses taken in kind.

## Sugar Cane Sustainability Fund

For the crop 2018 Government decided that an additional payment of MUR 1,250 would be made for bagasse on top of the existing amount paid under the Sugar Cane Sustainability Fund. The source of funding was from the budget of Government.

### Budgetary measures and Government decisions and progress on previous measures

The status and progress on budgetary measures taken by Government concerning the sugar sector are shown in Table 14:

Table 14. Status and progress on budgetary measures - 2016/2017 & 2017/2018		
Financial Year	Budgetary Measure	Progress / achievement
2016/2017	<b>Abandoned cane lands</b> To put agricultural land to modern and more productive use. In that context, the Mauritius Cane Industry Authority will set up an Agricultural Land Management System to bring unutilized abandoned cane land of small planters under productive use.	<p>The MCIA has set up an Electronic Data Management System (EDMS) with the objective to record all plots under cane cultivation, those which are no longer under cane and their current use. This system will provide information on the agro climatic-characteristics of all plots (soil type, rainfall, and status if irrigated). More importantly, it will provide up to date information on the suitability of abandoned plots for specific crops and also visualize their extent and spatial distribution on a regional basis.</p> <p>The showcase for the factory area of ALTEO was developed by SIL and is available to users through a pass code.</p> <p>The MCIA has launched a tender for the EDMS to be developed for the whole island. The closing date was 8 March 2019. The system once established will help in the following ways:</p> <ul style="list-style-type: none"> <li>• To visually identify the geographic location of the plots of land provided by SIFB</li> <li>• To visually identify use of land by colour codes displayed on the maps</li> <li>• To replicate modifications/ updates from the database on the map in real time</li> <li>• To help management and stakeholders track abandoned land; and</li> <li>• To generate management reports</li> </ul>

**Table 14. Status and progress on budgetary measures (Contd.)**

Financial Year	Budgetary Measure	Progress / achievement
2017/2018	<p><b>Drone Technology</b> Introduction and adoption of drone technology in agriculture, starting with the sugar industry. This new technology will improve the assessment and monitoring of crop performance on large areas.</p> <p><b>Biomass</b> Government is working on a scheme to encourage the use of biomass such as cane trash and woodchips by the Independent Power Producers operating in the sugar industry.</p> <p><b>Cane Land abandonment</b> A provision of MUR 50 Million to bring back under cane cultivation at least 50ha in fiscal year 2017/18</p>	<p>MCIA has already procured two drones equipped with a sprayer and a sensor respectively. The process for the procurement of a software for the calibration of algorithms / procedures is still ongoing. Training for the use of the equipment is in progress.</p> <p>Research on the collection and transport of the trash was completed by MRC/ MCIA</p> <p>Discussions on pricing were initiated in the context of the new Alteo power plant project.</p> <p>A strategy on Biomass to bioelectricity is being worked out by Ministry of Energy and Public Utilities (MEPU) under <i>Le Fonds d'Expertise Technique et d'Echanges d'Expériences</i> (FEXTE) and under which, the MCIA is a stakeholder. Two workshops were held. The first phase of the study ended in July 2018 and the firm Nodalis of France was awarded the contract in June 2019 for the second phase of the study.</p>

In addition to the above budgetary measures, Government took the decision in October 2017 to waive the Cess Contribution of producers for the crop 2017. The waiving of cess contribution was also applicable for the crop 2018.

As the price of sugar was pursuing a downward trend, the Government again came up with a number of additional measures to support the planters for the crops 2018 and 2019. These measures are shown in Table 15:

**Table 15. Additional Measures - Crop 2018**

Crop	Government Decisions	Progress/ achievement
2018	<p><b>21 September 2018</b> <i>"Government has agreed to provide support to sugarcane planters who are facing financial difficulties due to the decline in sugar price on the world market. The following measures were being proposed for providing immediate relief to planters for Crop 2018 -</i></p> <p><i>(a) a cash compensation of MUR 1,250 per tonne of sugar to all planters.</i></p> <p><i>(b) additional remuneration from bagasse of MUR1,250 per tonne of sugar thus bringing the revenue accruing from bagasse to MUR2,500 for small planters and MUR1,700 for other planters.</i></p> <p><i>(c) For planters with less than 100 hectares of cane cultivation, the advance of 80% would be extended on all the revenue received from sugar and co-products instead of the ex-MSS price on sugar only.</i></p>	<p>Provision of cash compensation was implemented.</p> <p>Implementation of bagasse remuneration is in the pipeline.</p> <p>Advance payment on all revenue implemented.</p>



Table 15. Measures (Contd.)

Financial Year	Government Decisions	Progress/ achievement
2018	<p>(d) <i>The Mauritius Cane Industry Authority would also assist planters with less than 100 hectares under cane cultivation through an advance from the Planters Fund for the purchase of fertilizers for crop 2019. The advance would be around MUR13,000 per hectare.</i></p> <p>(e) <i>Government would continue to explore new markets for sugar, in particular special sugar, with remunerative prices. In this respect, after protracted negotiations with the Chinese authorities under the Mauritius China Free Trade Agreement, Mauritius has managed to obtain a tariff rate quota of 50,000 tonnes of special sugar.”</i></p> <p><b>11 December 2018</b></p> <p><i>“Government has agreed to the proposals regarding the revision in the payment mechanism to small sugarcane planters for crop 2018. For the crop 2018, an additional financial support of MUR 257 per tonne of sugarcane to planters producing up to 60 tonnes of sugar, would be provided. These small planters would therefore receive, in aggregate, a revenue of MUR 1500 per tonne of sugarcane. This is equivalent to MUR 19,200 per tonne of sugar from all revenue sources (inclusive of remuneration from bagasse and molasses, waiving of CESS contribution and insurance premium and other support measures). This represents an additional revenue of MUR 3,287 per tonne of sugar over and above the revenue of MUR 15,913 agreed in September this year.”</i></p>	<p>Provision of advance for purchase of fertilizers implemented.</p> <p>Implemented</p>

**The following budgetary measures were announced in the Budget 2019/2020 namely:**

- |   |   |
|---|---|
| <p>(i) waiving the amount due by small planters under the FORIP (Field Operations Regrouping Project) Scheme;</p> <p>(ii) waiving 50% of the advance on fertilisers provided to planters through the Mauritius Cane Industry Authority (MCIA);</p> <p>(iii) the insurance premium paid to the Sugar Insurance Fund Board by planters producing up to 60 tonnes of sugar is also being waived for crop 2019;</p> <p>(iv) provision in the budget of the MCIA to meet the shortfall arising from the suspension of CESS payments for crop 2019;</p> | <p>(v) provision of funds under the Cane Replantation Programme to encourage planters to bring their land back under cultivation;</p> <p>(vi) Provision of MUR 15 M for the MCIA to acquire equipment for harvesting sugar cane of small planters;</p> <p>(vii) A National Biomass Framework will be developed for the use of sugar cane biomass, including cane trash, for electricity generation; and</p> <p>(viii) Government has already sought the assistance of the World Bank to provide strategic policy options for making the</p> |
|---|---|

sugar cane Industry sustainable, in the medium and long term; and

- (ix) For crop 2019, all planters will benefit from a special unprecedented price of MUR 25,000 per tonne of sugar for the first 60 tonnes of sugar accrued to them. This is more than double the price they would otherwise have obtained.
- The impact of the support provided by Government on the revenue of the small, large and corporate planters is shown in Table 16 for the period 2013 to 2018 with estimates for crop 2019 based on figures available at MCIA.

**Table 16.Total Revenue derived by planters producing up to 60 tonnes sugar**

Year	2013	2014	2015	2016	2017	2018	2019(est)
<b>A. Revenue Sugar and coproducts(MUR/ t Sugar)</b>							
Sugar	15,830	12,693	13,166	15,571	11,000	8,700	10,000
Molasses	591	694	700	673	718	713	700
Bagasse (BTP)	119	124	162	149	164	161	150
Alcohol contribution	268	277	275	498	504	586	500
Cess waiver					440	352	400
Import tariff sugar for local consumption						275	275
<b>Total Revenue Sugar and co products</b>	<b>16,808</b>	<b>13,788</b>	<b>14,303</b>	<b>16,891</b>	<b>12,826</b>	<b>10,787</b>	<b>12,025</b>
<b>B. Government Financial Support (MUR/ t Sugar)</b>							
Insurance Premium waiver	0	0	600	720	600	600	600
Financial support for bagasse	0	0	1100	1100	1100	2350	0
Additional Financial Support –	0	3400	2000	0	1250	1250	0
• Sugar Insurance Fund							
• Government budget	0	0	0	0	0	3,287	12,375
<b>Total Government financial support</b>	<b>0</b>	<b>3,400</b>	<b>3,700</b>	<b>1,820</b>	<b>2,950</b>	<b>7,487</b>	<b>12,975</b>
<b>Total Revenue+ Government Support</b>	<b>16,808</b>	<b>17,188</b>	<b>18,003</b>	<b>18,711</b>	<b>15,776</b>	<b>18,274</b>	<b>25,000</b>

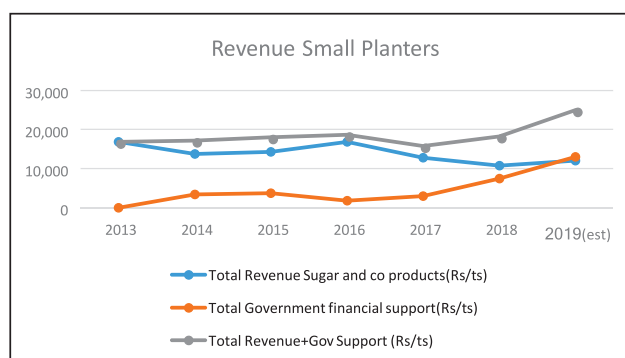


Fig 1. Revenue Small Planters

Table 17.Total Revenue derived by planters producing greater than 60 tonnes sugar

Year	2013	2014	2015	2016	2017	2018	2019(est)
<b>C. Revenue Sugar and coproducts(MUR/ t Sugar)</b>							
Sugar	15,830	12,693	13,166	15,571	11,000	8,700	10,000
Molasses	591	694	700	673	718	713	700
Bagasse (BTP)	119	124	162	149	164	161	150
Alcohol contribution	268	277	275	498	504	586	500
Cess waiver					440	352	400
Import tariff sugar for local consumption						275	275
<b>Total Revenue Sugar and co products</b>	<b>16,808</b>	<b>13,788</b>	<b>14,303</b>	<b>16,891</b>	<b>12,826</b>	<b>10,787</b>	<b>12,025</b>
<b>D. Government Financial Support (MUR/ t Sugar)</b>							
Insurance Premium waiver	0	0	0	0	0	0	0
Financial support for bagasse	0	0	300	300	300	1550	0
Additional Financial Support –	0	2000	2000	0	1250	1250	0
• Sugar Insurance Fund							
• Government budget	0	0	0	0	0	0	2,069
<b>Total Government financial support</b>	<b>0</b>	<b>2000</b>	<b>2300</b>	<b>300</b>	<b>1550</b>	<b>2,800</b>	<b>2,069</b>
<b>Total Revenue+ Government Support</b>	<b>16,808</b>	<b>15,788</b>	<b>16,603</b>	<b>17,191</b>	<b>14,376</b>	<b>13,587</b>	<b>14,094</b>

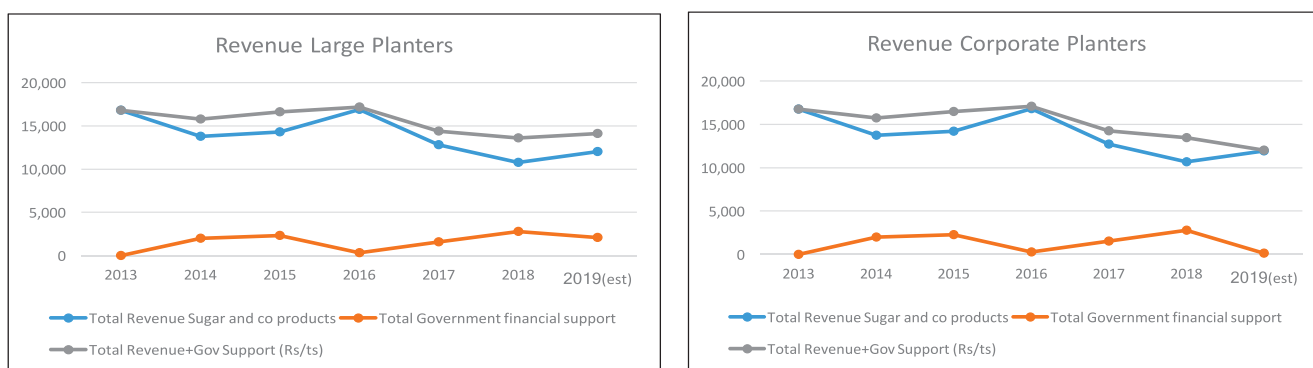


Fig 2. Revenue Large Planters & Revenue Corporate Planters

Table 18. Total Revenue derived by Corporate planters

Year	2013	2014	2015	2016	2017	2018	2019(est)
<b>E. Revenue Sugar and coproducts(MUR/ t Sugar)</b>							
Sugar	15,830	12,693	13,166	15,571	11,000	8,700	10,000
Molasses	591	694	700	673	718	713	700
Bagasse (BTP)	63	68	60	55	55	53	55
Alcohol contribution	268	277	275	498	504	586	500
Cess waiver					440	352	400
Import tariff sugar for local consumption						275	275
<b>Total Revenue Sugar and co products</b>	<b>16,752</b>	<b>13,732</b>	<b>14,201</b>	<b>16,797</b>	<b>12,717</b>	<b>10,679</b>	<b>11,930</b>
<b>F. Government Financial Support (MUR/ t Sugar)</b>							
Insurance Premium waiver	0	0	0	0	0	0	0
Financial support for bagasse	0	0	300	300	300	1550	
<b>Additional Financial Support –</b>							
• Sugar Fund Insurance	0	2000	2000	0	1250	1250	0
• Government budget	0	0	0	0	0	0	118
<b>Total Government financial support</b>	<b>0</b>	<b>2,000</b>	<b>2300</b>	<b>300</b>	<b>1550</b>	<b>2,800</b>	<b>118</b>
<b>Total Revenue+ Government Support</b>	<b>16,752</b>	<b>15,732</b>	<b>16,501</b>	<b>17,097</b>	<b>14,267</b>	<b>13,479</b>	<b>12,048</b>

## **The SIE (Amendment) Act 2016 – Workers employed by Job Contractor**

The MCIA has set up a committee to determine the number of man-days to be performed by workers employed by Job Contractors and seasonal workers employed by the Sugar Industry as per the provisions of the SIE Act. The composition of the meeting shall consist of the MCIA, a representative of employers and a representative of recognized trade unions.

MCIA has liaised with the Ministry of Agro-Industry and Food Security, Ministry of Social Security and Ministry of Labour and Industrial Relations and all the sugar companies for the submission of relevant data.

## **Registration and payment of a contribution to the MCIA for the importation and sales of sugar on the local market**

Following the gazetting of the Regulation made under Section 63 of the MCIA Act in 2012 and subsequent amendment made on 25 March 2014 (Government Notice No 50 of 2014) the contribution to MCIA from the sale of sugar on the local market is MUR 3.70/kg of sugar. Furthermore, provision was made in the National Budget 2018/2019, for the introduction of 80% duty on imported sugars for domestic consumption to render such sugar less competitive vis-à-vis locally produced sugar.

For the year 2018, 35 companies/importers were registered with the MCIA. An amount of 25,623 Mt of sugar were imported/sold on the local market and the MCIA has received a total contribution of some MUR 95M, which has been used for the payment of pensions for the ex-dockers.

As regards the quality of sugar imported, the importers are required to submit the certificate of analysis to the Customs Department and the MCIA as a prerequisite for customs clearance of the imported consignment. Furthermore, the SIE Act has been amended in 2016 to enforce standards for white and raw sugars used for domestic consumption as well as to empower the MCIA and Mauritius Standard's Bureau to proceed with the sampling and testing of sugar.

## **Activities related to the Multi Annual Adaptation Strategy (2006 - 2015)**

During the course of the year 2017 - June 2018 the following activities continued under the projects related to MAAS plan:

### **Project 1:**

Field operations and the regrouping of planters

### **Project 2:**

Centralization of sugar factories

### **Project 3:**

Socio – Economic Projects in favour of Employees of the Sugar Industry

### **Other components:**

(i) Electricity generation

(ii) Métayers

(iii) Fair Trade

(iv) Environmental issues

## **Project 1: Field operations and the regrouping of planters**

The objectives of this project are to improve the cost competitiveness of the field sector and to ensure the sustainable and reliable supply of canes by small planters through regrouping. The Field Operations Regrouping and Irrigation Project (FORIP) was to cover some 12,000 ha during the period 2006 to 2015. Given the recent increase in demand from planters to join this scheme, Government decided to extend the scheme until end June 2022 and provision was made for the allocation of additional funds accordingly.

The implementation of FORIP was initially based on a multi-phased approach, i.e. Phases I, II and III. Phase IV was initiated in July 2009 and was completed in December 2010. For the period 2010 to 2015 the implementation of the project was based on a calendar year basis in line with the Programme Based Budgeting (PBB) for the

allocation of funds. Subsequently, as from 2016 the project was implemented on a financial year basis.

In 2016, the appellation of the project was changed to Sugarcane Planters Regrouping Project (SPRP) with modifications to the Planters' Contract Agreement and the scope of works, which are summarised below:

- (i) planters who must be owners of less than an aggregate of 15 ha compared to 25 ha previously to be eligible join this project (i.e. the scheme targets the small / medium planters who are the most vulnerable ones);
- (ii) additional conditions have been included to enable the MCIA not to proceed with works under certain specific terms and conditions;
- (iii) the previous provision pertaining to planter's contribution has been amended to link it with the viability price of sugar. Planters will need to contribute only for years when the ex-MSS price of sugar exceeds MUR 16,000 per tonne;
- (iv) under the new scheme the provision regarding the payment of a cash advance to planters was abolished as was the case under FORIP.

However, in case a planter has got a cash flow problem, the MCIA would look into the possibility to make arrangements with banking institutions to enable the planter to contract a loan;

- (v) no provision will be made for the rehabilitation of fields once handing over has been effected;
- (vi) no provision will be made for excavation works and carting away of rocks in difficult areas; and
- (vii) otherwise, all other provisions of FORIP have been maintained.

The total cumulative extent regrouped, derocked and planted during the period covering 2006 to 2019 is 11,551 ha (i.e. representing some 96.3 % of the extent earmarked under this project) involving some 12,132 planters as indicated in Table 19.

**Table 19. Area involved under the different phases of FORIP [2006 -2015] and SPRP [2016-2019]**

Phase (Period)	Area (ha)	No. of Planters
Phase I (Aug 2006 – April 2007)	340	245
Phase II (May 2007 – April 2008)	973	785
Phase III (May 2008 – June 2009)	1,081	1,149
Phase IV (Jul 2009 – Dec 2010)	1,215	735
Phase V (Calendar year 2011)	1,325	1,407
Phase VI (Calendar year 2012)	1,396	1,675
Phase VII (Calendar year 2013)	1,331	1,597
Phase VIII (Calendar year 2014)	1,458	1,665
Phase IX (Calendar year 2015)	564	677
Phase X (Jan 2016 to July 2016)	590	708
Phase XI (FY 2016/2017)	727	872
Phase XII (FY 2017/2018)	293	328
Phase XIII (FY 2018/2019)	258	289
<b>Total</b>	<b>11,551</b>	<b>12,132</b>



## Project 2: Centralization of sugar factories

### Closure of Medine Sugar Factory

On 26 September 2018, the Medine Milling Company Limited (MSML) wrote to the Honourable Minister of Agro Industry and Food Security notifying him under section 30 of the MCIA Act of their intention to close down the Medine Sugar factory as from end of crop 2018.

MSML was a producer of Plantation White Sugar and as such it had an agreement with OMOL for delivery of same for a premium of EURO 25 per tonne raw sugar. After expiry of this agreement, MSML was no longer benefiting the same premium price it requested from the MSS. As parties could not reach an agreement, MSML has had resort to the Supreme Court. Each party retained their position and as such no agreement could be reached at the level of the Supreme Court either.

As the MCIA has the mandate to ensure the smooth operations of the industry, it solicited the services of a local consultant to come with recommendations in order to resolve the dispute between the parties. The MSML was not agreeable with the recommendations of the study.

It was clear that MSML could no longer operate for the crop 2019 and onwards both on technical and financial grounds. The MSML was in a quasi-bankrupt state and it remained operational the past years through support from its stakeholders. It was not in a state to undertake major repairs and replacement works at the level of the boiler which was critical to operate for the crop 2019. The closure of the factory was therefore the only option left after the Company had explored all other possibilities. The request for this closure was therefore analysed with the above background information.

The MCIA has, as it had in the past closures, held several meetings and consultation exercises with all the stakeholders concerned, namely cane receiving factories, planters and planters associations, trade unions and workers, Road Authorities, Ministry of Energy and Public Utilities and the Ministry concerned with the Environment. Based on the recommendations of the MCIA, the Government

decided to close Medine on 29 March 2019 with a number of conditions related to this closure. The cane of Medine as from crop 2019 was directed in the proportion 16% to Alteo Milling and the remainder equally shared between Terra and Omnicane Milling. With this arrangement the amount of electricity exported by Medine from bagasse will increase from 15 Gwh to some 34 Gwh. The reason being that the power plants of the cane receiving factories are more efficient than that at Medine.

## Project 2: Centralization of sugar factories

The progress on monitoring of factory closure conditions for the period 2017 - June 2019 is shown in Table 20:

Table 20. Factory Closures					
Closed Factories	Disbursement of Fund from EU to meet Cash Compensation to Beneficiaries	Disbursement of Planters Fund	Handing over of Title Deeds to Beneficiaries	Erection of 150 m <sup>2</sup> fertilizer store or multipurpose building	Road Infrastructure
1. St Felix closure in 2006	✓	✓	✓	No progress for the period	✓
2. Riche En Eau closure in 2007	✓	✓	✓	No progress for the period	✓
3. Mon Desert Mon Tresor closure in 2007	✓	✓	✓	No progress for the period	✓
4. Mon Desert Alma closure in 2008	✓	✓	✓	No progress for the period	✓
5. Union St Aubin closure in 2011	✓	Overdue MUR 6M not yet settled by Omnicane	✓	No progress for the period	No progress for the period
6. Mon Loisir closure in 2012	✓	✓	In Progress	No progress for the period	✓
7. Deep River Beau Champ closure in 2014	✓	✓	In Progress	No progress for the period	No Progress for the period
8. Medine closure in 2019	No EU fund. Payment was made to beneficiaries by Medine Ltd.	✓ Payment made for first year	In Progress	Medine Ltd has been requested to propose sites	None

Note: ✓ means completed

## Planters' Fund

Omnicanne Milling with respect to closure of Union St Aubin Sugar Factory still has an overdue account of MUR 6 M. Following closure of the Medine Sugar Factory in 2019, Medine has effected a first payment of Rs 3 M.

## Fertilizer Store/Multipurpose Complex

With regard to the erection of fertilizer stores or multipurpose complexes, there was an in principle agreement that for all the closures that have occurred in the south, OMOL will provide fertilizer stores at two sites namely Plaine Magnien and Britannia. Clearance has been obtained from the District Council for the site at Plaine Magnien. However, no progress was recorded for the development of the site.

In the context of the closure of Mon Loisir and Deep River Beau Champ the cane receiving mills namely Terra Milling and Alteo Milling respectively have not proposed sites for this development to occur. Medine Ltd. has been requested in April 2019 to propose sites for this development.

## Road Infrastructural Works

The MCIA has liaised with RDA for any outstanding road infrastructural works to be completed by Omnicanne and Alteo in the context of the closures of Union St Aubin and Deep River Beau Champ. There has been no progress for the period 2017 - June 2018.

## Project 3: Socio – Economic Projects in favour of Employees of the Sugar Industry

### Rightsizing of production entities: the implementation of a Voluntary Retirement Scheme

The Sugar Industry has been one of the most established industries given its long history which goes back more than three and a half centuries and has been up to now occupying a dominant role in the economy.

Over the years the Sugar Industry has made enormous contributions to the Mauritian economy and it has also played pivotal role in the development of the other Sectors of the economy.

The revenue had been used to diversify the Mauritian economy into tourism and textile. It has also contributed to a very good education system. Moreover, the economy of Mauritius has progressed considerably with the revenue obtained from the Sugar Industry.

Over its lifetime, the Sugar Industry has also had to face numerous challenges both on the national and international scenes.

In year 1838, Mauritius had 259 sugar mills and at the beginning of the 19th century, there were 60 - 80 factories producing, over 3000 tonnes of sugar. Since that time, the Sugar Industry has been undergoing constant expansion, modernization and centralization of factories.

The record sugar production was noted in 1973 when 21 sugar factories produced 718,464 tonnes of sugar.

The number of sugar factories has been reduced to 4 in year 2014 and 3 as from year 2019 after the closure of Medine Sugar factory

In June 2001, Government had published the Sugar Sector Strategic Plan (SSSP) 2001-2005 with the main objective of providing the Sugar Industry with all the necessary measures to overcome the threats and challenges facing the industry in the future particularly the erosion of preferential access to our export market for sugar and the continuous drive towards liberalization of the World Sugar Market.

Subsequently, many of the SSSP measures were translated into legal form to facilitate their implementation.

To that end, the SIE Act 2001 was enacted in August 2001 and had as objective to consolidate, amend and streamline the laws relating to the package of the incentives applicable to the sugar sector with

a view to further facilitating the democratization of ownership in the sugar industry, restoring and maintaining the efficiency and viability of the Sugar Industry and supporting the socio-economic development of Mauritius.

The SIE Act was amended in November 2001 and August 2002 to facilitate further the implementation measures in the Sugar Sector Strategic Plan 2001-2005.

### **Developments on the Voluntary Retirement Scheme (VRS)**

Government had several explanatory meetings around the island together with Ex-MSA, with workers of the Sugar Industry to communicate to them on the future of the Sugar Industry and its reform.

On 23rd of July 2001 the SIE Bill was debated at the National Assembly.

After the enactment of the SIE Act and the explanatory meetings, 8317 workers of 26 sugar companies of Ex MSPA members accepted

voluntarily to terminate their contract of employment under the Voluntary Retirement Scheme as the workers leaving the industry were offered a decent package both in terms of cash and land compensation in a way to recognize all the hard work that the workers have undertaken over the years.

The VRS was one among the many measures to contribute in the reduction of cost and contribute towards ensuring the long term viability of the industry.

The VRS helped the industry to reduce its cost and be competitive.

The viability of the industry ensured employment to all workers who opted to stay within the Industry. The overall responsibility of implementing the VRS was entrusted to the ex-Mauritius Sugar Authority (MSA) now the MCIA (Policy and Planning Unit). In the implementation of the VRS, the ex-MSA had enlisted the support of all the Stakeholders who were either directly or indirectly involved to ensure the successful implementation of the project.

**Table 21. STATUS OF HANDING OVER OF TITLE DEEDS FOR VRS/ERS/BLEU PRINT**

<b>Period</b>	<b>Schemes</b>	<b>No. of Beneficiaries</b>	<b>Title Deeds handed over</b>	<b>Outstanding Cases</b>
2001 - 2007	VRS 1 BLUE PRINT	8,317 1,051 9,368		Nil
2007 - 2014			9,368 (For 2001-2007)	
	VRS 2: 2007 2012	6,728 411		
	ERS	209	<b>1,500</b>	<b>1105</b>
	BLUE PRINT	1,145		
		<b>8,493</b>		
Jan 2015 - May 2019	VRS 2	44	6,039	
	BLUE PRINT	107		
		151	7,539	
<b>GRAND TOTAL</b>		<b>18,012</b>	<b>16,907</b>	<b>1,105</b>

**Table 22. DETAILS OF 1105 OUTSTANDING CASES**

1 Works in progress	724
2 Title deeds under preparation by Notary	37
3 Title deeds ready for handing over	344
	<b>1105</b>

**Table 23. Details of 1105 outstanding cases**

<b>VRS 2 - Sugar Companies Company</b>	<b>Site</b>	<b>Works in Progress</b>	<b>Title deeds Ready</b>	<b>Title deeds under Preparation</b>	<b>Total</b>
Médine Ltee.	Palma	118			
Médine Ltee.	Bambous	115			
Alteo Ltd.	Piton	70			
Alteo Ltd.	Melrose		117		
Cie Gros Cailloux Ltd.		44			
Bel Air SE	Rivière des Anguilles		95		
St Felix SE	Rivière des Anguilles	144			
		491	212	0	703
<b>BLUE PRINT (factory closures) Company</b>	<b>Site</b>				
Alteo Ltd.	L' Amitie			3	
Alteo Ltd.	Belle Vue Maurel			25	
Alteo Ltd.	Rivière des Creoles			9	
Alteo Ltd.	La Clemence	-	132		
Alteo Ltd.	Bonne Mère	126			
Medine Ltee.	Casela	107			
		233	132	37	402
<b>GRAND TOTAL</b>		<b>724</b>	<b>344</b>	<b>37</b>	<b>1105</b>

**Table 24. VRS/ERS/BLUE PRINT Employees Sites**

	<b>Sugar Company</b>	<b>Scheme: VRS /ERS/ Blue Print/ POC</b>	<b>Morc Board MHL/M</b>	<b>No of bene.</b>	<b>Site</b>	<b>Action taken by MCIA</b>	<b>Follow-Up</b>
1	Medine SE	VRS	M/17443	118	Palma	<p>MCIA had site visit for Geophysical Report. MCIA Next site visit with Medine on site scheduled for Monday 29 July 2019.</p> <p>MCIA has requested Medine to send copy of Geophysical Report to MCIA and Ministry of Environment by end of July 2019.</p>	<ul style="list-style-type: none"> <li>• Ministry of Housing and Lands /RDA/MPI responsible for acquisition of upgrading of Palma-roundabout and on Land Acquisition.</li> <li>• Medine agreed with Ministry of Environment with regard to 20m set back.</li> <li>• Ministry of Environment has agreed to waive the liability.</li> <li>• As agreed Medine is in the process of preparing the EIA and will submit application by end of September 2019 instead of October 2019.</li> </ul>
			M/17402	115	Bambous	<p>On 23 July 2019, MCIA has informed Medine to send urgently to Land Drainage Authority the Draft Affidavit.</p> <p>MCIA has a requested Medine to liaise with MCIA to organize a working session for the final Affidavit vetting.</p>	<ul style="list-style-type: none"> <li>• MCIA with Medine, Lawyer, Consultant and all government authorities for final working session for the Affidavit.</li> <li>• Medine to submit final Affidavit to all government authorities and Land Drainage Authority prior to submission to Supreme Court.</li> <li>• MCIA has requested Medine Ltée. to liaise urgently with Land Drainage Authority for its clearance.</li> <li>• litige between RDA and Medine Ltée on the culvert design liability has been settled.</li> <li>• RDA has granted its approval to the proposed culvert with inner clear dimensions of 6 m wide and 1.4 m deep on Riv. Noire A3 road at Mon Repos, Bambous.</li> <li>• Medine Ltée in its letter dated 26 June 2019 has sought for extension of time with Min. of Housing to complete all the works up to March 2020. MCIA is agreeable and recommended to Morc. Board.</li> <li>• .Awaiting reply from Morc. Board.</li> <li>• Views of CWA and Land Drainage Authority awaited.</li> </ul>



Table 24. VRS/ERS/BLEU PRINT Employees Sites (Contd)

Sugar Company	Scheme: VRS /ERS/ Blue Print/ POC	Morc Board MHL/M	No of bene.	Site	Action taken by MCIA	Follow-Up	
		M/17395	20	Chebel	All the 20 beneficiaries signed their title deeds on 31 May 2019.  Medine already vested 3 greenspaces to Municipality of Beau Bassin/Rose Hill.	<ul style="list-style-type: none"><li>• Title deeds handed over to the 20 beneficiaries by MCIA on 19 of July 2019.</li></ul>	
2	Alteo	VRS	M/16288	70	Piton	<p>On 23 May 2019, Alteo has paid the amount of MUR360,000 for street lanterns to District Council of Rivière du Rempart.</p> <p>MCIA has apprised Alteo to submit drawings to CWA for clearances.</p> <p>Meeting on 28 May 2019 between Alteo/NDU/District Council with regard to implementation of the drain found upstream of the VRS site to protect villages Piton, La Paix, Poudre d’Or and Cottage.</p>	<ul style="list-style-type: none"><li>• Alteo has liaised with Pamplemousses CWA with regard to main water pipe tapping.</li><li>• Main water tap connection will be completed in two weeks time.</li><li>• On completion of connection CWA will effect site visit and issue letter for amount for bank guarantee to Alteo.</li><li>• CWA to liaise with Alteo.</li></ul>
3	Bel Air	VRS	M/14117	95	Riviere des Anguilles	Title deeds signed	<ul style="list-style-type: none"><li>• Title deeds signed on 16 July 2019 and 20 July 2019 in presence of MCIA.</li><li>• MCIA will authorize Company to sell surplus plots once the beneficiaries have received their registered and transcribed title deeds.</li><li>• Government to liaise with Registrar for registration of title deeds.</li></ul>

**Table 24. VRS/ERS/BLEU PRINT Employees Sites (Contd)**

	<b>Sugar Company</b>	<b>Scheme: VRS /ERS/ Blue Print/ POC</b>	<b>Morc Board MHL/M</b>	<b>No of bene.</b>	<b>Site</b>	<b>Action taken by MCIA</b>	<b>Follow-Up</b>
4	St Felix SE	VRS	M/17413	144	Chemin Grenier	<p>MCIA has requested company promoter to contact CWA, CEB, Savanne District Council, RDA, and TMRSU for clearances.</p> <p>On 23 May 2019, MCIA has requested SE and Morc. Board to decouple the 144 plots of land pertaining to VRS beneficiaries and submit amended plan to Morc. Board.</p>	<ul style="list-style-type: none"> <li>• Infrastructure works been stopped due to financial difficulties.</li> <li>• Awaiting Land Conversion Permit to enable company to seek funds to complete infrastructure works.</li> <li>• As per MoAIFS awaiting approval of Cabinet for LCP.</li> <li>• MoAIFS will inform MCIA on issue of LCP.</li> </ul>
5	Cie de Gros Cailloux	VRS	M/18726	44	Kahin (Gros Cailloux)	<p>Infrastructure works ongoing.</p> <p>Company to liaise with CWA, CEB, District Council, TMRSU and Cadastral Unit for clearances on completion of all infrastructure works.</p>	<ul style="list-style-type: none"> <li>• On site works were stopped by contractor.</li> <li>• Now works started.</li> <li>• Company is facing financial difficulties to complete work.</li> <li>• Company will inform Ministry of Agro-Industry and Food Security on this issue.</li> <li>• Bottle Neck at the level of CEB and Mauritius Telecom to displace the poles.</li> <li>• Extension of time granted by Ministry of Housing and Lands up to 28 February 2020.</li> </ul>

## Blue Print

Table 24. VRS/ERS/BLEU PRINT Employees Sites (Contd)

	Sugar Company	Scheme: VRS /ERS/ Blue Print/ POC	Morc Board MHL/M	No of bene.	Site	Action taken by MCIA	Follow-Up
1	Alteo	Blue Print	M/17165	126	Bonne Mère	MCIA had effected site visits for follow up for creation of a turning bay near plot 126 and footpath along A7 Road.	<ul style="list-style-type: none"> <li>• Works for footpath and turning bay have been started. Government Authorities to effect visit.</li> <li>• MCIA and Morcellement Unit to write to Alteo with regard to Alteo to seek approval for design of turning bay with TMRSU.</li> </ul>
		Blue Print	M/18309	3	L'Amitié	Morcellement Permit received.	<ul style="list-style-type: none"> <li>• Morcellement Board issued permit on 13 June 2019.</li> <li>• MCIA has requested Alteo to apply for PIN and prepare title deeds.</li> </ul>
		Blue Print	M/16872	132	La Clemence	<p>Out of 132 beneficiaries, 112 beneficiaries will sign the title deeds on 7 June 2019.</p> <p>The remaining, 20 title deeds will be signed in second batch on receipt of relevant civil documents from beneficiaries. Beneficiaries have been requested to submit the civil documents to Alteo.</p>	<ul style="list-style-type: none"> <li>• Title deeds signed on 7 June 2019 and will be handed over to the beneficiaries by end of October 2019.</li> </ul>
		VRS	M/17100	117	Melrose	<p>Out of 117 beneficiaries, 115 will sign their title deeds on 4 June 2019.</p> <p>The remaining two beneficiaries will sign their title deeds once they will submit their civil documents to Alteo.</p>	<ul style="list-style-type: none"> <li>• Title deeds signed on 4 June 2019 and will be handed over to the beneficiaries by end of October 2019.</li> </ul>

## Blue Print

Table 24. VRS/ERS/BLEU PRINT Employees Sites (Contd)

Sugar Company	Scheme: VRS /ERS/ Blue Print/ POC	Morcel Board MHL/M	No of bene.	Site	Action taken by MCIA	Follow-Up
	Blue Print	M/17033	25	Belle Vue Maurel	On 27 May 2019, MCIA has requested Alteo to submit commitment letter for construction of 3 m drain as per request of District Council of Rivière du Rempart. MCIA has also requested Alteo to submit to Morcellement Board clearances of CWA, TMRSU, and RDA by Tuesday 28.05.19.	<ul style="list-style-type: none"> <li>• Morcellement. Permit received.</li> <li>• Alteo has started works on 19 June 2019; drain will be completed by end of July 2019.</li> <li>• Alteo to report to MCIA.</li> <li>• Authorities to effect site visit</li> </ul>
	Blue Print	M/17166	9	R. des Creoles	On 27 May 2019, MCIA has officially requested Alteo to prepare title deeds for the beneficiaries within shortest delay and liaise with Notary Me. Montochio.	<ul style="list-style-type: none"> <li>• MCIA has requested Alteo to fix date for signature of title deeds within the shortest delay to avoid any prejudice to the beneficiaries.</li> </ul>
2	Medine	Blue Print	107	Casela	Medine to submit application to Morcellement Board for Letter of Intent.	<ul style="list-style-type: none"> <li>• After harvest Company will do needful to apply for LOI at Morcellement Board. Land belongs to Medine Ltée.</li> </ul>

### Surplus plots of land under the VRS/ERS/Blue Print/Phasing out of Sugar Camps Scheme

- A survey has been carried out on all the sites of VRS/ERS/Blue Print/Phasing out of Sugar Camps Schemes after handing over of Title Deeds.
  - The surplus plots of land in the schemes are as follows:
  - Alteo Ltd. and Medine Ltd. will submit their status on completion of the schemes.
  - Sugar companies have the intention to sell the plots of land as they have to keep them clean on a regular basis as per the Ministry of Environment and Local Authorities.
- It has been agreed by all stakeholders that the land could be sold subject to:

VRS	76
P.O.C	60
B. Print	26
<b>Total</b>	<b>162</b>

1. Approval of MCIA as the Morcellement has been approved by the Morcellement Board under certain socio-economic projects under the supervision of MCIA.

2. Plot of land to be kept and maintained on a regular basis until a decision is taken.

3. No one will be authorized to occupy the plot of land.

4. All plots should be properly pegged.

5. Land to be sold to:

(i) All persons that the Company had an agreement with evidence as at December 2016 and having informed the MCIA.

(ii) Land will not be sold to those employees who have already benefitted plots of land under VRS/ERS/Blue Print and Phasing out of sugar camps.

(iii) Land to be sold by sugar companies to existing permanent employees in the Cane Industry after having refunded the amount of MUR 300,000 (representing the infrastructural cost) to the MCIA.

**Table 25. Surplus plots of land under the VRS/ERS/Blue Print/Phasing out of Sugar Camps Schemes**

<b>Sugar Company</b>	<b>Scheme: VRS /ERS/ Blue Print/ POC</b>	<b>Name of site</b>	<b>Number of surplus plots</b>
St. Felix S.E Co. Ltd.	VRS 1	Chemin Grenier	45
Mont Choisy	Phasing out of Sugar Camps	Mont Choisy	2
St. Aubin	VRS 1	Union St. Aubin	2
Medine	Phasing out of Sugar Camps	Eaux Bonnes	8
	VRS 1	Camp Mapou Chebel	5 2
Cie Sucrière de Bel Ombre	VRS 1	Case Noyale	2
Terragri Ltd.	VRS 1	Bois Mangues	8
	VRS 2	Bois Mangues	1
		Mon Goût Maison Blanche	1 6
Omnican Ltd.	VRS 1	Batimara - R. des Anguilles Britannia	2 1
Britannia	Phasing out of Sugar Camps	Camp Berthaud 1	4
Mon Trésor Mon Désert	Phasing out of Sugar Camps	Cote D'Or Deux Bras Sauveterre	4 1 1
Omnican Milling Operations	Blue Print	Tyack	8
Omnican (St. Felix)	Blue Print	St. Felix	14
Omnican (Mon Trésor)	Blue Print	Mon Trésor	4
Omnican Ltd.	Phasing out of Sugar Camps	Desplaces	41
<b>Total</b>			<b>162</b>

- N.B. Alteo Ltd. and Medine Ltée. will submit the exact number of surplus plots after completion of infrastructure works.

### Winding up of the Phasing out of Sugar Estate Camps Project

The elimination of the Sugar Industry housing estates was one of the major Government policy objectives as explicitly highlighted in the Sugar Sector programme which accompanied the publication of the Sugar Industry 1985 Action Plan.

The winding up of the Phasing Out of Sugar Camps project was held on 20 December 2017. At the official ceremony, 71 beneficiaries of Omnicane Ltd, Cie de Beau Vallon Ltée. and Union Sugar Estates received their Title Deeds whereas 12 beneficiaries of St Aubin Ltée. received their quittance in lieu of their Title Deeds.

A few outstanding cases at level of Omnicane and Mon Choisy and Solitude are being catered for MCIA.



Note:

Fig 3 & Fig 4. Sugar Camps

1. Red marks refer to sugar camps that existed previously
2. Green marks refer to sugar camps that have been rehabilitated/moved
3. Blue marks refer to sugar camps that have not moved



## Other components

### Electricity Generation

In 2018, electricity generation went up by 0.4% from 3,157 GWh (268 ktoe) in 2017 to 3,132 GWh (269 ktoe), of which 79% (2,483 GWh or 213 ktoe) was generated from non-renewable sources and 21% (649 GWh or 56 ktoe) from renewable sources.

The Independent Power Producers produced around 57% of the total electricity generated and the Central Electricity Board produced the remaining 43%.

During the same period 2017-2018, the sale price of electricity increased by 1.2% from MUR 2,618 around MUR 6 per kWh.

### The CEB/IPP's Power Purchase Agreements

#### Alteo Power Plant – contract extension for 3 years

The existing contract at Alteo came to term on 21 December 2018. Discussions regarding the new Alteo Power plant were ongoing at the level of the Restricted Negotiation Committee of which the MCIA is a member. It was therefore found appropriate for stakeholders to extend the contract for a further period of 3 years covering the period 2019 - 2021. The new Alteo Power plant would therefore be on the grid as from 2022.

The extended contract also takes on board trash combustion as a pilot project. Trash would be used at full swing for the new Alteo power plant. It is for the first time that IPP's and trash suppliers would be remunerated for the use of trash with a production of 3 Gwh as a test case. The trash suppliers would be remunerated at MUR 1.00 / kWh.

#### Terra power plant

The Terragen power plant contract will expire in June 2020. The company has started negotiation with the CEB in 2019 and is ongoing.

## Agricultural Land Management System

### *Development of an Electronic Data Management System*

Following Electronic Data Management System being developed for Alteo Factory Area in collaboration with State Informatics Limited as a show case, the MCIA embarked into a project to cover the whole island. The development of this system was entrusted to a firm in March 2019 and work is in progress. Once the system is established it will serve:

- to visually identify the geographic location of the plots of land provided by SIFB
- to visually identify use of land by colour codes displayed on the maps
- to replicate modifications/ updates from database on the map in real time
- to help management and stakeholders track abandoned land
- to generate management reports

### Cane Replantation Scheme (CRS)

Another component of the ALMS is the implementation of the 2017/2018 budgetary measure through the Cane Replantation Scheme (CRS). The objective of the CRS is to motivate planters to replant sugarcane, either in their abandoned fields or renew their fields which have already completed a cane cycle of at least 6 years under the Field Operations, Regrouping and Irrigation Project through the payment of a cash grant of MUR 71,000/ha. Whereas those planters who have not completed a cane cycle of 4 years would be eligible for a reduced cash grant of MUR 50,000 ha only for the replantation of their fields. This scheme will ensure that planters do not eventually abandon their plantations given the present difficult context.

Eligible planters will be required to make their own arrangements and incur all the expenses for the land preparation and plantation of their fields. Upon completion of works and verification to the satisfaction of the MCIA, a one-off cash grant of MUR 71,000 / ha or MUR 50,000 / ha will be paid to the planters. As at end June 2019, land owners holding a total extent of 661 ha have signed their



respective contract agreements with the MCIA to benefit from the scheme and an extent of 475 ha has already been replanted. Work is ongoing on the remaining extent.

### Métayers

Pursuant to the agreement reached between the Ministry of Agro-Industry and Food Security (MoAIFS) representing Government and MSPA on 29 March 2010, the MCIA requested members of the ex-MSPA to implement the provisions of the agreement. This agreement also makes provision for the possibility for a métayer to buy the land he/ she is currently occupying if it is considered as non-strategic or an alternative plot of land if the land occupied is considered to be strategic by the owner estate. The final price will include a discount of 35% as per the provision of the said agreement.

The MCIA is monitoring and acts as a facilitator regarding the implementation of the provisions of the agreement.

### Fair Trade

Export of sugar for small planters under the Fair-Trade accredited system is yet another avenue for generating additional revenue and this will contribute towards overcoming the impact of the reduction in sugar price.

There is a potential for small planters to export some 42,000 t of sugar under this label. Export of sugar sold at a premium rate of 60 USD/tonne of sugar under this label has decreased from 22,000 t in 2017/18 to a provisional figure of 19,000 t in 2018/19 due to deregistration of certain co-operative societies. These co-operative societies have already embarked on the process of recertification and in the event of recertification, the total volume of sugar exported under this label would increase eventually. The total premium received and paid to producers for the Crop 2018 is estimated around MUR 40M.

A new system of accreditation for the small planters who are grouped into cooperatives has been set up under the Altromercato Ferrero initiative, which involved the export of some 4,000 t of white refined sugar shipped to Ferrero whereby an additional premium of €40/t of sugar was received

by the cooperatives. Under this scheme, some 700 registered cooperative planters are also eligible to receive both bio and chemical fertilizers free of cost in line with the recommendation made by the MSIRI after soil analysis.

### Environment Issues of the Sugar Cane Cluster

#### EIA licences, EIA/PER monitoring and environment monitoring report by promoter

The draft regulation is still under consideration by the Ministry of Social Security, National Solidarity and Environment and Sustainable Development following views submitted by stakeholders.

#### Air Pollution Monitoring System

For the period July 2018 - June 2019 the total number of tests carried out was 238 with slight increases in numbers for the parameters for stack emissions, ambient air quality and indoor air quality as compared to financial year 2017-2018.

Table 26. Number of tests performed		
Parameters tested	2017 (July 2017 to June 2018- 12 months)	2018 (July 2018 to June 2019- 12 months)
Stack emissions	76	78
Particulate matter	76	73
Ambient air quality	37	45
PM 10	24	17
Indoor Air Quality	21	25
<b>Total</b>	<b>234</b>	<b>238</b>

The revenue generated from activities of the air pollution monitoring was MUR 7.47 M for the period July 2018- June 2019 as shown in the Table below.

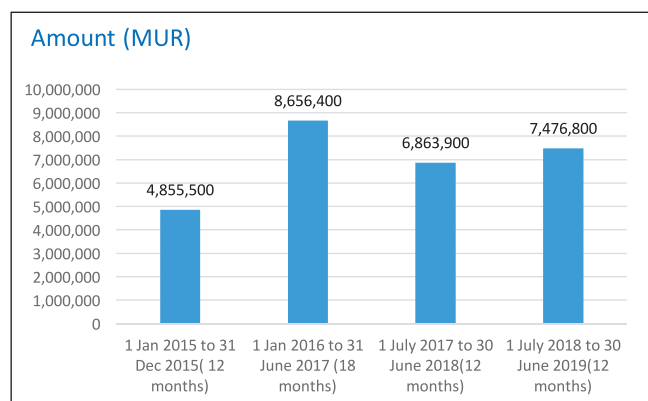


Fig 5. Revenue generated from activities of the air pollution monitoring

## Training

The unit offered a training placement to a university student for a period of 3 months starting in May 2019. The student had the opportunity to have a good exposure to field and laboratory works.

## World Environment Day

The theme for the World Environment Day celebrated in June 2019 was “Air Pollution”. This event aims at encouraging worldwide awareness and action for the protection of the environment. The air monitoring unit actively participated in this event by exhibiting the activities of the unit on 8 June 2019.

## Joint Technical Committee on Sugar

In view of the acute and increasing difficulties faced by the sugar cane industry as from Crop 2017, in particular with the continuous declining price of sugar, and following the official supports solicited by the industry, Government immediately set up a Joint Technical Committee (JTC) on sugar in August 2017. The JTC worked under the Co-Chairmanship of the then Permanent Secretary of the Ministry and the Chief Executive Officer of the Mauritius Chamber of Agriculture, and also comprising of the representatives of the MoAIFS, MoFED, MCIA, MSS and MCA.

The JTC has had discussions and consultations with different stakeholders, ministries and departments on measures that could be recommended to Government to address the immediate difficulties of the industry and more importantly ensure its long-term sustainability and viability. The JTC submitted its report and recommendations to the Ministry of Agro-Industry and Food Security (MoAIFS) in May 2018. The report was forwarded to Government, which immediately decided to set up an Inter-Ministerial Committee under the Chairmanship of the Prime Minister and Minister of Finance and Economic Development to examine the recommendations made given the multi-disciplinary nature of the issues and problems faced by the industry and the need to have the concerted support and actions of the different Ministries.

Consultations were held with all the stakeholders of the sugarcane industry, who were invited to submit their proposals. The objective of this wide consultation was to disclose the findings of the JTC, listen and have the views of the different stakeholders on the difficulties experienced by the industry and invite them to submit their official proposals to address the difficulties and challenges ahead. A copy of the JTC report was also handed over to all the stakeholders.

The MoFED in collaboration with the MCIA was entrusted with the responsibility to document and analyse all the proposals received from the stakeholders for consideration by the Inter-Ministerial Committee after consultations with different Ministries and departments. The following decisions were taken by Government during the Financial Year 2018/2019 in line with the recommendations made by the Inter-Ministerial Committee on the Report of the JTC, namely:

- a cash compensation of MUR1,250 per tonne of sugar to all planters;
- additional remuneration from bagasse of MUR1,250 per tonne of sugar thus bringing the total revenue accruing from bagasse to MUR 2,500 for small planters (those producing up to 60 tonnes of sugar) and MUR1,700 for other planters;

- (c) an additional compensation at the rate of MUR257 / tonne of cane or MUR3,287 / tonne of sugar to planters producing less than 60 tonnes of sugar;
- (d) an advance of 80% on all the revenue received from sugar and co-products for planters with less than 100 ha of cane cultivation; and
- (e) planters with less than 100 ha under cane cultivation through would receive an advance estimated at around MUR13,000 per ha for the purchase of recommended fertilizers for crop 2019.

### International Scene

On the international scene, the sugar industry is facing great difficulties following the recent drastic fall in the price of sugar on the world market and the increased competition for the export of its sugars on the world market including in the EU, with the abolition of the production quota on beet sugar and isoglucose on the European market as well as the maintenance of external tariffs as from October 2017. This situation has resulted in a surplus production of sugar, especially in the very first year, which has forced the price well below the world market price.

There is a need to embark on a more aggressive marketing campaign for the export of sugar on more remunerative markets. All the stakeholders of the industry are working closely with a spirit to secure additional markets for our sugars and diversify our marketing strategy to look for more remunerative markets such as China, India, SADC, COMESA, Saudi Arabia, etc.

At the SADC level, the trade of sugar is regulated by Annex VII of the SADC Trade Protocol. This annex is discriminatory in nature, given that only member countries of the SACU are able to restrict access to their markets while non-SACU countries have agreed to open their markets to other SADC Member States. Such a unilateral quota restriction by the SACU is considered as a non-tariff barrier to trade. In response to these barriers to trade,

non-SACU Member States have also introduced tariff and non-tariff barriers for sugars imported from other SADC countries and this situation is penalising the exports of Mauritius. Mauritius is exploring all possibilities to remove this trade restriction for its sugar traded on the regional markets. The interest of Mauritius was discussed at meeting of the Technical Committee on Sugar last July. The fact that the Mauritius sugarcane industry is in a very difficult situation and pending the proposed review of the SADC sugar regime, Mauritius has asked for a duty-free quota of 50,000t in the SADC sugar market. The Mauritius Sugarcane Industry has also witnessed the efforts made to help to open new market opportunities in order to safeguard the interest of all partners of this sector. Persistent marketing strategies coupled with economic diplomacy has finally managed to make a breakthrough on the Chinese market, which has allowed Mauritius to benefit from a reduced tariff quota for 50,000 tonnes special sugars, which will become effective progressively as from 2022. Furthermore, efforts are being made to secure an additional export volume of our sugars on the Indian market.

## C. MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE – RESEARCH AND DEVELOPMENT

### R&D Committee

Eleven meetings of the Research and Development Committee were held to discuss R&D matters pertaining to the MSIRI and issues related to the industry as a whole. Attendance at the Committee is given in Table 27. Amongst the various matters addressed, the Committee was apprised of on-going research in the optimization of the process of bioplastics production and techno-economic assessment for the preparation of a business case of bioplastics production. Progress of new projects, including new breeding techniques, spectroscopy and drone technology were regularly reported. The feasibility of growing high biomass sugar cane varieties in marginal areas for energy production was found to be of interest, but it was felt that a framework for payment of biomass is necessary. Revisiting the possibility for organic sugar production in Mauritius was an opportunity to be explored. In crop protection, updates on the evolution of the new disease, orange rust (*Puccinia kuehnii*) and the recent incursion of sugar cane yellow aphid (*Sipha flava*) were regularly provided. Varieties M 591/01, M 1561/01, M 216/02 and M 1698/02 were analyzed for their performances and attributes by the Committee before being presented to the Cane Release Committee. Attendance at the International Society of Sugar Cane Technologists (ISSCT) workshops from August to December 2018 was discussed and it was resolved that because of their relevance, MSIRI Staff were to participate at the meetings.

Table 27. Attendance at the R&D Committee

NAMES	Number of meetings attended
Dr J C Autrey, CSK, Chairperson	11
<b>MEMBERS</b>	
Mr J Li Yuen Fong	8
Mr. Jean Robert Lincoln	4
Mr. Denis Lavoipierre (Alternate)	5
Mr R K Hemoo	11
Prof T Bahorun, GOSK	9
Mr N Basant Roi, PDSM	8
Mr J C Desvaux	10

### The 2018 Crop

Cane elongation measurements were taken on a fortnightly basis during the period December 2017 - June 2018 in 48 sites located in the different agro-climatic zones of the island. Monthly samplings of cane were later carried out in some 128 fields (representative of the different agro-climatic zones and different cultivated varieties), during the period April - November 2018 to assess ripening and assist planters in planning the optimal harvest schedule during Crop 2018.

The area harvested in 2018 stood at 47,678 ha compared to 49,974 ha in 2017. The crop was characterised by excessive rainfall and below normal solar radiation that prevailed during the elongation phase, with total stalk height over the island at the end of the growth phase standing 5% below the normal. In contrast, during the ripening phase, dry conditions were observed over the island with temperature amplitude close to normal. These conditions were conducive to ripening with an



extraction rate of 10.26% in 2018 compared to an average of 9.88% for the past 5 years. Island wise, cane productivity in 2018 stood at 66.2 TCH, i.e. well below the mean of the last 5 years (75.1 TCH). Sugar productivity stood at 6.78 TSH compared to an average of 7.41 TSH over the last 5 years. Cane quality was slightly better in 2018 compared to the mean of the past 5 years. Fibre content at island level stood at 16.05% in 2018 compared to 16.34% averaged over the past 5 years. Sugar produced amounted to 323,406 t obtained from 3,154,515 t of cane.

### Breeding and Selection Programme

A total of 1008 crosses were carried out and comprised 387 genetic combinations involving 164 different female and 54 male fertile parents. The number of seedlings produced amounted to 66 061, as follows: 18 271 seedlings for the dry zone, 14 175 seedlings for the humid zone, 15 611 seedlings for the superhumid zone and 18 004 seedlings for the interspecific programme for selecting high biomass and multi-purpose varieties.

Selection of genotypes at the different stages was carried out during the year based on set objectives, agronomic characteristics, laboratory quality characters, morphological (mainly low flowering intensity, erect growth habit) attributes and ratooning ability, especially at the more advanced selection stages. The best genotypes were advanced to the final stages of selection for testing in different soil types, at different harvest periods and across ratoons.

At final phase selection, nine trials were established with 50 promising varieties for evaluation in plant cane and three ratoon crops. Twenty-seven varieties were planted for harvesting at mid-season in five different soil types. Nineteen varieties were planted for harvesting at early-season in the B, F and P (rainfed) soils.

A new quarantine cycle (2018-2020) was initiated and the sugarcane research stations in Argentina, Australia, Barbados, Ecuador, Fiji, Guatemala, India, Mexico, South Africa, Thailand, and USA were contacted for the exchange of varieties.

Experimentation was pursued in breeding for higher total cane biomass for marginal environments and for year-round harvest in Mauritius. *M 1334/84* represented a good candidate for the dry zone, for increasing the total biomass without jeopardizing sugar yield. For the superhumid zone, *M 196/07* was among the best biomass yielders. High fibre type biomass varieties were characterized by numerous tall and tough stalks of thin diameter, low sucrose content and low juice purity.

Four promising varieties, *M 591/01*, *M 1561/01*, *M 216/02* and *M 1698/02* were proposed to the Cane Release Committee for release. Varieties *M 1561/01*, *M 216/02* and *M 1698/02* were approved for commercial cultivation and *M 591/01* was further followed for its reaction to Orange rust disease. *M 1561/01* is a high cane and sugar yielding variety with high sucrose content and profitable sugar (Figure 6). It is recommended for cultivation in the B soils of the humid zone for harvest at early- and mid-season where it has the potential to replace varieties *M 52/78*, *M 387/85* and *M 703/89*. It is a fairly erect variety with an average number of stalks of medium to fairly large diameter and medium to tall cane stalks. Flowering intensity is high and ratooning ability is good. It is resistant to gumming and brown rust, slightly susceptible to leaf scald, susceptible to yellow spot and highly susceptible to smut.

*M 216/02* is a high cane and sugar yielding variety with fairly high sucrose content and high profitability at early- and mid-season harvests (Figure 7). It is recommended for cultivation in the P soils for early-season harvest, and in the L and P soils of the humid and sub humid zones for mid-season harvest. It has the potential to replace varieties *M 2256/88*, *R 573* and *R 575* at early-season harvest and varieties *M 2593/92*, *R 573* and *R 570* at mid-season harvest. It is a fairly erect variety with a fairly high number of stalks of medium diameter and height. Flowering intensity is average and ratooning ability is good. It is resistant to smut, gumming, slightly susceptible to leaf scald and brown rust and highly susceptible to yellow spot.

*M 1698/02* is a high yielding variety with average sucrose content (Figure 8). It is recommended

for cultivation in the L and P soils of the humid and sub humid regions for harvest at mid-season and in the P irrigated soils at late-season harvest. It has the potential to replace varieties *M 1176/77*, *M 2593/92* and *R 570* at mid-season harvest, and varieties *M 1672/90* and *R 570* at late-season harvest. It has a fairly erect growth habit with a fairly high number of stalks of medium diameter and fairly tall stalks. Flowering intensity is low and ratooning ability is good. It is resistant to smut, gumming and brown rust, slightly susceptible to leaf scald and susceptible to yellow spot.



Fig 6. Variety M 1561/01



Fig 7. Variety M 216/02



Fig 8. Variety M 1698/02

## Field Experimentation

One hundred and fifty-seven trials implemented on an area of 63.5 ha were under experimentation on the four experimental stations at Réduit, Ferret, Belle Rive and Union Park and at three substations of the MSIRI. Some 200 t of cane were used as planting material for experimentation and for establishing new nurseries and observation plots while 1,799 t of cane were harvested and sent to the mills.

A total of 46 final phase trials were monitored during the year. The trials were harvested at different harvest dates during the crop season and data were collected and processed to evaluate the performance of the test varieties against the standard ones in terms of cane yield (t cane ha<sup>-1</sup>), sucrose content (IRSC %), fibre yield (t ha<sup>-1</sup>) and sugar yield (t sugar ha<sup>-1</sup>).

The harvest results confirmed the good performances of the recently released varieties namely, *M 683/99*, *M 2502/99*, *M 1392/00*, *M 1698/02*, *M 1002/02*, *M 1256/04* and *M 915/05*, which were further propagated on a commercial basis by growers in the different recommended agronomic regions.

Varieties *M 1561/01* and *M 216/02* confirmed their superiority over the standard varieties in the different variety trials across the island. These two varieties were much appreciated by growers owing to their high sucrose content at early harvest. A number of test varieties namely, *M 591/01*, *M 1959/03*, *M 1863/05*, *M 2090/05*, *M 3008/06*, *M 3441/06*, *M 3779/06*, *M 3869/06*, *M 604/07*, *M 821/07*, *M 275/08*, *M 494/08* and *M 980/08* showed promising results and were closely monitored.

Nine new final phase trials were planted during the year: three in F soil at Valetta substation; three in B soil at Union Park Experimental Station; one in L soil at La Sourdine and two in P non-irrigated soil at the Mount.

Communication with the staff of sugar estates and other stakeholders in the sugarcane industry was maintained. Field visits were organised with growers to assess the performance of newly released as well as promising varieties. Efforts were pursued to promote the adoption of recently released varieties by the planting community. Cuttings of new varieties were provided to the Farmers Service Agency for the establishment of nurseries and commercial plantation on small planters' fields. Some 100 t of seed cane of variety *M 915/05*, released in 2016, were made available to the Farmers Service Agency and other growers for establishing nurseries for the small planters. It

is to be highlighted that nearly 1200 ha of sugar cane fields were replanted with newly released varieties during the recent years and 20% of these fields belong to small planters. Variety *M 1989/99* released in 2013 occupied an area of 287 ha, whereas varieties *M 683/99*, *M 2283/98*, *M 2502/99* and *M 1392/00* released in 2015, were planted on a total area of 672.9 ha. Varieties *M 1002/02* and *M 915/05*, released in 2016, occupied an area of 98.3 ha and 103.4 ha respectively (Figure 9).

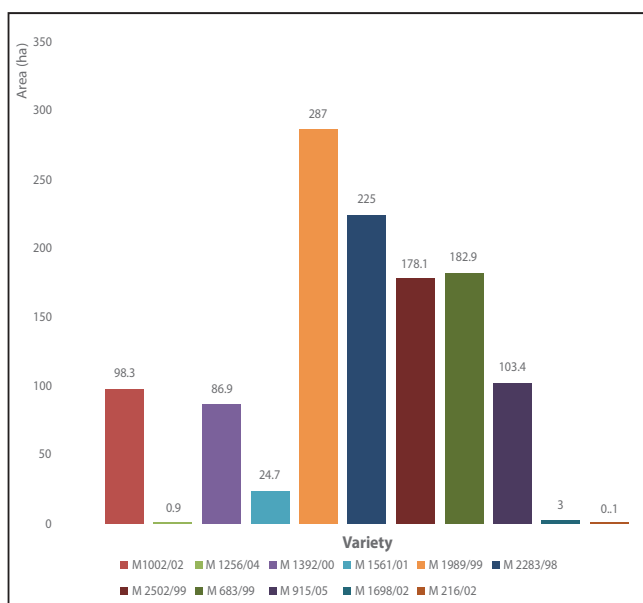


Fig 9. Area occupied by newly released varieties in 2018

Harvest results of four industrial trials established in 2016 at St Antoine, Union, Littoral DRBC (Alteo) and Médine confirmed the superiority of varieties *M 1002/02* and *M 915/05* over the test variety *R 582* in terms of sugar yield (TSH). At all sites *M 1002/02* and *M 915/05* outclassed *R 582*, except at St Antoine where *M1002/02* was inferior to it.

Two meetings were organised at MSIRI with representatives from the corporate planters, Farmers Service Agency, Planters' Services on estates and large and medium planters to discuss on various issues, namely; occurrence of orange rust, establishment of final phase trials and observation plots of promising sugar cane varieties in 2018, evolution of climate during 2017-2018, status of crop growth and evolution of crop season 2018 and information on newly released varieties.

## Biotechnology

Sugarcane varieties *M 1561/01*, *M 216/02*, and *M 1256/04* released in 2017 and 2018, were cultured *in vitro* using young leaf rolls. Some 6000 plantlets of three varieties were multiplied. In view of regenerating the noble canes collection available at MSIRI that has been initiated since 2016, three noble cane clones ISCA, NG 5113 and NG 77142 were successfully regenerated into plantlets and multiplied. Since 2016, sixteen clones have been cleaned and planted, resulting in vigorous plants.

Demand for the entry and export of varieties in the form of disease free tissue culture plantlets is increasing as the request for exchange of varieties between countries is becoming more and more stringent in terms of phytosanitary requirements. Seven out of 26 foreign varieties introduced in quarantine for the 2017-2018 cycle that tested positive for the presence of *Sugarcane yellow leaf virus* were cultured *in vitro* and successfully regenerated to produce virus free plantlets. Real-time RT-PCR was used to confirm virus elimination in all the 7 varieties, before their release for open quarantine in 2018. Ten Mauritian varieties were also cultured *in vitro* and indexed against major pathogens earmarked for export either as tissue culture plants or as cuttings.

Yellow spot caused by the fungus *Mycovellosiella koepkei* is mostly prevalent in superhumid areas of Mauritius. Breeding for resistant varieties is the main approach to limit losses caused by the pathogen. The selection of resistant varieties can be more efficient when complemented with marker assisted selection. Experimentation effected further validated the association of the marker SAT2033 to yellow spot resistance and further supports the application of SAT2033 for marker assisted selection among progenies derived from parent(s) carrying the marker.

The distribution of the SAT2033 marker was also assessed among a collection of 211 accessions. The marker was present in 65 clones, 19 of which were Mauritian varieties, the remaining 46 varieties carrying the SAT2033 resistant marker were distributed among clones introduced from 23



sugarcane research institutions worldwide. These results show the wide distribution of the resistance marker also among foreign accessions, which could be exploited as parents in the MSIRI breeding programme, targeting towards resistance to yellow spot.

The strong correlation of marker Bru1 to resistance to brown rust (*Puccinia melanocephala*) has been reported by numerous sugarcane research institutions, including the MSIRI. In this respect, the application of marker assisted selection for brown rust resistance was gradually being integrated in the MSIRI breeding programme. In 2018, sixteen promising sugarcane varieties were genotyped for the Bru1 locus using primer R12H16.

The CRISPR/Cas9 system is a revolutionary approach to genome editing in plants, whereby gene may be altered by deletions or base substitutions resulting in its knockout and loss of activity. An attractive application of the technology in sugarcane would be the knocking out of the gene(s) involved in the flowering pathway. Profuse flowering may cause substantial decrease in sucrose yield by terminating cane growth and triggering pithiness in cane stalks. The technology is being tested in the model plant *Arabidopsis thaliana*, which has a small genome.

Following the observation in March 2018, of typical symptoms of orange rust (*Puccinia kuehnii*) in variety M 2705/06, under selection, at Réduit as well as symptoms in commercial varieties across the island, molecular techniques were applied for confirmation of the disease involved. PCR tests were optimised for detection and differentiation of brown rust and the orange rust pathogens. Further confirmation of presence *P. kuehnii* in Mauritius was obtained through sequencing of the amplified 525 bp PCR products from total nucleic acids extracted from infected leaves of varieties. These sequences shared 100% similarity with existing *P. kuehnii* sequences from GenBank, confirming the presence of orange rust in Mauritius.

Streak mosaic, caused by *Sugarcane streak mosaic virus* (SCSMV) is prevalent in the Asian continent and is a major biosecurity concern for other sugarcane growing regions worldwide. It has

recently been reported in Africa. Specific RT-PCR and real time RT-PCR assays developed at MSIRI for SCSMV were successfully implemented during the year.

The causal agent of chlorotic disease, which was reported some fifty years back, was not known until recently when researchers in Australia identified it as a cercozoa, *Phytocercomonas venanatanis*. Specific PCR diagnostic assay based on the *P. venanatanis* ribosomal small subunit was used to test nucleic acids from variety M 52/78, collected at Rose Belle and displaying typical chlorotic streak symptoms. The 581 bp targeted fragment was amplified from test plants, but not from *in vitro* tissue culture disease free plants. With the diagnostic assay in place, efforts are now geared towards culturing and isolating the pathogen as well as screening varieties for presence of the pathogen.

In view of the limitations of morphological identification of insect pests, a project has been initiated to use DNA barcoding to generate specific sequences for local insect pests of agricultural importance. Major sugar cane insect pest species were collected from sugar cane fields while some species were reared in the insectary for emergence of adult stages and parasitoids for barcoding. Adult insects collected by the Entomology Division of Ministry of Agro-Industry and Food Security (MOAIFS) from the fall armyworm traps, were also DNA barcoded. PCR was done using primers HCO2198 and LCO1490 and purified PCR products were sequenced. Sequence analysis of the barcodes identified the following species *Spodoptera frugiperda*, *Spodoptera mauritia*, *Sesamia calamistis* and *Mythimna loreyi*.

As part of a Food and Agricultural Organization (FAO) sponsored project to support the strengthening the National Food Safety and Plant Health Protection Systems in Mauritius, at the request of the MOAIFS, MSIRI conducted a one-week hands on training from 23 to 27 July 2018, in modern molecular diagnosis. Targeted plant pathogens were *Xanthomonas axonopodis* pv. *dieffenbachiae*, causal agent of anthurium leaf blight, *Ralstonia solanacearum* responsible for potato bacterial wilt disease and potato viruses.

Besides diagnosis for *R solanacearum* race 1, commonly encountered in Mauritius, test for race 3 Biovar 2 was also optimized. These tests are now available for routine confirmatory testing of the two races of bacterial wilt in potato. The tests are also being optimized for soil samples.

In February 2018, local institutions were invited to submit proposals to the Mauritius Research Council (MRC) for establishing Poles of Innovation where high quality researchers/innovators maintain and develop Research and Innovation in areas of national priority. The MSIRI took advantage of the invitation and submitted in March 2018 a proposal entitled “MSIRI/MRC Pole of Innovation for Biotechnology”. In July 2018, the MRC recognized MSIRI as a pole for ‘Innovation for Biotechnology’ and approved the funding for the project for a period of 3 years for a total support of MUR 6.775 million. Different projects in molecular breeding, molecular diagnostic and gene editing are being investigated under the pole.

## Diseases

The incidence of gumming disease (*Xanthomonas axonopodis* pv. *vasculorum*) has been constantly decreasing in commercial fields over the last two decades mainly due to the cultivation of resistant varieties and the absence of cyclones that contribute to its dissemination. Observations made during the year on variety *M 3035/66* in the east did not show any symptoms of the disease, particularly race 2, which in the past was commonly encountered in commercial fields of this variety. Leaf scald (*Xanthomonas albilineans*) was insignificant during the year as a result of appropriate cultural practices and control measures adopted by growers. Mild infection of brown rust was observed in *M 1176/77* cultivated in the humid zone at Beau Champ and FUEL (Alteo). It was also prevalent in young canes of variety *M 2593/92*, planted in areas more conducive to the disease at this locality. Smut (*Sporisorium scitamineum*) was not significant during the year. The weather that prevailed during the early months of 2018 was favourable to the onset of yellow spot infection. At Union Park, peak infection in the highly susceptible reference variety *B 3337* was observed in May with 52.8% infection

while highest infection was noted in varieties *M 703/89* and *R 579* in June with 52.4% and 46.2% respectively. The incidence of yellow spot remained high in commercial variety *M 703/89*, particularly at Providence in the superhumid zone, where a peak of 56.8% infection was observed in June.

The assessment of the resistance of varieties to the major diseases is a major activity in breeding and selection for varieties with the ultimate objective of disease control. Resistance trials for the major diseases encountered in Mauritius were established and followed during the year. The trial to screen against race 1 of gumming disease showed no infection in test varieties. As this has been the case for several years, evaluation for gumming race 1 will now be implemented every 3 or 4 years, instead of a yearly basis, and with a reduced number of promising varieties.

The yellow spot evaluation trial planted in 2015 at Union Park Experimental Station was completed. Out of 34 varieties evaluated, three were resistant, five slightly susceptible, 16 susceptible and 10 highly susceptible. For smut, the resistance trial planted in 2015 at Ferret completed its cycle. Out of 31 varieties evaluated, 18 were resistant to the disease with no whip observed in 12 varieties, while six of them had infection rates below the limit of 5% which is considered as resistant in the resistance trial. Among the remaining 13 varieties, eight were slightly susceptible, three were susceptible and two were highly susceptible.

The trial implemented at Belle Rive Experimental Station in 2016 for leaf scald was completed. Among the 17 varieties evaluated, seven varieties showed no infection and were rated as resistant. Varieties *M 591/01*, *M 915/05* and *M 1739/05* were also considered as resistant. Five varieties namely *M 1561/01*, *M 216/02*, *M 1961/03*, *M 833/05* and *R582* were rated as slightly susceptible while varieties *M 3008/06* and *R585* were highly susceptible.

Visual assessment for diseases in varieties evaluated at the last stage of the preliminary phase of selection is an important tool in decision-making for promoting varieties. In 2018, a total of 155 varieties presenting symptoms of the major diseases were assessed.

In March 2018, symptoms typical of orange rust were observed on a 6-month old non-commercial sugarcane variety, *M 2705/06*, (Figure 10) planted in a nursery plot at Réduit. Morphological features of uredinial lesions and urediniospores were typical of those described for the fungus *Puccinia kuehnii* E.J. Butler, causal agent of orange rust and distinct to those of *Puccinia melanocephala*, causal agent of sugarcane brown rust. The identity of the pathogen was confirmed through PCR and DNA sequencing. A survey conducted just after this initial discovery showed the presence of the disease in different parts of the island. Variety *R570*, which is cultivated on 18% of the area under sugarcane and the promising variety *R582* were more severely infected. Commercial varieties *M 1400/86*, *M 1861/89*, *M 683/99*, *M 1989/99*, *M 1392/00*, *M 1002/02* and *M 1256/04* showed slight infection. Disease symptoms were observed in crops aged from 1 month up to maturity. Growers were immediately informed of the presence of the disease through talks, field visits and a fact sheet on the disease was distributed to sensitize the sugarcane planters.



Fig 10. Symptoms of orange rust on variety *M 2705/06*

The primary objective of the N1 nursery is to provide pure and disease-free planting material for variety selection trials, observation plots and disease resistance trials. In addition, it provides commercial varieties for inclusion as controls in the trials. In 2018, a total of 30 varieties were identified for implementing a new N1 nursery that was planted at Ferret, Trois Ilots and Réduit.

Varieties *M 1959/03*, *M 1317/04*, *M 3869/06* and *R585* were promoted to N2 nursery while varieties *M 1979/99* and *M 1555/01* were eliminated resulting in a total of 10 varieties, occupying a total of 0.96 ha, available in N2 nurseries by end-December 2018. Variety *M 591/01* was promoted to the N3 nursery. It is the only variety currently planted in the N3 nursery and occupies an area of 0.48 ha. No variety was planted in the N4 nursery.

Four N-varieties received from South Africa, in April 2017, under quarantine cycle 2015-2017 were harvested at plant cane and kept for evaluation at first ratoon in the national quarantine facility. Varieties *GT15*, *GT19*, *NA02-1618* and *NA05-1619* were received from CIRAD/VISACANE, France in April 2018 and planted for observation.

A new quarantine cycle (2018-2020) for the National Quarantine facility was initiated during the year and 11 countries were contacted for exchange of varieties. However, only three varieties, namely *EC-05*, *EC-06* and *EC-08* were received from Ecuador by end-December 2018. New varieties are expected to be introduced in 2019.

No new variety was introduced in the international quarantine facility in 2018. The 27 varieties (12 from Mauritius, 7 from Guatemala and 8 from USA) maintained in the facility were harvested in May 2018 and replanted.

In earlier studies, the fungicidal action of five *Trichoderma harzianum* isolates, an effective biocontrol agent against several fungal soil borne plant pathogens, was evaluated *in vitro* against *Ceratocystis paradoxa*, causal agent of pineapple disease of sugarcane. Two isolates that gave the best antagonistic effect on *C. paradoxa* were further evaluated in glasshouse trials. Cuttings of varieties *M 1002/02*, *M 52/78*, *M 2283/98*, *M 1176/77* and *R570* were assessed and the treatments consisted of dipping both ends of three-eyed cuttings in either a broth culture of the *T. harzianum* or in the systemic fungicide thiophanate-Methyl (Topsin M). Although one isolate produced a similar germination rate as the chemical fungicide in two trials, the chemical fungicide gave better results overall.



## Microbiological Analysis of Sugars and Soil Samples

Microbiological analysis of sugar samples increased by nearly 30% in 2018 as compared to 2017. During the year a total of 449 white refined, raw, special sugars and related products consisting of molasses and massecuites were analysed for spoilage and/or pathogenic bacteria.

At the request of the various stakeholders in the milling, refinery and marketing of sugars, method validation studies, for determination of a number of pathogenic bacteria and for guaiacol-producing thermophilic acidophilic bacteria (GP-TAB) in sugars, were pursued.

Tests for enumeration of *Escherichia coli* and coliforms in sugars were accredited for ISO/IEC 17025: 2005 standard by MAURITAS, in August 2018. Method validation studies for determination of *Staphylococcus aureus*, *Bacillus cereus*, and *Enterococci*, in sugars were also completed in 2018 and are to be submitted to MAURITAS for ISO/IEC 17025:2005 accreditation.

As for soil samples, 52 were analysed for the bacterial wilt pathogen *Ralstonia solanacearum*. This soil test is an important activity prior to potato plantation in order to avoid plantation in infested fields.

## Pests

Infestation by the soft scale, *Pulvinaria iceryi*, occurred at Mon Rocher, Belle-Vue, Petit Bel Air, Mon Désert Alma, Constance and Britannia. Fields under variety *M 1400/86* and *M 2593/92* were severely infested at Mon Rocher and Belle Vue respectively. Together with cultural practices and coccinellid species, the pest was effectively controlled. The sugar cane armyworm, *Mythimna* spp. was reported in young regrowths of mechanically harvested fields at Mount, Ferret, Amitié, Britannia and Benares. The fields recovered following treatment with insecticide lambda-cyhalothrin. Similarly, the insecticide was used against beetles of *Heteronychus licas* reported in January 2018 at Mon Désert Alma.

A severe infestation of *H. licas* in young plant cane at Gibraltar was successfully reduced with thiamethoxam followed by recruiting dead stools. Oviposition by the planthopper *Perkinsiella saccharicida*, high populations of the sugar cane whitefly, *Neomaskiella bergii*, spotted borer on *R570*, localised severe infestation by the armoured scale insect, *Aulacaspis tegalensis* were also observed.

The project on the rearing of the stem borer *Chilo sacchariphagus* for quality sterile insect technique (SIT) in collaboration with the South African Sugar Research Institute (SASRI) and the University of Stellenbosch (SU) was further pursued. Artificial diets formulated at SU were dispatched to MSIRI for testing. Borer larvae were collected in sugar cane fields mainly at Belle Vue and Mon Trésor and reared in the insectary at Réduit. Emerged moths were allowed to oviposit in nylon cages and the neonate larvae were used to inoculate eight artificial diets. Results showed low larval survival rate and thus diets need to be further refined.

Field surveys for yellow sugarcane aphid, *Sipha flava*, were initiated in May across various sections in the north. Natural enemies observed included mainly spiders, lacewings, coccinellids and syrphids. Larval stages of the syrphid species were bred in the laboratory and emerged adults were identified as *Paragus borbonicus* Macq. and *Xanthogramma* sp. Coccinellid larvae were similarly bred to adult stages which were identified as *Cheilomenes sulphurea* (Oliv.) and *Scymnus constrictus* Muls. (Figure 11). Field assessments in November revealed a drastic decline in the pest population. This was attributed mainly to heavy rains, cane growth and activity of natural enemies.

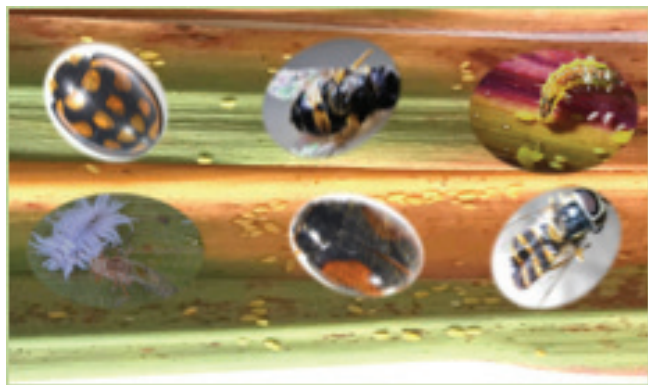


Fig 11. Coccinellid (top) and syrphid (bottom) predators of *Sipha flava*

### Cultural Practices and Mechanization

Trash (leaves and residues) left after mechanized harvesting of sugar cane represents a source of renewable energy and which, if efficiently collected and processed, can be mixed with bagasse to increase bioelectricity production and reduce our dependency on fossil fuels. As previous studies have revealed that this trash, if retained in the fields, provides agronomic advantages, mainly in terms of soil moisture conservation and suppression of weeds, the partial removal of trash (around 50%) from ratoon fields has thus raised some apprehensions. Since 2014, the MSIRI has collaborated with Terragen/Terra in improving the efficiency of trash collection practice, and assessing the agronomic apprehensions before proposing amendments to the current cropping system or any mitigating measures if required. This project has been extended to Alteo Ltd since 2017 and the preliminary results, after two years of experimentation, indicate that no major adverse agronomic effects on the sugarcane should occur by collecting 50% of the trash after harvest for energy production.

Data collected for 2018 crop have revealed that 1 681 112 t were harvested mechanically on some 22 500 ha. It appears that a plateau has been reached concerning mechanized harvesting and the area under mechanized harvesting is not expected to increase significantly in the near future.

### Weed Management

Experimental works were initiated in 2017 to evaluate the efficacy of the bio-herbicide pelargonic

acid in post-emergence of weeds. Two new trials were established in 2018 on the MSIRI experimental stations at Réduit and Belle Rive where the product has been tested at the rates of 8, 12 and 16 L ha<sup>-1</sup>. Preliminary results have shown that pelargonic acid causes non-selective burn-down of green tissues as from 2 hours after spraying, effects being more pronounced at higher rates. The trials indicated that the bio-herbicide is mainly effective on very young developing annual herbaceous weeds and the efficacy is also influenced by the concentration of the spray volume. Further trials are required to fine-tune the rates with respect to the spray volume, and timing of application according to the growth stage of the weeds.

The herbicide mesotrione was recommended in 2017 as a tank-mix partner for the pre-emergence and post-emergence control of weeds in sugarcane. In order to compare its effectiveness on an industrial scale with other recently recommended pre-emergence herbicides, two large-plot trials were established at Queen Victoria (Alteo) and Beau Plan (Terra) in plant cane. The tank-mix oxyfluorfen + mesotrione @ 0.56 + 0.15 kg a.i ha<sup>-1</sup> was compared to the standards oxyfluorfen + diuron @ 0.56 + 2.2 kg a.i. ha<sup>-1</sup> and oxyfluorfen + diclosulam @ 0.56 + 0.0756 kg a.i. ha<sup>-1</sup>. The two trials confirmed the potential of both mesotrione and diclosulam as compared to diuron, or atrazine which the two new active ingredients have replaced after the deregistration of both diuron and atrazine in early 2018.

A project was initiated in 2017 to assist Omnicane in complying with the pesticides limit fixed for certification by Bonsucro, i.e. a total permissible amount of 5.0 kg active ingredients per hectare per annum. After an appraisal of the standard herbicide treatments used on the different sections and their total amounts of active ingredients, and their total amounts of active ingredients, some 'validation' trials were proposed and laid down to evaluate the efficacies of a few new tank-mixes containing lower amounts of active ingredients, before recommending same as potential treatments for weed management on the estate. The validation process was successful and the new tank-mixes were integrated in their herbicide treatments to

reduce the total amount of active ingredients to comply with Bonsucro requirements at the end of 2018. In 2018, a similar exercise has been initiated at Alteo.

### Fertilizer Management

The recommended rate for N was maintained at 1.2 kg for each tonne of cane expected in order to maximize net returns. Recommendations for phosphorus (P) and potassium (K), which are based on soil test results, remained unchanged.

### Analytical Services provided by the Agricultural Chemistry Department

Analytical services were provided to small and medium planters and sugar estates for the determination of pH, available phosphorus (P), potassium (K) and silicon (Si) in soils. A total of 950 samples were analysed and based on the soil test results, recommendations were made for the correction of soil acidity and fertilization of plant and ratoon canes.

The monitoring of N, P, K and Si status in TVD leaves on ratoon canes was done on leaf samples coming from 404 Permanent Sampling Units (PSU's) and sugar estate fields, with the aim of monitoring the nutrient status of sugar cane plantations and of taking corrective measures where required. The percentage of PSU's showing deficiency of N, P and K was 50, 49 and 30% respectively. Available data showed that the percentage of PSU's showing N deficiency has continued to increase during the past 10 years, whereas for P and K the percentage of PSU's showing deficiency was higher in 2017 compared to 2016.

In addition to the routine soil and leaf testing, the Agricultural Chemistry Laboratory provided non-routine analytical services upon request from stakeholders in the sugarcane industry as well as from private organizations. Some 490 samples comprising of a wide range of matrices including liquid and granular fertilizer, sugar, molasses and water were analysed.

### Irrigation

The irrigation survey for this cropping season shows that more than 15 000 ha are currently under some form of irrigation within the corporate planters' sector. The most popular irrigation systems are overhead systems, which are used over some 95% of the total irrigated area. Out of these systems, centre pivot, big gun and dragline can be listed in order of importance. In terms of regional distribution, the most important zone under irrigation is in the South (32% of total irrigated area), followed by the North (30%), with the other two regions, i.e. West, and East and Centre, both accounting for some 19% of the total irrigated area.

The drip irrigation trial at Chebel (Médine), to study the effects of four varieties (*M 1400/86*, *R 579*, *M 2502/99* and *M 1176/77*) under different water and fertilizers regimes, was harvested in third ratoon. A total of 1,346 mm of rain was recorded for the season. This rainfall was poorly distributed during the crop season, with almost 90% occurring as heavy downpours during the months of January to April. The rainfall was fairly evenly distributed afterwards, resulting in a total of 188 rainy days during the crop season, of which 115 occurred during the period January to April. On account of this uneven distribution, only some 525 mm (i.e. 39%) was calculated as being effectively used by the crop. Irrigation was affected during the early stages of the crop due to delay in the supply of spare parts. However, with the onset of the rain, no irrigation was needed until the month of May. In total, some 625 mm of net irrigation was applied. Thus, for the whole of the growing season, some 1,150 mm of water were estimated to have been used by the crop, equivalent to a crop water satisfaction of about 80%.

Yield results are shown in Figure 12. There was a tendency for a higher cane yield in single row than in dual row plots. However, statistical analysis did not reveal any significant difference between the two planting methods. As observed in the previous years, var *M 2502/99* had the highest cane yield in both single and dual row plots, but statistical differences were dissimilar in the two planting methods. In the single row, cane yield of

var *M 2502/99* was significantly higher than the other three varieties, whereas in the dual row, the difference was significant compared with var *R 579* only. In general, as observed in the previous crops, var *M 2502/99* showed a remarkable performance and once again produced the highest cane and sugar yields in both planting methods. However, it was observed that irrespective of variety and planting methods, cane yields were much lower than the previous season. This can be explained by the adverse climatic conditions (excessive rainfall and less radiation) that prevailed during the growing phases of the crop. Between the planting methods, cane yield was more affected in the dual row plots (45% less) than in the single row plots (30%). With climatic conditions improving towards the ripening stages, IRSC was much better than the previous season. Overall, the cane and sugar yield results of the 3rd ratoon were the lowest that have been recorded so far. While adverse climatic conditions have been identified as a probable cause for this poor performance, associated problems with the drip irrigation network, such as clogging of emitters and damage to the thinner driplines and long delays for repairs are also probable contributing factors.

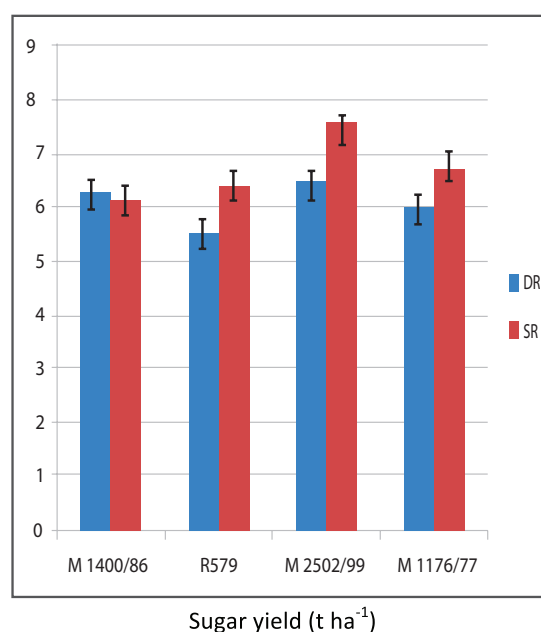
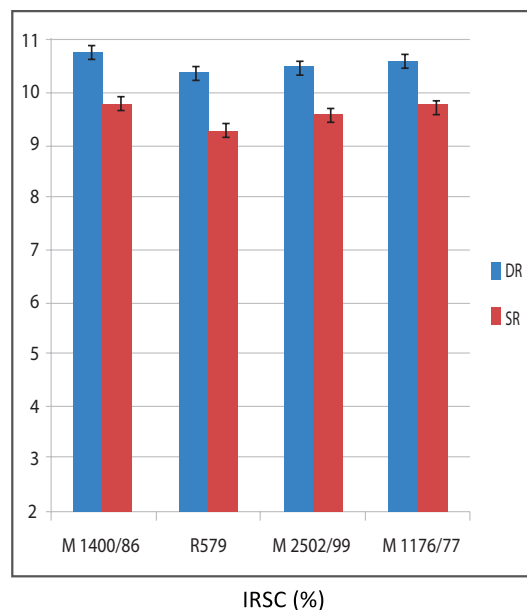
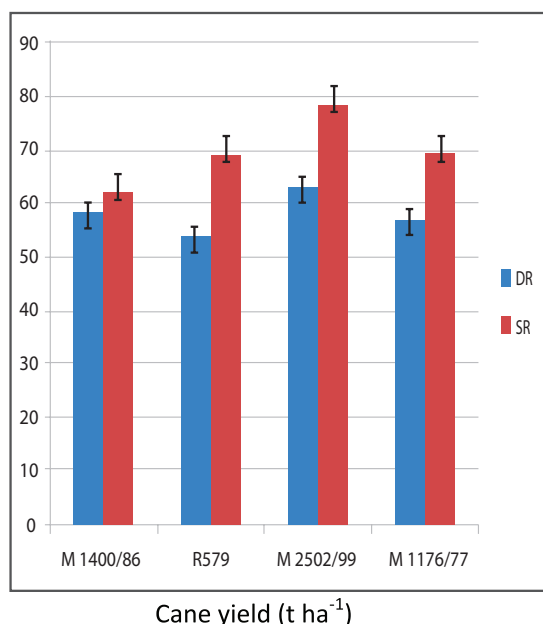


Fig 12. Effects of drip irrigation on third ratoon cane yield, IRSC and sugar yield of four varieties grown in the single row and dual row planting systems

The study to optimize use of limited irrigation water supplies was continued at Terra in 2nd ratoon. Rainfall was unevenly distributed during the growing season. Out of the crop duration of 365 days, some 159 days had rain and a total of 2,326 mm was recorded, with 50% occurring in January and February and almost 75% during the months of January to April. As a result of these



large successive rainfall events, most of the rain was lost outside the root zone and effective rainfall amounted to only 655 mm (28% of total rainfall) for the whole season in the rainfed plots.

Irrigation, restricted to the relatively drier months, started immediately after the first ratoon harvest and was applied for some 160 days in between the rainfall events, up to two weeks prior to the 2nd ratoon harvest. A net irrigation of 470 mm was applied during the season. Effective rainfall in the irrigated plot was calculated to be 555 mm and total crop water use was calculated to be 1,024 mm for the irrigated cane compared to 655 mm for the rainfed condition, equivalent to a crop water satisfaction of 85% and 55% respectively. Cane yield was 94.8 t ha<sup>-1</sup> for the irrigated cane compared to 68.9 t ha<sup>-1</sup> for the rainfed crop, and sugar yield was 10.2 t ha<sup>-1</sup> for the irrigated crop compared to 8.3 t ha<sup>-1</sup> for the rainfed condition. Water use efficiency (WUE) expressed as weight of cane produced per unit of water consumed was 93 kg ha<sup>-1</sup> mm<sup>-1</sup> for the irrigated crop and 105 kg ha<sup>-1</sup> mm<sup>-1</sup> for the rainfed one. Irrigation water use efficiency (IWUE), defined as the ratio of yield difference between irrigated and rainfed

cane to the net amount of irrigation applied, was calculated to be 55.0 kg ha<sup>-1</sup> mm<sup>-1</sup>. Consistent with what has been observed in this study as well as in the previous crops, there is therefore a good response to irrigation in the region.

## Land Resources

An exploratory exercise was carried out using Terragri rainfall data for the period 2008-2018 and compared with the rainfall data for the period 1971-2000 of the region (Fig. 13). The exercise was based on an existing network of 25 rain gauges that are currently in use by Terragri. The spatial distribution of these 25 rain gauges exhibits a similar rainfall pattern, with a slight upshift (varying between 29 and 475 mm) for most of them, except for the sites of Beau Fond, Industrie, Souvenir, Esperance, and Valton, where a decline of 44 to 164 mm was observed. The changing rainfall regime, in terms of intensity, amount and rainy days during the crop growth period, is definitely expected to affect crop growth and disease spread. It is therefore crucial that agronomic practices be modified and adapted to cope with these resulting changes.

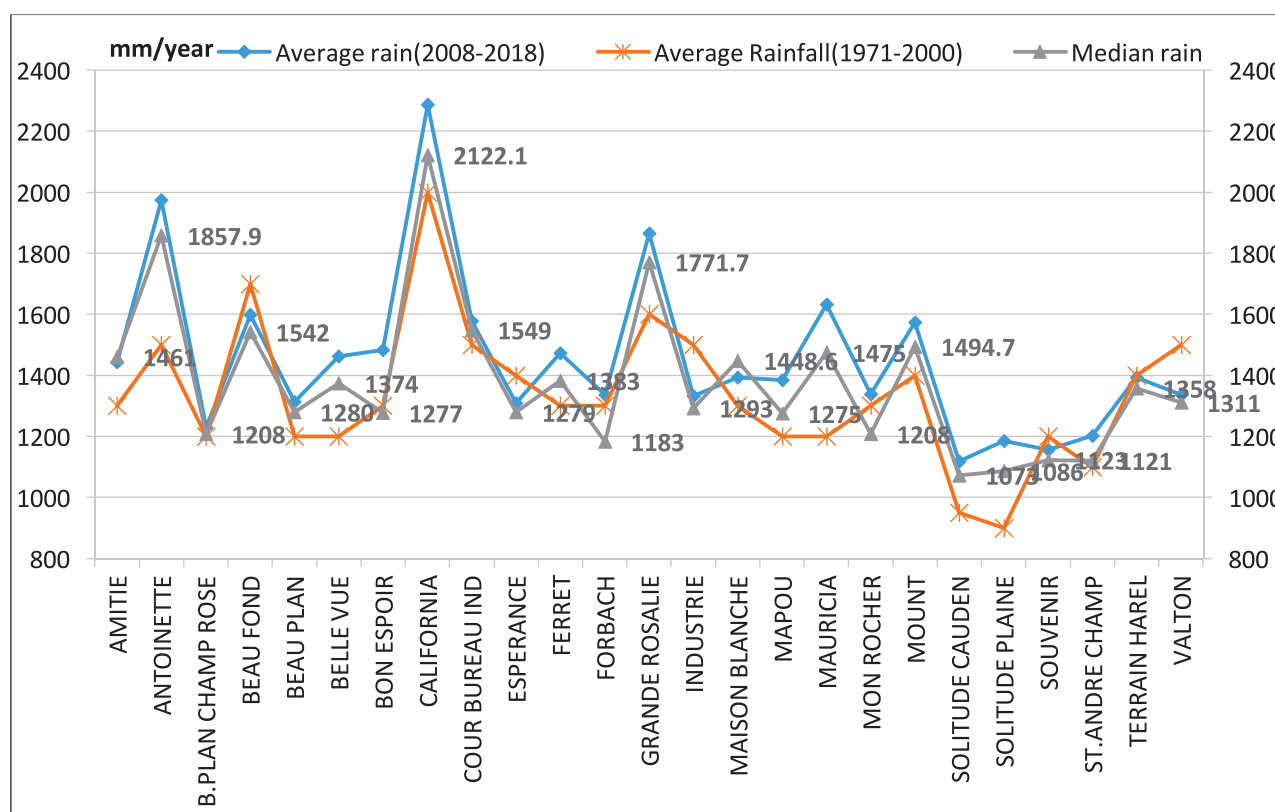


Fig 13. Terragri rainfall for period 2008-2018 as compared with rainfall values for period 1971-2000

Variety recommendations sheets with associated geographical locations have been published on the MSIRI website as maps for each factory area of Mauritius since 1996. Such maps allow individual sugarcane farmers to choose the variety that is best adapted to their environment, based on their soil type, climatic conditions, etc. In fact, each variety recommendation sheet represents a factory area (as defined by SIFB) and depicts the soil families present and the main inhabited zones in which

they are located, associated with a table that lists the recommended varieties. This updating is undertaken every 3 to 5 years, taking on board newly released varieties and phasing out older ones that are no longer recommended. The current sheets are those that have been recommended since 2016.

An example of variety recommendation sheet for Beau Champ factory area is given in fig. 14:

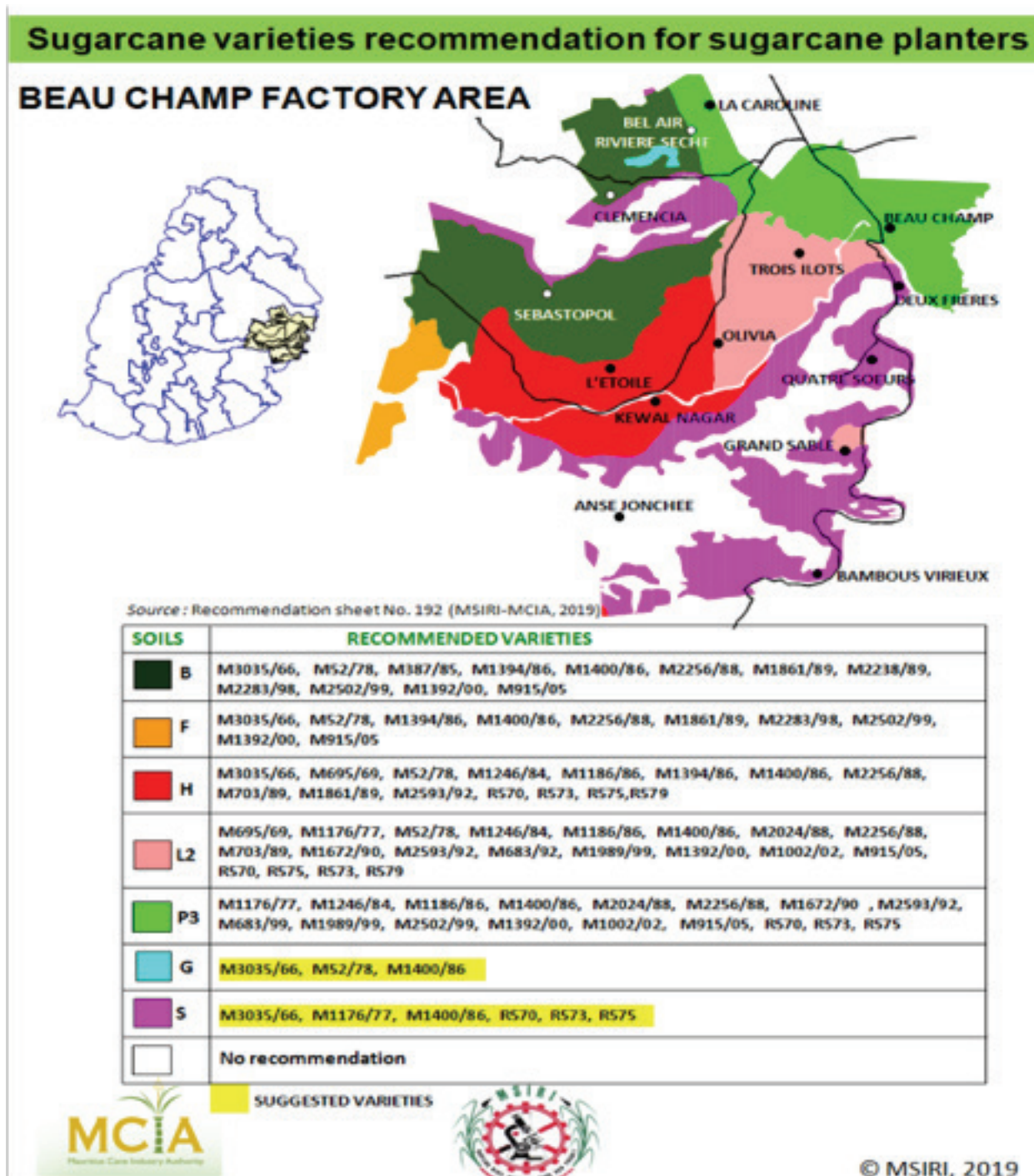


Fig 14. Variety recommendation sheet for Beau Champ factory area

## **D. SERVICE TO FARMERS (EXTENSION & TRAINING)**

### **Objectives**

- (i) Ensure that essential services are available to planters.
- (ii) Promote the setting up of cane nurseries and the supply of cane setts to planters.
- (iii) Facilitate the adoption of modern and efficient agricultural practices by planters.

### **Functions**

- (i) Provide technical advice, assistance and training to planters on cane cultivation, harvesting and transport of cane and post-harvest operations.
- (ii) Manage agricultural land and, in particular, abandoned fields in FORIP or such other similar projects.
- (iii) Enter into management contracts on behalf of planters.
- (iv) Devise agricultural credit schemes in consultation with financing agencies.
- (v) Ensure that arrangements are made so that canes of small planters are harvested at their optimal sucrose content.
- (vi) Assist cooperative societies in benefitting from the Fair Trade initiative or such other similar projects.

### **Operations of the Farmers Service Agency**

The Farmers Service Agency provides services to sugar cane planters through the six FSCs at Saint Félix, Rose Belle, Saint Pierre, Unité, Bon Accueil and Solitude. The one-stop-service available at these FSCs allows planters to avail themselves of extension services, provision of inputs for their crop, apply for incentive schemes and contracts for land preparation services.

Each member of the 28 front line extension staff operate within a specific sugarcane zone delimited in a factory area, where he plans his extension activities targeting sugarcane planters in that zone.

### **Field Visits**

Field visits constitute the core of the activities of the technical staff. They were essentially geared towards planning and coordination of the implementation of the Sugarcane Planters Regrouping Projects (SPRP). Emphasis was also laid on application of Good Agricultural Practices. For the year, some 19,863 field visits were effected, out of which some 73% concerned monitoring of activities in SPRPs.

**Table 28. Field Visits**

<b>Year</b>	<b>2017</b>	<b>2018</b>
FORIP/SPRP	12,757	14,512
Non-FORIP	6,388	5,351
<b>Total</b>	<b>19,145</b>	<b>19,863</b>

### **Planters Productivity Improvement Programme (PPIP)**

This project which started in 2018, consisted of carrying out specific extension activities for growers in targeted blocks with below average cane yields. 132 group meetings and 635 field visits were carried out. 58 demonstrations of weed control were also set up. Some planters forming a total of 126.7 ha were encouraged to apply for either SPRP or ALMS (Agricultural Land Management Scheme).

### **Demonstrations**

The practice of establishing field demonstrations was continued in growers' fields. For the year under review some 63 demonstrations were set up out of which 62% consisted of assessing the performance of newly released sugarcane varieties and 27% on appropriate herbicide mixes in various cane growing areas compared to growers' current practices.

**Table 29. Demonstrations**

Year	2017/2018	2018/2019
Herbicide Mix*	25	17
One Eye Setts	8	6
Variety**	50	39
Zero Budget Farming	1	0
Mechanized Operations***	9	1
<b>Total</b>	<b>93</b>	<b>63</b>

\* New herbicides mix: Dinamic and Krismat, Goal, Starane, Escort, Torpedo (Diclosulam) as replacement herbicide for Atrazine.

\*\* Newly released varieties: M2283/98, M1392/00, M683/99, M915/05, M1002/02, M1989/99, M2502/99, M1256/04, M216/02 against M3035/66 and R570.

\*\*\* Mechanical harvest and loading

## Conducted Tours

Twenty three conducted tours were organized and attended by 217 growers. The objective of the guided tours was to show new sugar cane varieties, new herbicide treatments and mechanization of harvest.

## Surveys

In collaboration with the Cultural Operations and Weed Agronomy unit of the MSIRI, FSA staff carried out an island wide weed identification survey on a factory area basis. The objective of this exercise was to develop a tool for use by the technical staff at FSC, that would facilitate advising appropriate herbicide treatments for weed control for sugar cane planters. Survey findings have also allowed the compilation of data on classification as well as degree of presence of weeds in small planters' fields.

## Group Meetings

A total 54 group meetings were organized and were attended by some 516 growers. The topics discussed are given in Table 30.

**Table 30. Group Meetings**

Topic	2018	2019
Regrouping/Cane Replantation Scheme	26	17
Productivity Improvement	27	3
Cane Fire Mitigation	4	1
Cane Harvest	3	20
Good Management Practices	5	5
Mechanical Loading	1	0
Planters' Schemes		8
<b>Total</b>	<b>66</b>	<b>54</b>

## Info Sheets

Twenty one information sheets were handed over to 1073 growers. The contents covered various topics such as cane fire prevention and management, lists of active job contractors, herbicide and fertilizer usage, planting and harvest periods of new cane varieties as well as average cost of production.

## Soil Sampling

The field staff collected a total of 185 soil samples from small growers' fields which were sent for analysis to the MSIRI Soil Chemistry Laboratory. Results of the soil analyses were utilized for appropriate fertilizer regimes and soil amendments mainly in SPRP sites.

## Field Days

One field day was organized in the south for 44 growers who had the opportunity to see a mechanical harvester in operation in the sloping region at Anse Jonchee.



## Visit by Planters to FSC

A total of 12,877 growers visited the Farmers Service Centres for technical advice and information mainly related to SPRP and weed control.

## Liaison Meetings

Twelve liaison meetings were held with main stakeholders of the sugar cane sector.



Fig 15. Meeting with planters at St Pierre

## Seed Cane Supply

One of the main activities of the Farmers Service Centres is seed cane supply to small planters. Some 6,515 t of planting material were supplied to planters during the year 2018/19, as shown in the table below.

Variety	Table 31. Seed Cane Supply	
	2018 (tonnes)	2019 (tonnes)
R 570	4,298	3,449
M 1400/86	977	954
M 3035/66	859	471
R 579	500	399
M 1176/77	115	83
M 387/85		13
M 2283/98	405	388
M 683/99	158	431
M 1002/02	59	94
M 915/05	21	91
M 1989/99	18	74
M 1392/00	18	62
M 1256/04		4
M 216/02		3
<b>Total</b>	<b>7,428</b>	<b>6,515</b>

Whilst the most popular cane varieties were still R570, M1400/86, M3035/66, R579 and M1176/77, growers tend to increasingly appreciate new cane varieties released since 2015. It is to be noted that the proportion of new varieties planted has significantly increased over 2018.

## Nurseries Established

During the year 2018/19, the total area under cane nurseries stood at 88.4 ha as shown in Table 32 below:

Variety	Table 32 . Nurseries Established	
	2018	2019
R 570	11.6	10.4
M 683/99*	11.7	15.3
M 2398/98*	25.4	3.9
M 1256/04*	0.520	0.4
M 1392/00*	0.949	3.8
M 1002/02*	1.942	5.8
M 915/05*	3.365	6.4
M 3035/66	3.424	19.8
R 579	5.689	6.4
M 1400/86	6.592	11.9
M 1989/99		3.2
M 1176/77		0.4
M 216/02*		0.5
M 1698/02*		0.1
<b>Total</b>	<b>71.2</b>	<b>88.4</b>

\*Newly released sugarcane varieties by the MSIRI

It is to be noted that newly released sugarcane varieties constitute some 41% of the total area under nurseries.

## Sugarcane Planters Regrouping Project (SPRP)

This project started in 2015 after the end of FORIP (Field Operations, Regrouping and Irrigation Project). An annual budget of some MUR 130M is available for this project where cane fields of small planters are regrouped for land preparation and planting. The annual target is 450 ha.

For the year 2018/19, 457.8 ha of small planters' land were contracted for implementation of SPRP out of which 335.4 ha (73.3%) were completed. Delays were due to heavy rainfall affecting land preparation activities during the period January to April 2019.

**Table 33. Sugarcane Planters Regrouping Project (SPRP)**

Year 2018/19		
Sector	Area Contracted (ha)	Area Completed (ha)
North	56.5	47.5
East	159.2	112.9
Centre	116.9	64.3
South	125.2	110.7
<b>Total</b>	<b>457.8</b>	<b>335.4</b>

### Agricultural Land Management System

A total of 662 ha of sugar cane fields was contracted under this scheme by the cane growers during 2018/19. It is to be recalled that the Agricultural Land Management System (ALMS) was introduced in 2017/18 with a Cane Replanting Scheme aiming at reversing the land abandonment trend among small sugar cane planters. As at end June 2019 an area of 436.8 ha, representing some 66% of the area contracted, was replanted. Delays were due mainly to the excessive rainfall recorded during period January to April 2019, which adversely affected land preparation activities.

**Table 34. Agricultural Land Management System**

Year 2018/19		
Sector	Area Contracted (ha)	Area Completed (ha)
North	158	100.5
East	210	103.4
Centre	173	128.5
South	121	104.4
<b>Total</b>	<b>662</b>	<b>436.8</b>

### Planters' Fund

During the financial year 2018/2019, there was a high demand from planters for repairs to road access for fields due to damage sustained following heavy rainfall periods.

A total of 53.7 km roads for a total value of MUR 2.3 million was repaired mainly through laying of roughstone followed by compaction. 859 planters from nine factory areas benefitted from this scheme.



**Fig 16. Box culvert at Clemencia**

Planters of Beau Champ (Alteo) factory area were the main beneficiaries for road upgrading over a total length of 21.3 km, followed by planters of Riche-en-Eau.

**Table 35. No of Planters benefitting from Planters' Fund**

Factory Area	Field Access Roads (km)	No of Planters
Beau Champ	21.3	305
Riche en Eau	10.6	38
Britannia	6.4	240
Rose Belle	5.2	107
Mon Trésor Mon Desert	4	30
Mon Desert Alma	2.1	16
Saint Felix	1.8	44
Constance	1.3	9
Highlands	1	70
<b>Total</b>	<b>53.7</b>	<b>859</b>

Fifteen projects comprising building of reinforced concrete culverts/drains, building of one bridge (box culvert) at Beau Champ and upgrading of two bridges in Saint Felix and Riche en Eau were completed for a total of value of MUR 2.9 million during the year.

### Planters' Harvest Unit

With a view to alleviating planters with harvest problems, the Farmers Service Agency initiated the Planters Harvest Unit which consisted of planters in a given region. According to the conditions of this project, planters enter into a contract agreement with MCIA which in turn hires the services of SME's for harvest and transport.

The terms of the contract agreement include payment for harvest and transport costs on behalf of planters to the SME by the MCIA, which in turn shall recoup same at source from the planters' account at the end of the harvest.



Fig 17. Harvest at Grand Sable

A pilot project started in 2018 involving twenty two planters in six localities in the East, namely Grand Sable, Petit Sable, Bambous Virieux, Mare Carré and Camp Ithier over a total area of some 22 ha. A total of 1,630 tonnes was harvested at the cost of MUR 480 per tonne cane. The FSC staff of these regions played a key role for the initiation and monitoring of the project.

### Advance Supply of Fertilizers

In September 2018, the Government approved a special scheme to support sugarcane planters through the provision of fertilizers as an advance. Some 206, 000 bags of fertilizers (25 kg) were supplied to sugarcane planters cultivating up to 100 ha. A sum of MUR 103 million was disbursed by MCIA. Fertilizer vouchers were distributed to some 7,917 eligible planters who collected their fertilizer entitlements from twelve approved suppliers for application in their ratoon fields.

### Radio Talks

The following radio talks were broadcasted during year 2018/19:

Table 36. Radio Talks	
Topic	Date
Post Harvest Cultural Operations	Jul-18
Short Season Cane Planting	Aug-18
Effective Herbicide Spraying Techniques	Sep-18
Control of Vines in Ratoon Cane	Oct-18
Post Harvest Cultural Operations	Nov-18
New Herbicide Formulations	Dec-18
Control of Difficult Weeds in Ratoon Cane	Jan-19
Long Season Cane Planting	Feb-19
Newly Released Sugarcane Varieties	Mar-19
Cane Fire Prevention and Management	Apr-19
Land Abandonment: Challenges and Opportunities	May-19
Short Season Cane Planting	Jun-19

### TV Programmes

FSC Managers participated in two "Mati Ke Mol" TV programmes on Replanting of Sugar Cane and Cane Fire Prevention and Management Issues. "Mati Ke Mol" is a 26-minute agricultural programme broadcast in Bhojpuri language and is sponsored by the Small Farmers Welfare Fund.



## Events

The FSA participated in the World Food Day Celebrations organised by the Ministry of Agro-Industry & Food Security held at Domaine Les Pailles from 18 to 20 October, 2018.

## Human Resource Matters

With the retirement of Mr. Toolsee Gunesh, Assistant Director, in 2018, the responsibilities of FSC Managers were reviewed and they were called upon to assume additional duties concerning training of planters in Fair Trade and Altromercato projects and delivery of radio and TV Programmes.

Mr. C. Baboolall was transferred back from FAREI and has been posted as Manager at L'Unité and Bon Accueil FSCs

## Committees

The following staff represented MCIA on several committees:

**Table 37. Staff Representatives on Committees**

Name	Grade	Committee
R.K. Soniah	Director	Mount and Beau Plan Fund
Y. Ramdharee	Manager	Steering Committee, Empty Pesticide Container Disposal, MoAIFS
A. Awotarowa	Manager	Standards Committee, Mauritius Qualifications Authority Sectoral Committee, HRDC

## E. SERVICE TO FARMERS (AGRICULTURAL AND MECHANISATION)

### Objectives and Functions

- (i) To maintain a pool of machinery for agricultural purposes.
- (ii) To hire out the agricultural machinery of the Authority to such persons and on such terms and conditions as the Board may determine.

### Services to the Planting Community

The Agricultural Mechanisation Unit of the Mauritius Cane Industry Authority manages a fleet of agricultural machines and equipment consisting mainly of Crawler Tractors, Pneumatic Tractors, Excavators, Bell Loaders, Rollers, as well as various equipment and accessories. Table 38 shows the different types and numbers constituting the fleet.

**Table 38. Services to the Planting Community**

DESCRIPTION	TYPE	CAPACITY	23QTY
Crawler Tractor	'D6'	165 - 185 HP	25
Crawler Tractor	'D7'	220 HP	9
Crawler Tractor	'D8'	300 HP	4
Excavator	SOLAR 500 LC-V	50 Tonnes	2
Excavator	PC - 350	35 Tonnes	2
Loader	950 F	170 HP	1
Bell Loader	1250 Cane Loader	38 HP	5
Roller	3410P	130 HP	1
Wheel Tractor		90 HP	1
Wheel Tractor		175-185 HP	14
Wheel Tractor		250 HP	1

The Unit undertakes land preparation works for various categories of planters. The types of service provided consist mainly of:

1. Land Clearing
2. Derocking
- (i) Coarse
  - Bulldozing
  - Rock breaking
  - Ripping
  - Raking
- (ii) Fine
  - Chiselling
  - Rock aligning
3. Levelling
4. Furrowing
5. Road tracing and road-making
6. Cane Loading

- Stone crushing

Approximately 80% of the work performed by AMU machines is for sugarcane plantation and approximately 12% is for food crop planters.

## Main Categories of Hirers

### 1. Small sugarcane planters

This category of planter consists mainly of small sugarcane planters and constitutes approximately 72% of the AMU's workload. More than 85% of planters found in this category have land of less than 1 ha while more than 65% have less than 0.5 ha. These planters benefit from highly subsidized tractor rates.

### 2. Sugar Estates

Some sugar estates also hire the machines of AMU for their sugarcane land preparation. They benefit from subsidized tractor hire rates but at a slightly higher hire rate.

### 3. Sugar Planters Regrouping Project (SPRP)

Since 2015, the Field Operations Regrouping and Irrigation Project (FORIP) has been replaced by the Sugar Cane Planters' Regrouping Project. With regards to land preparation works, the SPRP differs from the FORIP in as much as the number of effective hours of land preparation

works is now limited to 15 hours per arpent. The total number of effective hours performed in this project during period July 2018 to June 2019 amounts to 13,784 hours representing 28% of the total effective hours performed.

### 4. Small non-sugar planters

This category consists mainly of food crop growers. From July 2018 to June 2019, the number of hours work done for this category represents 17.5% of total hours work done and is more than twice the number of hours worked for this category during the corresponding period last year.

## 5. Revenue

Table 39. Revenue

Planters/Category	2015		Jan 2016 – June 2017		July 2017 – June 2018		July 2018-June 2019	
	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)
Small Sugar Cane Planters	18,400	10,224,595	27,138	15,572,975	25,224	14,364,372	23,012	13,368,835
Sugar Estates	3,069	3,450,050	1,363	1,399,980	2,318	1,488,000	2,455	684,840
Large Planter	859	721,770	5,964	6,643,935	3,616	4,035,540	1,536	1,511,970
SPRP	23,925	76,796,350	19,994	61,997,143	8,664	27,028,696	10,243	31,723,618
Ministry /Parastatal	55	162,085	4,318	13,811,556	1,858	6,093,259	1,105	3,503,308
Small Non-Sugar Planters	3,430	4,367,857	5,093	6,392,986	3,953	5,166,508	8,586	11,379,179
Others					1,143	3,575,772	2,278	7,574,578
<b>Total</b>	<b>49,738</b>	<b>95,722,707</b>	<b>63,870</b>	<b>105,818,575</b>	<b>46,776</b>	<b>61,752,147</b>	<b>49,215</b>	<b>69,746,328</b>

## F. CANE MILLING ARBITRATION AND CONTROL

### Role and Function

The Control and Arbitration Department (CAD), formerly known as the Cane Planters and Millers Arbitration and Control Board is a Department of the Mauritius Cane Industry Authority (MCIA) since the proclamation of the MCIA Act No.40 of 2011 on 19 March 2012.

The CAD is managed by a Director who is responsible for the execution of the policy of the Control and Arbitration Committee (CAC) and the day-to-day business of the department. In the discharge of his functions, the Director is assisted by the Assistant Director, three Sugar Technologists and the Manager, Operations and Research.

**Vision:** To provide effective service to planters, millers and other institutions of the sugar industry in order to promote and sustain social stability among partners of the Sugar Industry.

**Mission:** To control milling activities, arbitrate disputes and determine the quantum of sugar and by-products accruing to growers.

The functions and powers of the Control and Arbitration Committee include:

- (i) Arbitration of disputes between planters and millers;
- (ii) Control of the milling of canes and the manufacture of sugar;
- (iii) Determination of the quantity of sugar and co-products accruing to planters and millers;
- (iv) Determination of Refund of Transport Cost;
- (v) Registration of Cane Contracts;
- (vi) Delimitation of Factory Areas

**Table 40. Composition of the Committee 2018 - 2019**

Chairperson	
Mr. Dheerendra Kumar Dabee, G.O.S.K, SC	
Members	
Mrs.Damyantee Takoory	Representative of the Ministry of Agro-Industry and Food Security
Mr. Jean Li Yuen Fong	Representative of millers
Mr. Soobas Muniah	Representatives of small planters
Mr. Vhinaye Dookhony P.M.S.M	Representatives of large planters
Mr. Amal Mungur	Representative of the MCIA Board
Vacant	Independent member

During period 1st January 2018 - 30 June 2019, the Committee held twenty meetings. The attendance of each member is shown in Table 41:

**Table 41. Attendance for period  
01 January 2018 to 30 June 2019**

Mr. Dheerendra Kumar Dabee, G.O.S.K, SC	20
Mrs. Damyantee Takoory	20
Mr. Jean Li Yuen Fong	19
Mr. Soobas Muniah	18
Mr. Vhinaye Dookhony P.M.S.M	20
Mr. Amal Kumar Mohabeer Mungur	19

### Arbitration of disputes and grievance handling

During period January 2018 - June 2019, no formal dispute was reported to the Committee for arbitration. However, twenty one complaints have been registered and successfully addressed by the management of the CAD during that period.

### Registration of Cane contracts

Section 28 of the MCIA Act (Provision relating to Cane Contracts) provides that cane contracts between planters and millers shall be entered into for any crop year on or before 31 May and forwarded to the Committee for registration not later than 15 June of that crop year.

For Crops 2018 and 2019, as in the previous years, a one-stop-shop facility was offered to planters' during the month of May at eight different locations throughout the island namely the Farmers' Service Centres of Solitude, Riviere du Rempart, St Pierre, Unité, Bon Accueil and St Felix and equally at the Sugar Insurance Fund Board (SIFB) sub-offices of Mare D'Albert and Vacoas. Planters were thus able to register their sugarcane plantations with the SIFB, sign their cane contract agreements with the millers and register their cane contracts with the CAD under one roof.

In 2018, the CAD registered 4,846 cane contracts including 312 late registrations which were received after the deadline of 31 May 2018.

For Crop 2019, a total of 3,065 cane contracts were registered as at the end of June 2019 excluding those of Medine factory area for which there was a delay following the closure of the factory.

### Start and End of Crop 2018

The milling of canes started on 04 June at Alteo factory and ended likewise at Alteo on 13 December 2018 after 160 crushing days. The start and end of milling activities at each sugar factory is given in Table 42 below.

Factory	Date receiving estate canes	Date receiving planters' Cane	Date start	End of Harvest	Crushing days
Terra	27 June	27 June	02 Jul	05 Dec	131
Alteo	01 June	04 June	04 June	13 Dec	160
Medine	09 July	12 July	10 Jul	03 Nov	98
Omnican	02 July	02 July	03 Jul	06 Dec	124

### Harvest Extent

During Crop 2018, about 54,000 ha of sugarcane were cultivated out of which 48,380 ha were harvested and sent to the mills as compared to

48,855 ha for Crop 2017 (see Table 43) representing a decrease of 475 ha. Overall, 18,974 ha belonged to the estate sections while the remaining categories of planters cultivated sugarcane over 29,406 ha.

Factory	Estate Sections	Planters	Crop 2018	Crop 2017
Terra	4,770	6,445	11,215	10,674
Alteo	8,455	10,909	19,364	19,288
Medine	3,368	885	4,253	4,437
Omnican	2,381	11,167	13,548	14,456
Total	18,974	29,406	48,380	48,855

### Canes Milled

During Crop 2018, the four factories altogether received 3,154,516t of canes out of which 3,152,697t were milled while the remaining 1,819t were lost during transportation between the cane transit sites and the receiving factories. Figure 18 illustrates canes crushed by the four sugar factories:

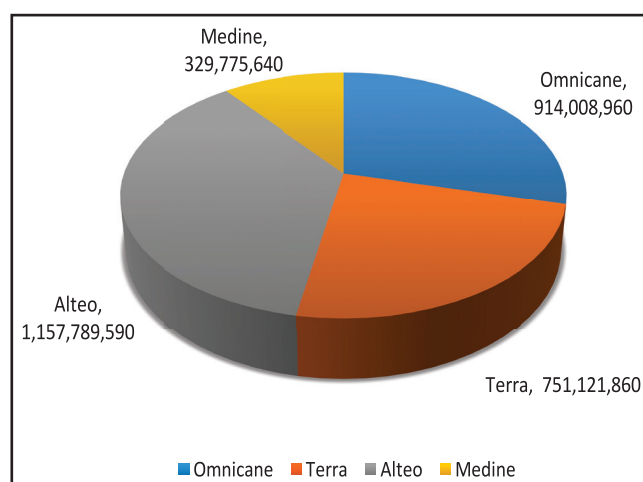


Fig 18. Cane Crushed per Factory - Crop 2018

### Sugar Production

The final sugar production for crop 2018 was 323,406t Tel Quel as compared to 355, 213t for Crop 2017.

The average extraction rate of 10.26% was superior to the mean of 9.88 recorded in 2017.

The amount of sugar produced by each mill is shown in Fig.19:

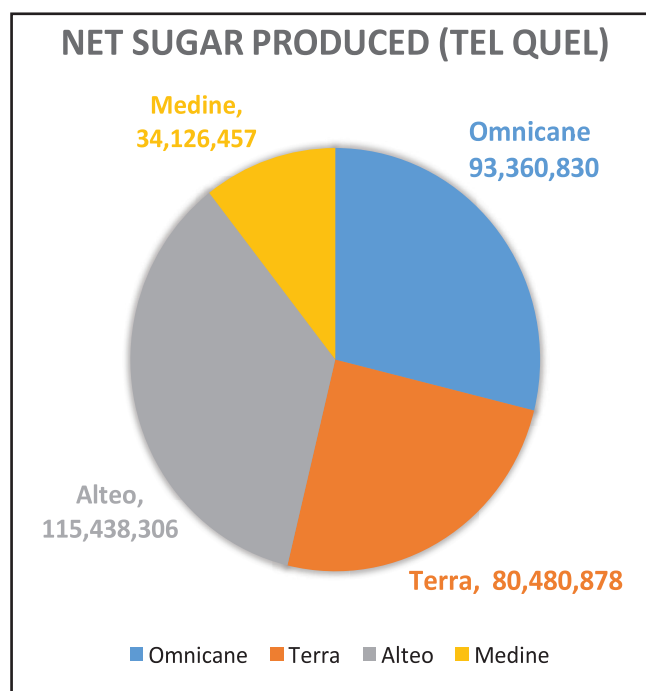


Fig 19. Sugar Produced Tel Quel per factory - Crop 2018

### Final Road Rate for Crop 2018

Pursuant to section 40 of the MCIA Act, sugarcane growers are entitled to a refund of the transport cost of their canes where the distance over which the canes are transported by the planters to a factory is greater than 6.4 km.

In practice, small planters supplying up to 100t of canes benefit from a special rate (+ 10%) as they pay a higher cost of transport due to the bad state of the roads leading to their fields and lower bargaining power as compared to large planters who benefit from economies of scale due to larger production.

Alternatively, where the transport is undertaken by the miller, the latter is refunded a fixed cost and the cost of transport over the first 6.4 km only.

The recommended rates applicable where the transport cost is undertaken by the planter are shown in Table 44.

**Table 44. Rate of refund for transport undertaken by the planter (above 6.4 km)**

Crop	2017	2018
Variable Cost	6.85	6.92
Special Variable Cost	7.54	7.62

Where the transport cost is undertaken by the miller, the fixed and variable costs applicable are shown in Table 45 below.

**Table 45. Rate of refund for transport undertaken by the miller (first 6.4 km)**

Crop	2017	2018
Variable Cost	6.85	6.92
Fixed Cost	24.57	24.82

### Assessment of Scum for Crop 2019

The Final Assessment of Scum for Crop 2018 based on the average quantity of scums produced by each factory per tonne of canes milled during the preceding crop year at specified moisture content is shown in Table 46.

**Table 46. Final Assessment of Scum for Crop 2019**

Factory	Moisture % scum	Kg scum/t cane
Terra	68.49	29.00
Alteo	72.96	53.70
Medine	82.30	58.40

Since Omnicane factory produced a limited amount of scums, planters of the enlarged Omnicane factory area were provided 7 tonne of scums per acre during replantation only as per a decision of the Committee taken on 30 May 2013.

### Sucrose Content Tests

The Control and Arbitration Department randomly carries out sucrose content tests on the canes of planters at the various CAD Laboratories.



As in the previous year, any planter or group of planters having a minimum amount of 300t of canes could apply for a separate sucrose content test in case he wanted his canes to be assessed separately for Crop 2018. As at the closing date of 15 March, 6 new separate tests, 45 cancellations with low tonnage of canes and 10 amendments to existing tests were approved by the Committee.

During the harvest season, the four laboratories altogether performed 102,529 sucrose content tests (see Table 47) as compared to 109,371 tests in 2017. This represents a reduction of about 6% which is due to a decrease in cane yield and land abandonment.

**Table 47. Cane received and number of samples per site**

Site No.	Site Name	Cane received	Number of valid tests
1	Beau Champ	43,261	3,787
2	Beau Plan	56,109	4,801
3	Terra	751,475	19,860
4	Bel Ombre	10,344	1,007
5	Britannia	15,727	1,778
6	Constance	48,542	4,287
7	Alteo	1,158,668	20,410
8	Medine	329,871	8,402
9	M Desert Alma	42,089	4,261
10	Mon Loisir	49,282	4,543
11	Reufac	4,420	626
14	R en Eau	25,464	2,759
15	St Felix	59,022	5,267
18	Omnican	914,502	20,741
<b>Total</b>			<b>102,529</b>

The Final Assessment of Sugar and Molasses was approved by the Committee on 07 February 2019.

### Determination of Price of Molasses

Pursuant to Section 39(2)(c) of the MCIA Act, where a planter has opted to receive the molasses to which he is entitled wholly or partly in cash, the value of the molasses shall be determined, where the molasses is sold by a miller or otherwise, on the average price of the molasses.

For Crop 2018, a total of 102,622t of molasses at 86° Brix were produced by the four factories. An amount of 683t was delivered in kind to planters while the remaining 101,939t were sold to local distilleries and livestock breeders. The price applicable to each category of users and the Final Price of Molasses for Crop 2018 at 86° Brix are as follows:

- (1) Sale Price to Livestock Breeders: MUR 2,500 per tonne
- (2) Deemed FOB price of molasses to distillers producing alcohol destined for exportation: MUR 2,147.18 per tonne
- (3) Deemed FOB price to distillers producing potable alcohol for domestic market: MUR 3,500 per tonne
- (4) Average Blended Price of Molasses per tonne: MUR 2,376.10
- (5) Final Price of Molasses payable to planters per tonne of molasses at 86° Brix inclusive of Distiller/Bottler Contribution: MUR 3,840.44

### Weighbridge Calibrations and Checks

In compliance with Section 32 of the MCIA Act, the CAD regularly calibrates and checks the weighbridges located at the sugar factories, cane transit sites, refineries and Sugar Storage Units of the MCIA.

For this purpose, the CAD possesses two lorries equipped with cranes and forty-five 1-tonne standard weights which are calibrated by the Legal Metrology Division of the Ministry of Commerce prior to the start of each crop season.

The number of cane and sugar weighing platforms actually in operation is 43 and a total of 4,766 accuracy checks were performed on those weighbridges as at 30 June 2019 (see Table 48 below) in addition to approximately 1,500 reconciliations of weighbridge planters' tickets.

**Table 48. Weighbridge calibration and Accuracy checks**

**January 2018**

Types of Checks	Number of Checks
Calibration/Recalibration	54
Taring	112
Daily weighbridge accuracy checks	4600
Total	4766

### **Certification of ISO/IEC 27001:2013**

The Control and Arbitration Department of the MCIA was accredited MS ISO/IEC 27001:2005 (Information Security Management System) on 23 June 2011 for a period of 3 years. The CAD is the second Department in the Public Service after the Passport and Immigration Office (PIO) and first parastatal body to be awarded this certification.

Since then, the CAD is constantly upgrading its information security system and in May 2017, the Mauritius Standards Bureau conducted their Audit Exercise and found that the management system of the CAD meets all the requirements of MS ISO/IEC 27001:2013. A certificate of registration valid for a period of three years until 22 June 2020 was subsequently issued to the CAD by the MSB on 23 June 2017.

As per the requirements of MS ISO/IEC 27001:2013 certification, the auditors of the MSB carried out a surveillance audit exercise on 10 August 2018. Four minor non-conformities were noted by the auditors and appropriate corrective actions were taken by the CAD to maintain its certification for a further period of one year.

### **Enhancements of the application Software**

The enhancement of the Data Capture and Sugar Assessment System used to capture automatically test results at the CAD laboratories for the production of sugar bulletins and other assessment reports was successfully developed by Software Labs Ltd. by the end of 2018. However, a few

improvements were still required, and these were expected to be completed towards the end of the current harvest season.

### **Value added products**

During Crop 2018, six operators were involved in the production of rum agricole and special sugars from the use of either sugarcane or sugarcane juice. The estimated amount of sugar to be deviated was approximately 2,500 t.

During same period, twenty operators were involved in the commercialization of sugarcane juice at 23 different locations throughout the island. All the operators used less than 10t of sugarcane over the year except two who use 20 and 36t respectively. The total amount of sugar involved was nearly 27t from approximately 270t of canes.

### **Closure of weighbridges**

For Crops 2018 and 2019, the CAD received the following applications for the closure of weighbridges:

- 1) From Omnicane Milling Operations Ltd. for the closure of the weighbridges at Britannia and Bel Ombre Cane Transit Sites
- 2) From Medine Milling Company Ltd. for the closure of the weighbridge located at Reufac Cane Transit Site;
- 3) From Alteo Milling Ltd. for the closure of the weighbridge located at Constance Cane Transit Site.

The closure of Britannia, Bel Ombre and Reufac weighbridges were in principle approved by the Control and Arbitration Committee subject to no objection from the parent Ministry. In absence of a reply from the Ministry, the closure of the three weighbridges has been kept in abeyance.

## Compensation Payable to Planters for Crop 2018

Based on an inflation rate of 3.2% provided by Statistics Mauritius, the Control and Arbitration Committee determined the compensation payable to sugarcane planters of such factory areas where the weighbridges have been closed down at MUR26.76 per tonne of cane.

## Total Proceeds accrued to small planters from Sugarcane for Crop 2018

The proceeds from sugar, bagasse and molasses (per tonne of sugar) excluding financial support from the government accruing to a planter producing up to 60 tonnes of sugar, out of canes supplied by him during Crop 2018 were as follows:

- 1) Income from Sugar : MUR 8,700
- 2) Income from Bagasse: MUR 2,511.05
- 3) Income from Molasses: MUR 1,536.71
- 4) **Total Income:** MUR 12,747.76

## Closure of Medine Factory

The closure of Medine factory was approved by the Minister of Agro-Industry and Food Security as from end of Crop 2018 on 29 March 2019. The percentage cane allocation to Alteo, Omnicane and Terra was 16:42:42 from the following sections:

**Table 49. Cane Allocation**

Factory	Cane Supply
Alteo	1. Free planters' canes from Reufac Factory Area 2. Canes from Chebel Section
Omnicane	1. Canes from Tamarin Section 2. Canes from Beau Songes Section 3. Bel Ombre canes
Terra	1. Free planters' canes from Medine Factory Area 2. Canes from Chebel Section

## Seasonal employees

For Crops 2018 and 2019, as in previous years, the CAD recruited a number of seasonal employees in the grade of Laboratory Head, Supervisor/Operator, Sampler/Cleaner and Helper/Cleaner to work at the various laboratories and cane transit sites. Additionally, the CAD also recruited one lorry driver and one lorry helper to work in the Department's lorry fitted with a crane which is used for the calibration of weighbridges.

**Table 50. Summary of Crop 2018**

<u>Factory</u>	<u>Crushing Period</u>		<u>Crush- ing days</u>	<u>Canes (tonnes)</u>			<u>Richesse (Sucrose % Cane)</u>	<u>Extraction (Sucrose Extracted % Cane)</u>	<u>Sugar Produced (tonnes)</u>				<u>Molasses Produced tel quel (tonnes)</u>
	<u>Start</u>	<u>End</u>		<u>Received</u>	<u>Crushed</u>	<u>Loss in Transit</u>			<u>Tel Quel</u>	<u>Produced @ 98.5</u>	<u>Average Efficiency</u>	<u>Diff</u>	
<u>Terra</u>	<u>02-Jul</u>	<u>05-Dec</u>	<u>131</u>	<u>751,475</u>	<u>751,122</u>	<u>353</u>	<u>12.32</u>	<u>10.65</u>	<u>80,481</u>	<u>81,243</u>	<u>81,716</u>	<u>-473</u>	<u>25,145</u>
	<u>17-Jul</u>	<u>29-Dec</u>	<u>138</u>	<u>868,091</u>	<u>867,643</u>	<u>447</u>	<u>11.60</u>	<u>10.07</u>	<u>87,398</u>	<u>88,233</u>	<u>88,159</u>	<u>41</u>	<u>28,921</u>
<u>Alteo</u>	<u>04-Jun</u>	<u>13-Dec</u>	<u>160</u>	<u>1,158,668</u>	<u>1,157,790</u>	<u>878</u>	<u>11.37</u>	<u>9.87</u>	<u>115,438</u>	<u>115,990</u>	<u>115,301</u>	<u>689</u>	<u>32,242</u>
	<u>26-May</u>	<u>26-Dec</u>	<u>174</u>	<u>1,427,965</u>	<u>1,426,826</u>	<u>1,138</u>	<u>10.68</u>	<u>9.24</u>	<u>131,868</u>	<u>132,305</u>	<u>132,006</u>	<u>299</u>	<u>42,645</u>
<u>Medine</u>	<u>10-Jul</u>	<u>03-Nov</u>	<u>98</u>	<u>329,871</u>	<u>329,776</u>	<u>95</u>	<u>11.94</u>	<u>10.30</u>	<u>34,126</u>	<u>34,494</u>	<u>34,677</u>	<u>-183</u>	<u>11,271</u>
	<u>10-Jul</u>	<u>18-Nov</u>	<u>108</u>	<u>361,902</u>	<u>361,761</u>	<u>141</u>	<u>11.46</u>	<u>9.93</u>	<u>35,913</u>	<u>36,251</u>	<u>36,381</u>	<u>-130</u>	<u>12,026</u>
<u>Omnican</u>	<u>03-Jul</u>	<u>06-Dec</u>	<u>124</u>	<u>914,502</u>	<u>914,009</u>	<u>493</u>	<u>11.82</u>	<u>10.16</u>	<u>93,361</u>	<u>94,256</u>	<u>94,288</u>	<u>-32</u>	<u>34,112</u>
	<u>4-Jul</u>	<u>16-Dec</u>	<u>135</u>	<u>1,055,374</u>	<u>1,054,689</u>	<u>685</u>	<u>11.06</u>	<u>9.48</u>	<u>100,034</u>	<u>100,914</u>	<u>101,142</u>	<u>-228</u>	<u>38,223</u>
<u>Total</u>				<u>3,154,516</u>	<u>3,152,697</u>	<u>1,819</u>	<u>11.86</u>	<u>10.25</u>	<u>323,406</u>	<u>325,983</u>	<u>325,982</u>		<u>102,770</u>
				<u>3,713,331</u>	<u>3,710,919</u>	<u>2,412</u>	<u>11.08</u>	<u>9.57</u>	<u>355,213</u>	<u>357,702</u>	<u>357,688</u>		<u>121,815</u>

*Note: Figures in italic relate to Crop 2017*

## G(1) SUGAR STORAGE AND HANDLING UNIT (SUGAR TERMINAL)

### Introduction

The Sugar Storage and Handling Unit (Ex-Mauritius Sugar Terminal Corporation) is located on a piece of reclaimed land having an area of 10.93 ha at Les Salines, Port Louis.

Initially, at its inception in 1980, the main activities at the Terminal were to receive, store and bulk load into ships the raw sugar produced by the sugar factories. The terminal is equipped with receiving facilities, accurate weighing equipment, two-storage sheds of bulk capacity of 175,000 t each and an efficient out-loading station with a loading rate of 1440 t/h.

Following the dismantling of the Sugar Protocol and the cessation of raw sugar production and exportation, the activities of the Sugar Storage and Handling Unit are mainly the reception, storage and delivery of both plantation white sugar and non-originating sugars to the two refineries of the island.

### Receiving Station

Sugar is transported in trucks from the sugar factories (PWS) or from the Terminal Quay (NOS) to the receiving station. Fully computerized weighbridges ensure accurate weighing of the sugar lorries at the receiving station. The sugar boxes are then tipped using electro-mechanical equipment to unload the sugar onto conveyor belts which is then conveyed to the storage sheds.



Fig20. Unloading sugar boxes

### The Storage Sheds

Two storage sheds, each having a storage capacity of 175,000 t harbours in bulk the plantation white sugar as well as the non-originating sugar. The infrastructures are so designed to resist cyclonic winds of 300 km/h. The storage sheds are protected against any fire outbreak through a state-of-art fire detection and firefighting system.

Since 2009, Shed No. 2 is dedicated to the storage of special sugars in 1-t bags destined for exportation.



Fig 21. Storage Shed

### Unloading of Non-Originating Sugar at the Terminal Quay

The unloading of sugar from vessels is carried on a 24-h basis which may last from 6 to 8 days. The operations are complex with several operators within the port sector working simultaneously and converging towards the same goals and objectives. Thus, proper coordination, cooperation, communication and control are key factors for successful end results. The unloading rate is approximately 4000 t per 24 h with some 2000 trucks involved, in the to and fro movement from the wharf to the receiving station, for the whole operations.





*Fig 22. Storage of Non Originating Sugar (NOS)*



*Fig 23. Loading of trucks*



*Fig 24. Transport by trucks*



*Fig 25. Grabs filling chute*

### **Delivery of Sugar to Refineries**

Plantation White Sugar (PWS) and Non-Originating Sugar (NOS) from Shed No 1 are delivered through a new conveying system (C14) inside the shed. The lorry is positioned under discharging hoppers where an operator triggers the pneumatic gate to load the sugar boxes. The lorry is then weighed at the receiving station and directed to the refineries namely Alteo, and Omnicane.

Delivery of NOS is also done through the out-loading conveyors and reclaimed at the return bin of the sugar quay.



*Fig 26. Delivery of sugar from Shed No.1*





Fig 27. Delivery of sugar from return bin of quay

## Staff Matters

### Health and Safety Committee

The Health and Safety Committee met regularly to discuss matters relating to the health and safety of the employees.

All provisions of the Occupational Safety and Health Act 2005 were complied with and all the equipment at the Sugar Storage and Handling Unit is inspected by a Registered Machinery Inspector.

### Meetings with Staff Associations

The management had regular meetings with the Mauritius Sugar Terminal Corporation Employees Union (MSTCEU) and the Mauritius Sugar Terminal Corporation Staff Association (MSTCSA) to discuss establishment problems, including those relating to the terms and conditions of service and the maintenance of good industrial relations.

## Maintenance and Repairs

All equipment and machineries undergo rigorous maintenance phases based on a pre-planned preventive maintenance programme and coupled to that, critical equipment are routed to a conditioned-based monitoring cycle.

Most of the maintenance and repair works are carried in-house except for big projects which are outsourced. The workshop is equipped with specialized tools and equipment and among others this include a lathe, a milling machine, a hydraulic

press, welding equipment both arc and gas, heavy duty drilling machine. Two mobile cranes facilitate transportation of heavy loads, tarring of weighbridges, maintenance of sugar boxes and working at heights with the man-platform attachment.

In view of the geographical position of the terminal and being exposed to the saline environment, the whole structure which is made of steel and aluminium cladding are subject to adverse environmental impacts. Coupled to that, the ageing of the terminal escalates the maintenance and repairs works. The total built-up area is approximately 43,000 m<sup>2</sup>.

## Sugar Movements

### 1. Sugar Received at the Terminal

A total of 15,222.210 MT of PWS was received at the Terminal during the 2018 sugar cane crop. A breakdown of the quantity of sugar received from the sugar estates is shown below.

#### Receipt of Plantation White Sugar (PWS)

Table 51. Sugar Received at the Sugar Storage and Handling Unit for Year 2018 (26.07.18 – 17.12.18)	
Sugar Estates	Plantation White Sugar (PWS) (MT)
Terra Milling Ltd.	1,905.900
Médine Sugar Milling Company Ltd	13,316.310
<b>Total</b>	<b>15,222.210</b>

### 2. Plantation White Sugar Delivered for Year 2018

Table 52. Delivery of Plantation White Sugar for Year 2018 (24.07.18 – 30.11.18)	
Terra Milling Ltd.	2,042.250 MT
<b>Total</b>	<b>2,042.250 MT</b>

### 3. Closing Stocks of PWS and NOS as at 31st December 2018 were as follows –

Plantation White Sugar  
= 15, 383.170 metric tonnes

Non-Originating Sugar (Year 2017)  
= 32, 329.680 metric tonnes

### G(2) SUGAR STORAGE AND HANDLING UNIT (BAGGED SUGAR)

Transfer of the Operations of the Bagged Sugar Storage and Distribution Co Ltd. to MCIA

In the context of the rationalization of the service providing institutions to improve cost effectiveness, quality services and optimal use of human resources, Cabinet, at its meeting on 22 August 2014, had agreed to the transfer of the operations of the Bagged Sugar Storage and Distribution Co. Ltd. to the Mauritius Cane Industry Authority. The employees of the Company, who are on a permanent and pensionable establishment would be redeployed to the Mauritius Cane Industry Authority.

The Bagged Sugar Storage and Distribution Co.Ltd. has been removed from the Register of Companies, under Section 309(1)(d) of the Companies Act 2001, on 31 December 2014. All assets and liabilities have been transferred to the Mauritius Cane Industry Authority with effect from 1 January 2015.

### Principal Activities

The principal activity of the Bagged Sugar Unit (BSU) comprises of the receipt, storage and distribution of bagged sugar as follows:

- Special Sugars are received from sugar estates for export markets
- White Refined / Raw Sugars are received from sugar estates for local market
- Imported Sugars were received from overseas suppliers for local market and bottlers up to year 2012.

The sugars are received from Terra Milling Ltd., Alteo Milling Ltd. and Omnicane Milling Ltd. in 25 kg, 50 kg and 1-tonne bags.

To this end, the Unit operates two warehouses held on operating lease at the following locations:

- (a) MCIA Shed No 2
- (b) Caudan

The sugar weight received for the past 8 years is as shown in the Table 53:

Table 53. Weight of sugar received at the BSU

Crop Year	2011	2012	2013	2014	2015	2016	2017	2018
Sugar Received from Sugar Estates (t)	136,144	142,772	121,042	126,714	104,172	134,566	87,457	93,990
Imported Sugar (t)	3,000	8,000	-	-	-	-	-	-
	<b>139,144</b>	<b>150,772</b>	<b>121,042</b>	<b>126,714</b>	<b>104,172</b>	<b>134,566</b>	<b>87,457</b>	<b>93,990</b>

## H. DIRECTORS RESPONSIBILITY STATEMENT

### General

Directors are responsible to present financial statements of the Authority that give a faithful representation of the financial position as at the end of the financial period and of the results of its operations for the period then ended. It is responsible for the integrity of these financial statements and for the objectivity of any other information presented therein.

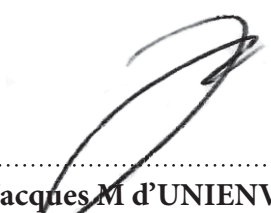
The Directors confirm that, in preparing these financial statements, they have ensured that proper accounting records which disclose with reasonable accuracy at any time the financial position of the Authority; the assets of the Authority have been safeguarded by maintaining appropriate internal control systems and procedures; reasonable steps have been taken for the prevention and detection of fraud and other irregularities; the financial statements have been prepared on the going concern basis; judgments and estimates have been made that are reasonable and prudent; and accounting policies have been selected in accordance with International Public Sector Accounting Standards (IPSASs) and have been applied consistently.

### Internal Control

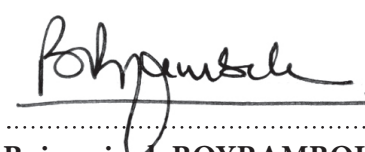
The Directors have overall responsibility for taking such steps, as are reasonably open to them, to safeguard the assets of the Authority and to prevent and detect fraud and other irregularities. The internal control system has been designed to provide the Directors with such reasonable assurance. Such systems ensure that all transactions are authorised and recorded and that any material irregularities are detected and rectified within a reasonable time-frame. The Authority has an established internal control system which assists management in effectively discharging its responsibilities. The internal control system is reviewed on an ongoing basis to ensure its effectiveness.

### Risk Management

The Authority does not have a specific Risk Management Committee. However, all risky issues are considered by the Board. The Board is responsible for taking appropriate action to mitigate risks, if any, using such measures, policies, procedures and other controls that it deems fit.



.....  
Mr Jacques M d'UNIENVILLE, G.O.S.K  
CHAIRPERSON,  
MCIA Finance Committee



.....  
Bojrazsingh BOYRAMBOLI  
Senior Chief Executive,  
Ministry of Agro-Industry and Food Security  
CHAIRPERSON  
MCIA Board of Directors

## **I. INDEPENDENT AUDITOR'S REPORT**





# NATIONAL AUDIT OFFICE

## REPORT OF THE DIRECTOR OF AUDIT

## TO THE MAURITIUS CANE INDUSTRY BOARD

### Report on the Audit of the Financial Statements

#### Opinion

I have audited the financial statements of the Mauritius Cane Industry Authority, which comprise the statement of financial position as of 30 June 2019, and the statement of financial performance, the statement of cash flows, statement of changes in net assets/equity and statement of comparison of budget and actual amounts for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the financial statements give a true and fair view of the financial position of the Mauritius Cane Industry Authority as at 30 June 2019, and of its financial performance and its cash flows for the year then ended in accordance with International Public Sector Accounting Standards.

#### Basis for Opinion

I conducted my audit in accordance with International Standards of Supreme Audit Institutions (ISSAIs). My responsibilities under those standards are further described in the 'Auditor's Responsibilities for the Audit of the Financial Statements' section of my report. I am independent of the Mauritius Cane Industry Authority in accordance with the INTOSAI Code of Ethics, together with the ethical requirements that are relevant to my audit of the financial statements in Mauritius, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

#### Key Audit Matters

Key Audit Matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters.

I have determined that there are no key audit matters to communicate in my report.

#### Other Information

Management is responsible for the other information. The other information comprises the information included in the annual report of the Mauritius Cane Industry Authority, but does not include the financial statements and my auditor's report thereon.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit or otherwise appears to be materially misstated. If, based on the work I have performed, I conclude that there is a material misstatement of this other information, I am required to report that fact. I have nothing to report in this regard.

### ***Corporate Governance Report***

My responsibility under the Financial Reporting Act is to report on the compliance with the Code of Corporate Governance disclosed in the annual report and assess the explanations given for non-compliance with any requirement of the Code. From my assessment of the disclosures made on corporate governance in the annual report, the Mauritius Cane Industry Authority has, pursuant to section 75 of the Financial Reporting Act, complied with the requirements of the Code.

### **Responsibilities of Management and Those Charged with Governance for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Public Sector Accounting Standards, and for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Mauritius Cane Industry Authority's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management intends to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible of overseeing the Mauritius Cane Industry Authority's financial reporting process.

### **Auditor's Responsibilities for the Audit of the Financial Statements**

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISSAIs, will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with ISSAIs, I exercise professional judgement and maintain professional scepticism throughout the audit. I also:



- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Mauritius Cane Industry Authority's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Mauritius Cane Industry Authority's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Mauritius Cane Industry Authority to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

I also provide those charged with governance with a statement that I have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on my independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, I determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. I describe these matters in my auditor's report unless law or regulation precludes public disclosure about the matter or, when, in extremely rare circumstances, I determine that a matter should not be communicated in my report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.



## **Report on Other Legal and Regulatory Requirements**

### ***Management's Responsibilities for Compliance***

In addition to the responsibility for the preparation and presentation of the financial statements described above, management is also responsible to ensure that the Mauritius Cane Industry Authority's operations are conducted in accordance with the provisions of laws and regulations, including compliance with the provisions of laws and regulations that determine the reported amounts and disclosures in an entity's financial statements.

### ***Auditor's Responsibilities***

In addition to the responsibility to express an opinion on the financial statements described above, I am also responsible to report to the Board whether:

- (a) I have obtained all the information and explanations which to the best of my knowledge and belief were necessary for the purpose of the audit;
- (b) the Statutory Bodies (Accounts and Audit) Act, in so far as they relate to the accounts, have been complied with;
- (c) in my opinion, and, as far as could be ascertained from my examination of the financial statements submitted to me, any expenditure incurred is of an extravagant or wasteful nature, judged by normal commercial practice and prudence;
- (d) in my opinion, the Mauritius Cane Industry Authority has been applying its resources and carrying out its operations fairly and economically; and
- (e) the provisions of Part V of the Public Procurement Act regarding the bidding process have been complied with.

I performed procedures, including the assessment of the risks of material non-compliance, to obtain audit evidence to discharge the above responsibilities.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified opinion.

### **Opinion on Compliance**

#### ***Statutory Bodies (Accounts and Audit) Act***

I have obtained all information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit.

The Mauritius Cane Industry Authority has complied with the Statutory Bodies (Accounts and Audit) Act in so far as it relates to the accounts.

Based on my examination of the accounts of Mauritius Cane Industry Authority, nothing has come to my attention that indicates that:

- (a) any expenditure incurred was of an extravagant or wasteful nature, judged by normal commercial practice and prudence; and
- (b) the Authority has not applied its resources and carried out its operations fairly and economically.

### ***Statutory Bodies Pension Funds (SBPF) Act***

#### ***Ex- Mauritius Sugar Industry Research Institute (MSIRI) pension fund***

The Mauritius Cane Industry Authority (MCIA) was established as a statutory body under the MCIA Act and accordingly was included in the first schedule of the Statutory Bodies (Accounts & Audit) Act. Section 3 of the SBPF Act requires that the pension fund of every statutory body shall be administered by SICOM Ltd.

The retirement benefit obligations of the MCIA as at 30 June 2019 stood at Rs 858 .1 million and comprised Rs 111.1 million and Rs 747 million, representing the obligations for the Ex-MSIRI and the other five ex-Service Providing Institutions (Other SPIs) respectively. As at 30 June 2019, the pension fund of the Ex-MSIRI (Rs 111.1 million) has still not been transferred to SICOM Ltd, which is contrary to the requirement of Section 3 of the SBPF Act.

### ***Public Procurement Act***

In my opinion, the provisions of Part V of the Act have been complied with as far as it appears from my examination of the relevant records.



**C. ROMOOAH**  
Director of Audit

National Audit Office  
Level 14,  
Air Mauritius Centre  
PORT LOUIS

7 September 2020

**J. FINANCIAL STATEMENTS**

**THE MAURITIUS CANE INDUSTRY AUTHORITY**

**FINANCIAL STATEMENTS**

**YEAR ENDED 30 JUNE 2019**

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## THE MAURITIUS CANE INDUSTRY AUTHORITY

### REPORT OF THE DIRECTORS

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1. The Directors have the pleasure to submit the financial statements of the Mauritius Cane Industry Authority (MCIA) for the year ended 30 June 2019.

2. State of affairs and review of activities

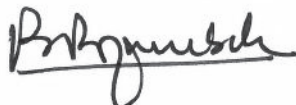
The Statement of financial position as at 30 June 2019 is set on page 2 and the Statement of financial performance for the year then ended on page 3.

The main activity of the Mauritius Cane Industry Authority, is unchanged since 30 June 2018.

- 3 Statement of Directors

The Directors state that :

- Suitable accounting policies are selected and applied consistently.
- Judgements and estimates made are reasonable and prudent.
- Applicable accounting standards are followed subject to any material departures, disclosed and explained in the financial statements.
- Financial statements are prepared on the going concern basis, given the Board presumes that the Authority will continue its activities.



**CHAIRPERSON**  
**MCIA Board of Directors**

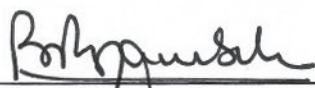



## STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2019

	Notes	30 Jun 2019 MUR	30 Jun 2018 MUR
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	9	784,200,123	744,738,103
Trade receivables	10	295,018,332	35,592,849
Loans receivable	11	11,199,997	10,924,711
Inventories	12	51,800,499	51,948,807
Prepayments		1,272,545	1,305,874
		<u>1,143,491,496</u>	<u>844,510,344</u>
<b>Non-current assets</b>			
Trade receivables	10	25,987,376	222,762,018
Loans receivable	11	32,754,479	34,496,777
Investment in financial assets	13	548,300	692,800
Property, plant and equipment	14	2,124,656,591	2,240,588,790
Investment property	15	6,820,000	7,260,000
Intangible assets	16	2,307,137	2,125,018
		<u>2,193,073,883</u>	<u>2,507,925,403</u>
<b>Total assets</b>		<u><u>3,336,565,379</u></u>	<u><u>3,352,435,747</u></u>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade payables	17	479,892,805	13,996,459
Short term borrowings	18	1,362,302	1,364,587
Short term employee benefit provisions	19	25,200,000	23,500,000
Other short term provisions	19	1,300,000	810,000
		<u>507,755,107</u>	<u>39,671,046</u>
<b>Non-current liability</b>			
Trade payables	17	2,139,980	12,695,812
Long term borrowings	18	15,442,804	16,833,674
Financial liabilities	20	-	1,876,051
Long term employee benefit provisions	19	162,665,292	155,099,504
Other long term provisions	19	2,500,000	3,100,000
Retirement benefits obligations	21	858,145,682	802,730,742
		<u>1,040,893,758</u>	<u>992,335,783</u>
<b>Total Liabilities</b>		<u><u>1,548,648,865</u></u>	<u><u>1,032,006,829</u></u>
<b>Net Assets</b>		<u><u>1,787,916,514</u></u>	<u><u>2,320,428,918</u></u>
<b>NET ASSETS/EQUITY</b>			
Contributed capital	22	300,000,000	300,000,000
Revaluation reserve		1,949,005,443	2,029,258,274
Fair value reserve		410,550	555,050
Accumulated surplus/(deficit)	23	(461,499,479)	(9,384,405)
<b>Total Net Assets/Equity</b>		<u><u>1,787,916,514</u></u>	<u><u>2,320,428,918</u></u>

Approved by the MCIA Board of Directors on 27 July 2020

  
Mr Bojrazsingh Boyramboli  
Chairperson

  
Mr Jacques Marrier D'Unienville  
Board member

**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**STATEMENT OF FINANCIAL PERFORMANCE**  
**FOR THE YEAR ENDED 30 JUNE 2019**

		Year ended 30 Jun 2019	Year ended 30 Jun 2018
	Notes	MUR	MUR
<b>Revenue</b>			
<b>Non - Exchange Transactions</b>			
Cess and Grants	25	1,077,413,116	707,744,506
Levy on sale of sugar	26	119,180,449	155,939,540
Other non-exchange income	27	3,249,505	2,874,506
		<u>1,199,843,069</u>	<u>866,558,552</u>
<b>Exchange Transactions</b>			
Hire of tractors and trailers	28	73,850,053	63,918,583
Other exchange income	27	35,093,277	45,894,136
		<u>108,943,330</u>	<u>109,812,719</u>
<b>Expenses</b>			
Salaries and salary related expenses	29	(411,000,810)	(402,110,690)
Administrative and general expenses	30	(379,985,957)	(158,773,443)
Ex- dockers pensions	31	(114,333,385)	(113,732,225)
Depreciation of property, plant & equipment	14	(121,841,105)	(127,890,970)
Depreciation of investment property	15	(440,000)	(440,000)
Amortisation of intangible assets	16	(1,028,481)	(805,715)
FORIP expenses		(74,697,131)	(128,165,570)
Planters fund expenses		(55,702,714)	(1,478,438)
ALMS expenses		(30,304,390)	(23,153,925)
Sugar cane sustainability expenses	32	(596,045,135)	(138,774,169)
Finance costs		(360,257)	(385,842)
Increase in retirement benefits obligations	21	(43,678,668)	(46,059,254)
		<u>(1,829,418,032)</u>	<u>(1,141,770,242)</u>
<b>Deficit for the year</b>		<u>(520,631,633)</u>	<u>(165,398,971)</u>

The notes on pages 7 to 33 form an integral part of these financial statements.

# STATEMENT OF CHANGES IN NET ASSETS/EQUITY

YEAR ENDED 30 JUNE 2019

	Contributed Capital	Accumulated Surplus/(Deficit)	Fair Value Reserve	Revaluation Reserve	Earmarked Funds	Total
	MUR	MUR	MUR	MUR	MUR	MUR
<b>As previously stated at 01 July 2018</b>	300,000,000	(9,384,405)	555,050	2,029,258,274	-	2,320,428,919
Transfer - excess depreciation on revaluation	-	80,252,831	-	(80,252,831)	-	-
Deficit for the year	-	(520,631,633)	-	-	-	(520,631,633)
	300,000,000	(449,763,207)	555,050	1,949,005,443	-	1,799,797,286
Actuarial losses on defined benefit pension plans	-	(11,736,272)	-	-	-	(11,736,272)
Decrease on investment revaluation	-	-	(144,500)	-	-	(144,500)
<b>As at 30 June 2019</b>	<b>300,000,000</b>	<b>(461,499,479)</b>	<b>410,550</b>	<b>1,949,005,443</b>	<b>-</b>	<b>1,787,916,514</b>

Car Loan Fund of MUR 30,417,987 representing money obtained by MSIRI from ex MSA to be used as a revolving fund. As it is no more used for the intended purpose, it has been transferred to Accumulated Fund in 2015.

Car Loan Interest fund of MUR 51,112,351 representing interest earned on car loans to MSIRI officers transferred to Accumulated Fund on 30 June 2017.

<b>As previously stated at 01 July 2017</b>	300,000,000	(714,207,841)	551,650	2,115,420,117	744,994,655	2,446,758,581
Deferred Income - Previous period	-	61,517,294	-	-	-	61,517,294
Earmarked funds - Previous period	-	744,994,655	-	-	(744,994,655)	-
<b>As restated at 30 June 2017</b>	<b>300,000,000</b>	<b>92,304,108</b>	<b>551,650</b>	<b>2,115,420,117</b>	<b>-</b>	<b>2,508,275,875</b>
Transfer - excess depreciation on revaluation	-	86,161,843	-	(86,161,843)	-	-
Adjustment to opening earmarked funds balance	-	(85,400)	-	-	-	(85,400)
Deficit for the year	-	(165,398,971)	-	-	-	(165,398,971)
	300,000,000	12,981,580	551,650	2,029,258,274	-	2,342,791,504
Actuarial losses on defined benefit pension plans	-	(22,365,985)	-	-	-	(22,365,985)
Increase on investment revaluation	-	-	3,400	-	-	3,400
<b>As at 30 June 2018</b>	<b>300,000,000</b>	<b>(9,384,405)</b>	<b>555,050</b>	<b>2,029,258,274</b>	<b>-</b>	<b>2,320,428,919</b>



**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**STATEMENT OF CASH FLOWS**  
**YEAR ENDED 30 JUNE 2019**

5

	Notes	Year ended 30 Jun 2019	Year ended 30 Jun 2018
		MUR	
<b>Cash flows from operating activities</b>			
Cash absorbed in operations	36.1	39,190,225	76,143,956
Interest paid		(279,645)	(294,855)
<b>Net cash used in operating activities</b>		<b>38,910,580</b>	<b>75,849,101</b>
<b>Cash flows from investing activities</b>			
Capital expenditure		(12,449,318)	(14,355,642)
Disposal proceeds		5,039,916	375,000
Interest received		7,958,315	9,819,774
Dividend received		28,460	19,960
<b>Net cash generated from/(used in) investing activities</b>		<b>577,373</b>	<b>(4,140,908)</b>
<b>Cash flows from financing activities</b>			
Staff loans recovered		16,075,280	13,761,953
Staff loans granted		(14,758,778)	(13,228,452)
Repayment of loans		(1,342,435)	(1,357,210)
<b>Net cash flow generated from financing activities</b>		<b>(25,933)</b>	<b>(823,709)</b>
<b>Net Increase/ (Decrease) in cash and cash equivalents</b>		<b>39,462,020</b>	<b>70,884,484</b>
<b>Movement in cash and cash equivalents</b>			
		MUR	MUR
<b>As at 01 July 2018</b>		<b>744,738,103</b>	<b>673,853,619</b>
<b>Increase / (Decrease)</b>		<b>39,462,020</b>	<b>70,884,484</b>
<b>As at 30 June 2019</b>	36.3	<b>784,200,123</b>	<b>744,738,103</b>

The notes on pages 7 to 33 form an integral part of these financial statements.

# YEAR ENDED 30 JUNE 2019

	ORIGINAL BUDGET MUR	ACTUAL		VARIANCE		REMARKS
		MUR		MUR		
RECURRENT EXPENDITURE						
Salaries,Salary related expenses and Travelling	359,563,000	342,941,045		16,621,955	Unfilled Vacancies, COLA paid lower than expected, early retirement, control over mileage and APMU salaries excluded.	
Pension and Insurance of employees	65,003,500	55,289,722		9,713,778	Unfilled Vacancies, COLA paid lower than expected and early retirement.	
MSS Ex- Dockers Pension	117,325,000	114,819,168		2,505,832	COLA paid lower than expected and reduced number of pensioners	
Rent, Rates and Utilities	27,238,700	20,797,927		6,440,773	Exemption of Municipal rates and BSSD rental for United Docks budgeted but not incurred.	
General Office Expenses	10,600,600	6,021,331		4,579,269	Cost saving	
Maintenance and Insurance	83,761,600	97,872,575		(14,110,975)	Major repairs and changes in fuel consumption and cost.	
Welfare and Health & Safety	2,989,000	2,445,462		543,538	Cost saving	
Finance Cost	427,300	358,396		68,904		
Mission	300,000	46,034		253,966		
Field Experimentation	50,000	73,386		(23,386)		
Publication and Advertisement	600,000	377,783		222,217		
Training & Support Services	435,000	169,365		265,635		
Security	14,989,700	12,367,849		2,621,851	Alarm system at ex SSHU not installed	
Air Pollution Monitoring Expenses	795,000	1,911,355		(1,116,355)	Expenses not budgeted	
Sugar Planters Regrouping Project Expenses	130,000,000	68,686,691		61,313,309	Expenses relate to prior periods	
Planters Fund Expenses	-	4,357,431		(4,357,431)		
Agricultural Land Management System Expenses	50,000,000	30,304,390		19,695,610	Expenses relate to prior periods	
Sugar Cane Sustainability Expenses	-	596,045,135		(596,045,135)	Sugar Cane sustainability and additional assistance to small planters not budgeted	
Research & Development	12,319,500	11,659,861		659,639	Cost saving	
	876,397,900	1,366,544,906		(490,147,006)		
CAPITAL EXPENDITURE						
Non Current Assets	12,107,700	11,875,029		232,671		
Repayment of Loans	1,426,600	1,342,435		84,165		
	13,534,300	13,217,464		316,836		
TOTAL EXPENDITURE	889,932,200	1,379,762,370		(489,830,170)		
REVENUE						
MSS-Warehouse for Special Sugars	2,101,300	-		(2,101,300)	Not yet received.	
Hire of Tractors & Trailers	71,000,000	73,850,053		2,850,053		
Co - financing from Government	398,466,100	355,000,000		(43,466,100)	Operating deficit not fully funded by Government	
Grant from MSS	81,010,000	81,010,000		-		
Levy on sale of sugar on local market	129,500,000	86,104,299		(43,395,701)	Significant receipt after year end and reduction in sugar imports	
Agricultural Land Management System Grant	50,000,000	-		(50,000,000)	Funds utilized by parent Ministry to finance payment of enhanced advance to planters	
Sugar Planters Regrouping Project Grant	130,000,000	5,778,700		(124,221,300)	Funds utilized by parent Ministry to finance payment of enhanced advance to planters	
Sugar Cane Sustainability Grant	-	598,756,348		598,756,348	Income not budgeted	
Fertilizers Scheme - Government	-	55,000,000		55,000,000	Top up to finance additional assistance to planters not budgeted	
Fertilizers Scheme - SIFB	-	55,000,000		55,000,000	Top up to finance additional assistance to planters not budgeted	
Air Pollution Monitoring Income	-	5,423,800		5,423,800	Income not budgeted	
Others	27,854,800	26,784,107		(1,070,693)		
	889,932,200	1,342,707,307		452,775,107		

The notes on pages 7 to 33 form an integral part of these financial statements.



**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**
**1 REPORTING ENTITY**

The Mauritius Cane Industry Authority (**The Authority**) is a body corporate established under the Mauritius Cane Industry Authority Act 2011 which was proclaimed on 19 March 2012 to take over the activities of the following ex- Service Providing Institutions (SPIs):

- Mauritius Sugar Authority
- Mauritius Sugar Industry Research Institute
- Mauritius Sugar Terminal Corporation
- Farmers' Service Corporation
- Sugar Planters Mechanical Pool Corporation
- Cane Planters and Millers Arbitration and Control Board

MCIA took over the activities of BSSD Co. Ltd as from 1 January 2015. The audited financial statements of the company as at 31 March 2015 have been consolidated with those of MCIA.

The Authority's registered office is situated at 1, Moka Road, MSIRI Complex, Reduit.

The objectives of the Authority include:

- Monitoring, overseeing and coordinating all the activities relating to, and ensuring a fair, efficient and effective administration and operation of the cane industry.
- Promoting and supporting the sustainable development, efficiency and viability of the cane industry.
- Formulating and implementing policies, strategies, plans, programmes and schemes in relation to the cane industry.
- Promoting and facilitating the sustainable development of the cane cluster in Mauritius and in the region.
- Monitoring and coordinating the activities of the cane industry, including planting, milling, processing, transport, bulk handling and marketing.

The assets and funds of every former SPI have been vested in the Authority and all rights, obligations and liabilities subsisting in favour of or against a former SPI continued to exist under the same terms and conditions in favour or against the Authority. Consequently, the Authority has incorporated in its financial statements all the assets, liabilities and funds of the ex-SPIs which were reclassified and consolidated. Depreciation policies have been standardised to achieve consistency and uniformity in reporting.

**2 REPORTING DATE AND COMPARATIVES**

The financial statements cover a period of 12 months ending 30 June 2019 and are presented in accordance with International Public Sector Accounting Standards (IPSASs)

The Authority applied IPSASs for the first time in the financial year ending 30 June 2018 and elected to not prepare comparative information. An opening accrual basis statement of financial position at 1 July 2017 was prepared and presented. As a first-time adopter, the Authority also elected not to adopt the Three Year Transitional Relief.

**3 REPORTING CURRENCY**

The financial statements of the Authority are presented in Mauritian rupees (MUR).

**4 MEASUREMENT BASE**

As from financial year ending 30 June 2018, the Authority adopted International Public Sector Accounting Standards (IPSASs), issued by the International Public Sector Accounting Standards Board (IPSASB) which is a Board of the International Federation of Accountants (IFAC), as appropriate for the measurement and reporting of the financial position and financial performance on an accrual basis.

## NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

### 5 ADOPTION OF IPSASs

#### 5.1 Non-application of IPSASs

Certain new standards, amendments and interpretations to existing standards have been published that are mandatory for the accounting periods beginning after 1 July 2019 or later periods but which have not been early adopted. These new standards, amendments and interpretations are either not relevant to the MCIA's operations or are not expected to have a material effect on the accounting policies and disclosures.

5.2 Below is a list of amendments to IPSASs issued in July 2019 which are mandatorily effective for annual financial statements covering periods beginning on or after 1 January 2020 but which allow early application.

- IPSAS 5 Borrowing Costs
- IPSAS 13 Leases
- IPSAS 17 Property, Plant, and Equipment
- IPSAS 21 Impairment of Non- Cash-Generating Assets
- IPSAS 26 Impairment of Cash-Generating Assets
- IPSAS 30 Financial instruments: Disclosures
- IPSAS 33 First-time Adoption of Accrual Basis International Public Sector Accounting Standards
- IPSAS 40 Public Sector Combinations

#### 5.3 Use of estimates and judgement

Where relevant, the Authority is still evaluating the effect of these Standards, amendments to published Standards and Interpretations issued but not yet effective, on the presentation of its financial statements. The preparation of financial statements in conformity with the International Public Sector Accounting Standards requires the use of certain critical accounting estimates. It also requires management to exercise its judgement in the process of applying the Authority's accounting policies. The areas involving a higher degree of judgement or complexity, or areas where estimates and assumptions are significant to the financial statements are disclosed in **note 8**.

### 6 SIGNIFICANT ACCOUNTING POLICIES

The principal accounting policies adopted in the preparation of these financial statements are set out below.

#### 6.1 Basis of preparation

The financial statements have been prepared on the historical cost basis except for non current assets and financial instruments that are measured at revalued amounts or fair values at the end of each reporting date.

#### 6.2 Statement of Compliance

The financial statements have been prepared in accordance with International Public Sector Accounting Standards (IPSASs). Where an IPSAS does not address a particular issue, the appropriate International Financial Reporting Standards (IFRSs) and International Accounting Standards (IASs) issued by the International Accounting Standards Board (IASB) are applied.

#### 6.3 Property, plant and equipment

Assets, liabilities and funds of all ex-SPIs have been vested into the MCIA at the commencement of the MCIA Act 2011 and transferred at their book values. Assets and liabilities of BSSD Co. Ltd have been transferred at their book values at 01 January 2015.

Non-current assets are stated at their revalued amount, based on periodic valuations, by external independent valuers, less subsequent depreciation for buildings. Any accumulated depreciation at the date of revaluation is eliminated against the gross carrying amount of the asset and the net amount is restated to the revalued amount of the asset.

All property, plant and equipment transferred are stated at their carrying amount. Historical cost includes expenditure that is directly attributable to the acquisition of the items.

Subsequent to initial recognition, property, plant and equipment are measured at fair value. Gains and losses arising from changes in the fair value of property, plant and equipment are included in equity in the period in which they arise.



**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**

Subsequent costs are included in the assets carrying amount or recognised as a separate asset as appropriate, only when it is probable that future economic benefits associated with the item will flow to the Authority and the cost of the item can be measured reliably.

Increases in the carrying amount arising on revaluation are credited to revaluation reserve. Decreases that offset previous increases of the same asset are charged against the revaluation reserve; all other decreases are charged to the statement of financial performance.

Each period the difference between depreciation based on the revalued carrying amount of the asset charged to the statement of financial performance and depreciation based on the asset's original cost is transferred from revaluation reserve to accumulated surplus/(deficit).

Depreciation is calculated on the straight line method to write off the cost or revalued amounts of the assets to their residual values over their estimated useful lives as follows:

	Annual rate
Buildings	2% - 20%
Plant, Machinery and Motor Vehicles	2.85% - 100%
Fixtures, Furniture and Fittings & Office Equipment	3.33% - 100%
Computer & Associated Equipment	6.67% - 50%
Laboratory Equipment	16.67% - 100%

Land is not depreciated.

Tractors are depreciated based on the number of effective hours. Tools are written off in the year of purchase.

Full provision for depreciation is made in the year of purchase and nil in the year of disposal.

The assets' residual values and useful lives are reviewed and adjusted if appropriate, at the end of each reporting period.

Where the carrying amount of an asset is greater than its estimated recoverable amount, it is written down immediately to its recoverable amount.

Gains and losses on disposal of plant and equipment are determined by comparing proceeds with carrying amount and are included in the statement of financial performance.

**6.4 Investment property**

Investment property, which is building held to earn rentals and not occupied by the Authority, is carried at cost less impairment losses. Depreciation is calculated at 5% of the cost of the building. Subsequent to initial recognition, investment property is measured at fair value. Gains and losses arising from changes in the fair value of investment property are included in equity in the period in which they arise.

**6.5 Intangible assets**
**Computer Software**

Acquired computer software licences are capitalised on the basis of costs incurred to acquire and bring to use the specific software and are amortised using the straight line method over their estimated useful lives. Subsequent to initial recognition, computer software are measured at fair value. Gains and losses arising from changes in the fair value of computer software are included in equity in the period in which they arise.

Costs associated with maintaining computer software are recognised as an expense as incurred.

**6.6 Inventories**

Inventories are valued at the lower of cost and net realisable value.

## NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

## 6.7 Financial instruments

### 6.7.1 Financial assets

The Authority classifies its financial assets as loans and receivables and available-for-sale financial assets. Management determines the classification of its financial assets at initial recognition.

#### (i) Loans and receivables

Loans and receivables are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. They arise when the Authority provides money, goods or services directly to a debtor with no intention of trading the receivable. They are included in current assets when maturity is within twelve months after the end of the reporting period or non-current assets for maturities greater than twelve months.

#### (ii) Available-for-sale financial assets

Available for sale financial assets are non-derivatives that are either designated in this category or not classified in any of the other categories. They are included in non-current assets unless Management intends to dispose of the investment within twelve months of the end of the reporting period.

Purchases and sales of financial assets are recognised on trade-date, the date on which the Authority commits to purchase or sell the asset. Investments are initially measured at fair value plus transaction costs for all financial assets.

Financial assets are derecognised when the rights to receive cash flows from the investments have expired or have been transferred and the Authority has transferred substantially all risks and rewards of ownership.

Available-for-sale financial assets are subsequently carried at cost.

Investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured are measured at cost.

The Authority assesses at the end of each reporting period whether there is objective evidence that a financial asset or a group of financial assets is impaired. In the case of financial assets classified as available-for-sale, a significant or prolonged decline in the fair value of the security below its cost is considered in determining whether the securities are impaired.

If any such evidence exists for available-for-sale financial assets, the cumulative loss, measured as the difference between acquisition cost and the current fair value, less any impairment loss on that financial asset previously recognised is removed from equity and recognised in the statement of financial performance

#### (iii) Long term receivables

Long term receivables with fixed maturity terms are measured at amortised cost using the effective interest rate method, less provision for impairment. The carrying amount of the asset is reduced by the difference between the asset's carrying amount and the present value of estimated cash flows discounted using the effective interest rate. The amount of loss is recognised in the statement of financial performance. Long term receivables without fixed maturity terms are measured at cost. If there is objective evidence that an impairment loss has been incurred, the amount of impairment loss is measured as the difference between the carrying amount of the asset and the present value of estimated cash flows discounted at the current market rate of return of similar financial assets.



**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**
**(iv) Other receivables**

Other receivables are recognised initially at fair value and subsequently measured at amortised cost using the effective interest method, less provision for impairment. A provision for impairment of other receivables is established when there is objective evidence that the Authority will not be able to collect all amounts due according to the original terms of receivables.

The amount of the provision is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the effective interest rate. The amount of provision is recognised in the statement of financial performance.

**6.7.2 Financial liabilities**

Financial liabilities are classified as borrowings, payables and other financial liabilities.

**(i) Borrowings**

Borrowings are recognised initially at fair value being their issue proceeds net of transaction costs incurred.

Borrowings, except bank overdraft, are classified as current liabilities unless the Authority has an unconditional right to defer settlement of the liability for at least twelve months after reporting date.

**(ii) Other payables**

Other payables are stated at their fair value and subsequently measured at amortised cost using the effective interest method.

**(iii) Other Financial Liabilities**

They are recognised at fair value, net of any assets provided as guarantee to the financial institution issuing the loans.

Other financial liabilities are offset with financial assets to the extent that the liabilities and the assets are linked. Full disclosures of the gross amount used in the offsetting model are made below (**note 20**).

**6.7.3 Cash and Cash Equivalents**

Cash and cash equivalents include cash in hand, cash at bank, bank overdrafts and deposits.

**6.7.4 Retirement benefit obligations**
**(i) Defined benefit plans**

A defined benefit plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation.

The Authority contributes to a defined benefit plan for its employees. The cost of providing benefits is determined and the regular cost is spread over the service lives of employees in accordance with the advice of qualified actuaries who carry out a full valuation of plans every year using the Projected Unit Method.

The retirement benefit obligation recognised in the statement of financial position represents the present value of the defined benefit obligation as adjusted for unrecognised actuarial gains and losses and unrecognised past service cost, and as reduced by the fair value of plan assets.



NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

(ii) **Defined contribution plans**

A defined contribution plan is a pension plan that defines an amount of pension benefit that an employee will receive on retirement, dependent on the amount of contribution by the employee and the employer made to the plan.

A defined contribution plan is implemented for new entrants in the Authority after 1 January 2013 as recommended in the PRB report 2013.

(iii) **Gratuity on retirement**

For employees who are not covered by the above pension plan, the net present value of gratuity on retirement payable is calculated by qualified actuaries and provided for. The obligations arising under this item are not funded.

**6.8 Impairment of assets**

At each reporting date, the Authority reviews the carrying amounts of its assets to determine whether there is any indication that those assets have suffered an impairment loss. An impairment loss is recognised for the amount by which the carrying amount of the asset exceeds its recoverable amount. The recoverable amount is the higher of an asset's fair value less costs to sell and value in use. For the purposes of assessing impairment, assets are grouped at the lowest levels for which there are separately identifiable cash flows (cash-generating units).

**6.9 Revenue recognition**

Revenue is measured at the fair value of the consideration received or receivable.

Revenues earned by the Authority are recognised on the following bases:

(i) **Revenue from Non - Exchange Transactions**

- Cess - Cess on sugar proceeds, receivable from the Mauritius Sugar Syndicate, is accounted for in the same accounting period in which it is received on a financial year basis rather than on crop year basis.
- Capital grant - Capital grant received to finance acquisition of property, plant & equipment is recognised in the period in which it is received.
- Grant - Grant from the Mauritius Sugar Syndicate to finance BSSD expenditure, is accounted for in the same accounting period in which the related expenditure is incurred.
- Levy on sale of sugar - Levy on sale of sugar is recognised when imported & locally produced sugar is delivered for sale on the local market.
- Anchorage dues - Anchorage due from Mauritius Ports Authority is recognised when vessels berth at the Sugar Terminal wharf.
- Berthing dues - Berthing due from Central Electricity Board (CEB) is recognised when vessels berth at Sugar Terminal wharf to upload heavy fuel oil product from Fort Williams depot for CEB in Rodrigues.
- Cane juice application fee - When application is received for the production of cane juice for direct consumption.

(ii) **Revenue from Exchange Transactions**

- Hire of equipment - Upon completion of work at the invoiced value for hire of equipment. No value added tax is charged.
- Interest income - Interest is recognised on a time-proportion basis that takes into account the effective yield on the asset.
- Dividend income - Dividend income is recognised when the Authority's right to receive payment is established.
- Royalties - Royalty is recognised as they are earned in accordance with the substance of the relevant agreement.
- Sales of cane - Sale of cane is recognised when goods are delivered and title has passed.
- Cash advance to and contribution from planters - Cash advance is recognised when it is probable that economic benefits will flow to the Authority.

**6.10 Provisions**

Provisions are recognised when the Authority has a present or constructive obligation as a result of past events and when it is probable that an outflow of resources that can be reliably estimated will be required to settle the obligation.

**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**
**7 FINANCIAL RISK MANAGEMENT**
**7.1 Financial Risk Factors**

The Authority's activities expose it to a variety of financial risks.

**7.1.1 Market risk**
**(i) Currency risk**

The Authority has limited exposure in respect of foreign currency risk.

**(ii) Price risk**

The Authority holds an investment of only MUR 548 300 ( at fair value on 30 June 2019) in equities and no investment in bonds or other securities. Accordingly, it has minimal exposure to price risk.

**(iii) Credit risk**

The Authority has limited concentration of credit risk in relation to car loans, and has policies in place requiring loan refund to be deducted directly from employees' salary. A '*gage sans déplacement*' is created in favour of the Authority on vehicles acquired through MCIA loans.

Credit risk associated with advances made to planters under the FORIP Scheme is, however, more significant. Despite cash advance to planters is subject to contractual obligations, the recoverability is highly dependent on government policy. Decision to enforce repayment rests upon the Ministry of Agro-Industry and Food Security.

**(iv) Liquidity risk**

The Authority manages its liquidity risk by maintaining sufficient cash and also by ensuring the availability of funds through committed credit facilities.

The table below analyses the Authority's financial liabilities into relevant maturity groupings based on the remaining period at the end of the reporting period to the contractual maturity date.

	Due within 12 months	Due after 1 year	Total
	MUR	MUR	MUR
<b>At 30 June 2019</b>			
Borrowings	1,362,302	15,442,804	16,805,106
Trade Payables	479,892,805	2,139,980	482,032,785
	<u>481,255,107</u>	<u>17,582,784</u>	<u>498,837,891</u>
	MUR	MUR	MUR
<b>At 30 June 2018</b>			
Borrowings	1,364,587	16,833,674	18,198,261
Trade Payables	13,996,459	12,695,812	26,692,271
	<u>15,361,046</u>	<u>29,529,486</u>	<u>44,890,532</u>

**(v) Cash flow and fair value interest rate risk**

As the Authority has no investment in significant interest-bearing assets, the Authority's income and operating cash flows are substantially independent of changes in market interest rates.



## NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

### 7.2 Fair value estimation

The nominal value less estimated credit adjustments of other receivables and payables are assumed to approximate their fair values.

### 7.3 Capital risk management

The Authority manages its capital to ensure that it will be able to continue as a going concern. Its overall strategy remained unchanged from 30 June 2018. The capital structure of the Authority consists of accumulated surplus/(deficit), revaluation reserve and other reserves.

## 8 CRITICAL ACCOUNTING ESTIMATES AND JUDGEMENTS

Estimates and judgements are continuously evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

### 8.1 Critical accounting estimates and assumptions

The Authority makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below.

### 8.2 Impairment of available-for-sale financial assets

The Authority follows the guidance of IPSAS 26 on determining when an investment is other-than-temporarily impaired. This determination requires significant judgement. In making this judgement, the Authority evaluates, among other factors, the duration and extent to which the fair value of an investment is less than its cost, and the financial health of and near-term business outlook for the investee, including factors such as industry and sector performance, changes in technology and operational and financing cash flow.

### 8.3 Pension benefits

The present value of the pension obligations depend on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for pensions include the discount rate. Any changes in these assumptions will impact the carrying amount of pension obligations.

The Authority determines the appropriate discount rate at the end of each year. This is the interest rate that should be used to determine the present value of estimated future cash outflows expected to be required to settle the pension obligations. In determining the appropriate discount rate, the Authority considers the interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating the terms of the related pension obligation.

### 8.4 Revaluation of property, plant and equipment

The Authority measures property, plant and equipment, investment property and intangible assets at revalued amounts with changes in fair value being recognised in equity. Independent valuation specialists were engaged to determine fair values.

## NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

### 8.5 Asset lives and residual values

Property, plant and equipment are depreciated over its useful life taking into account residual values, where appropriate. The actual lives of the assets and residual values are assessed annually and may vary depending on a number of factors in reassessing asset lives, factors such as technological innovation, product life cycles and maintenance programmes are taken into account. Residual value assessments consider issues such as future market conditions, the remaining life of the asset and projected disposal values. Consideration is also given to the extent of current profits and losses on the disposal of similar assets.

### 8.6 Depreciation policies

Property, plant and equipment are depreciated to their residual values over their estimated useful lives. The residual value of an asset is the estimated net amount that the Authority would currently obtain from disposal of the asset, if the asset was already of the age and in condition expected at the end of its useful life.

The directors therefore make estimates based on historical experience and use best judgement to assess the useful lives of assets and to forecast the expected residual values of the assets at the end of their expected useful lives.

## 9 CASH AND CASH EQUIVALENTS

	30 Jun 2019 MUR	30 Jun 2018 MUR
- Deposits with MSS	-	379,200,000
- Bank account with SBM Ltd- FORIP Account	171,889,470	210,164,913
	<b>171,889,470</b>	<b>589,364,913</b>
- Bank account with Maubank	988	1,788
- Bank account with SBM Ltd- Main Account	524,893,548	74,657,239
	<b>696,784,006</b>	<b>664,023,940</b>
- Other bank balances	87,273,601	80,587,935
- Cash	142,516	126,228
	<b>784,200,123</b>	<b>744,738,103</b>

The effective rate of interest on bank overdrafts at the reporting date is 9.75 %.

## 10 TRADE RECEIVABLE

10.1

	30 Jun 2019 MUR	30 Jun 2018 MUR
Receivables - Exchange transactions	264,339,628	253,204,763
Receivables - Non-exchange transactions	56,666,080	5,150,104
	<b>321,005,708</b>	<b>258,354,867</b>
<i>analysed as follows:</i>		
	MUR	MUR
Current		
Exchange transactions	258,942,182	30,442,745
Non - exchange transactions	36,076,150	5,150,104
	<b>295,018,332</b>	<b>35,592,849</b>
Non Current		
Exchange transactions	5,397,446	222,762,018
Non - exchange transactions	20,589,930	-
	<b>25,987,376</b>	<b>222,762,018</b>
<b>TOTAL</b>	<b>321,005,708</b>	<b>258,354,867</b>



## NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

10.2 Receivables consist of:	MUR	MUR
Cash advance to planters	-	207,037,932
Planters - Hire of tractors	22,070,767	16,373,273
Planters funds	23,589,930	14,589,930
MSS - Levy on sale of sugar	33,076,150	5,150,104
Analytical & Agronomic Services	6,042,842	5,622,180
Air Pollution Monitoring Unit	2,076,000	1,089,500
Rodrigues Assembly	102,732	437,849
Ministry of Agro-Industry - Sugar Cane Sustainability	163,000,000	1,399,089
Ministry of Agro-Industry - ALMS	11,892,800	-
Ministry of Agro-Industry - Sequencer and Genetic Analyser	4,167,600	-
Planters - Fertilizers Scheme - Crop 2019	51,345,283	-
University of Mauritius	1,230,400	-
Platinum Farms Ltd	120,000	-
MCAF	190,712	-
Blychem	146,400	-
MSIRI Support Staff	604,794	-
MPA, CEB and Others	1,151,780	-
WIKWIO	-	77,967
Interest & Dividend	-	2,415,664
Others	197,518	4,161,379
	<b>321,005,708</b>	<b>258,354,867</b>

10.3 The carrying amount of receivables approximate their fair value. Receivables do not contain impaired assets. The maximum exposure to credit risk at the reporting date is the fair value of each class of receivable mentioned above.

10.4 Receivable-non exchange transactions comprises of amount due by MSS with respect to levy on sale of sugar.

11 LOANS RECEIVABLE	30 Jun 2019 MUR	30 Jun 2018 MUR
11.1 Staff loans		
Car loan	41,836,414	42,785,926
Motorcycle loan	1,951,861	2,522,262
Personal loan	166,200	113,300
	<b>43,954,475</b>	<b>45,421,488</b>
<i>analysed as follows:</i>	MUR	MUR
- Current	11,199,997	10,924,711
- Non-current	32,754,478	34,496,777
	<b>43,954,475</b>	<b>45,421,488</b>

11.2 Movement in Staff Loans	Car Loan MUR	Motorcycle Loan MUR	Personal Loan MUR	TOTAL MUR
Opening balance	42,785,926	2,522,262	113,300	45,421,488
New loan	13,988,210	217,168	553,400	14,758,778
Amount Written Off	-	(150,511)	-	(150,511)
Repayment	(14,937,722)	(637,058)	(500,500)	(16,075,280)
Closing balance	<b>41,836,414</b>	<b>1,951,861</b>	<b>166,200</b>	<b>43,954,475</b>



**THE MAURITIUS CANE INDUSTRY AUTHORITY**

17

**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**

- 11.3** Car loans are issued to employees at concessionary rates of 4% to 8% interest per annum and are refundable over a period of five to seven years. Personal loans are interest free.

A 'gage sans déplacement' is created in favour of the Authority on vehicles acquired.

The effective rate of interest on bank overdrafts at the reporting date is 9.75%.

**12 INVENTORIES**

	<u>30 Jun 2019</u>	<u>30 Jun 2018</u>
	MUR	MUR
Cost of spare parts and consumables		
SSHU	26,478,717	28,892,059
AMU	25,129,687	22,597,992
MSIRI	192,095	458,756
	<u>51,800,499</u>	<u>51,948,807</u>

Inventories are valued at the lower of cost and net realisable value.

Net realisable value is estimated to approximate cost of inventories.

The recoverable amount of some items of inventories is estimated to be less than their carrying amount. Impairment loss is debited to the statement of financial performance.

**13 INVESTMENT IN FINANCIAL ASSETS**

Investment represents .

- 74,000 shares in Sugar Investment Trust
- 85 000 ordinary shares in SBM Ltd

**Fair Value**

	<u>30 Jun 2019</u>	<u>30 Jun 2018</u>
	MUR	MUR
SIT	74,000	74,000
SBM Ltd	474,300	618,800
	<u>548,300</u>	<u>692,800</u>

**Cost**

Available-for-sale financial assets  
At 30 June 2019

<u>222,750</u>	<u>222,750</u>
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**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**FOR THE YEAR ENDED 30 JUNE 2019**

**14 PROPERTY, PLANT AND EQUIPMENT**

14.1

	LAND & BUILDINGS	PLANT, MACHINERY & VEHICLES	FFF & OFFICE EQUIPMENT	COMPUTER & ASSOCIATED EQUIPMENT	LABORATORY EQUIPMENT	TOTAL
	MUR	MUR	MUR	MUR	MUR	MUR
<b>COST OR VALUATION</b>						
As at 01 July 2018	1,933,698,500	727,692,749	7,507,922	7,092,733	15,570,895	2,691,562,799
Adjustment	-	-	-	-	-	-
Additions	329,000	5,756,679	681,829	824,115	6,037,270	13,628,893
Disposal	-	(14,893,000)	-	(48,530)	-	(14,941,530)
<b>As at 30 June 2019</b>	<b>1,934,027,500</b>	<b>718,556,428</b>	<b>8,189,751</b>	<b>7,868,318</b>	<b>21,608,165</b>	<b>2,690,250,162</b>
<b>DEPRECIATION</b>						
As at 01 July 2018	202,438,001	227,201,382	4,444,128	4,385,307	12,505,191	450,974,009
Charge for the Year	57,845,279	57,853,409	1,272,423	1,315,689	3,554,305	121,841,105
Disposal	-	(7,209,410)	-	(12,133)	-	(7,221,543)
<b>As at 30 June 2019</b>	<b>260,283,280</b>	<b>277,845,381</b>	<b>5,716,551</b>	<b>5,688,863</b>	<b>16,059,496</b>	<b>565,593,571</b>
<b>NET BOOK VALUE</b>						
As at 30 June 2019	1,673,744,220	440,711,046	2,473,200	2,179,455	5,548,670	2,124,656,591
As at 30 June 2018	1,731,260,499	500,491,366	3,063,795	2,707,426	3,065,705	2,240,588,790

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**NOTES TO THE FINANCIAL STATEMENTS**

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**YEAR ENDED 30 JUNE 2019**

- 14.2** Property, plant and equipment, investment property and intangible assets of the Authority have been revalued at 31 December 2014 by BDO & Co. , Chartered Accountants. BDO & Co. hired the services of Mr. Vyas S. Ramphul, MRICS, Chartered Valuation Surveyor at Broll Indian Ocean.
- The income capitalisation approach has been used as basis for valuing investment property, sales comparison approach and depreciated replacement cost basis for land and buildings and for plant, machinery and motor vehicles.

The revaluation surplus was credited to revaluation reserve.

- 14.3** If the property, plant and equipment were stated on a historical cost basis, the amounts would be as follows:

	<b>30 Jun 2019</b>	<b>30 Jun 2018</b>
	<b>MUR</b>	<b>MUR</b>
Cost	<b>1,520,262,642</b>	1,555,189,311
Accumulated depreciation	<b>(1,246,345,293)</b>	(1,245,833,892)
Net book value	<b>273,917,349</b>	309,355,419

**15 INVESTMENT PROPERTY**

	<b>30 Jun 2019</b>	<b>30 Jun 2018</b>
	<b>MUR</b>	<b>MUR</b>
<b>15.1 COST OR VALUATION</b>		
<b>As at 01 July 2018 &amp; 30 June 2019</b>	<b>8,800,000</b>	8,800,000
<b>DEPRECIATION</b>		
<b>As at 01 July 2018</b>	<b>1,540,000</b>	1,100,000
Charge for the year	<b>440,000</b>	440,000
<b>As at 30 June 2019</b>	<b>1,980,000</b>	1,540,000
<b>NET BOOK VALUE</b>		
<b>As at 30 June 2019</b>	<b>6,820,000</b>	7,260,000

If the investment property was stated on a historical cost basis, the amounts would be as follows:

	<b>30 Jun 2019</b>	<b>30 Jun 2018</b>
	<b>MUR</b>	<b>MUR</b>
Cost	<b>1,561,251</b>	1,561,251
Accumulated depreciation	<b>(1,186,552)</b>	(1,155,327)
Net book value	<b>374,699</b>	405,924

- 15.2** The following have been recognised in the statement of financial performance:

	<b>30 Jun 2019</b>	<b>30 Jun 2018</b>
	<b>MUR</b>	<b>MUR</b>
Rental income	<b>300,000</b>	300,000
Direct operating expenses arising from investment property that generates rental income	<b>32,182</b>	17,330



YEAR ENDED 30 JUNE 2019

16 INTANGIBLE ASSETS	30 Jun 2019	30 Jun 2018
	MUR	MUR
<u>Computer software</u>		
COST OR VALUATION		
As at 01 July 2018	4,972,175	4,056,345
Additions	1,210,600	915,830
As at 30 June 2019	6,182,775	4,972,175
DEPRECIATION		
As at 01 July 2018	2,847,157	1,876,538
Charge for the year	1,028,481	970,619
As at 30 June 2019	3,875,638	2,847,157
NET BOOK VALUES		
As at 30 June 2019	2,307,137	2,125,018

If the intangible assets were stated on a historical cost basis, the amounts would be as follows:

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Cost	14,201,389	12,990,789
Accumulated depreciation	(12,338,829)	(11,697,033)
Net book value	1,862,560	1,293,756
17 TRADE PAYABLES		
	30 Jun 2019	30 Jun 2018
	MUR	MUR
17.1 Payables	482,032,785	26,692,271
17.2 analysed as follows:		
	MUR	MUR
- Current	479,892,805	13,996,459
- Non-current	2,139,980	12,695,812
	482,032,785	26,692,271
17.3	MUR	MUR
Rose Belle	1,567,580	1,327,580
Ex- dockers pensioners	5,189,565	5,746,726
Planters	11,842,248	4,929,106
Mauritius Revenue Authority	897,640	900,361
Scomat Ltee	1,761,632	12,101
University of Mauritius	722,400	722,400
National Pension Fund	409,633	400,970
MSS - Sugar Cane Sustainability Fund	436,288,787	-
Vivo Energy & Total Ltd	3,714,451	-
Excavator Bucket	342,792	-
CEB , CWA and MT	981,676	-
Drone Expert Services Ltd	1,629,504	-
MCIA Employees	2,075,436	-
AWL Trading	86,250	198,375
RSL Security Services	2,641,502	1,145,343
National Audit Office	900,000	900,000
Feber Associates	109,250	100,625
Ministry of Agro-Industry	7,000,000	7,000,000
Others	3,872,439	3,308,684
	482,032,785	26,692,271



**THE MAURITIUS CANE INDUSTRY AUTHORITY**

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**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**
**18 BORROWINGS**

	30 Jun 2019	30 Jun 2018
	MUR	MUR
<b>Loans</b>		
- EDF loan	16,699,850	18,066,691
- Australian aid loan	105,256	131,570
	<u>16,805,106</u>	<u>18,198,261</u>
<b>Repayable as follows:</b>		
- Within one year	1,362,302	1,364,587
- Within two to five years	5,422,895	5,458,348
- After five years	10,019,909	11,375,326
	<u>16,805,106</u>	<u>18,198,261</u>
<b>analysed as follows:</b>		
- Current	1,362,302	1,364,587
- Non-current	15,442,804	16,833,674
	<u>16,805,106</u>	<u>18,198,261</u>

Loans are unsecured and repayable by annual instalments. The rate of interest ranges from 1 to 4 %.

The carrying amount of borrowings are not materially different from their fair value.

EDF loan is denominated in Euro and is translated at closing rate.

Exchange gain of MUR 50,720 is recognised on translation of the EDF loan.

## 19 PROVISIONS

Provisions are recognised when the Authority has a present legal or constructive obligation as a result of past events, it is probable that an outflow of resources will be required to settle the obligation, and a reliable estimate of the amount can be made.

Provisions are reviewed at each reporting date and are adjusted to reflect the current best estimate.

Employees entitlement to bank of sick leave and vacation leave as defined in the PRB 2013 Report are recognised as and when they accrue to employees. An accrual is made for the estimated liability for bank of sick leave and vacation leave.

All provisions made are present obligations of uncertain timing or amount.

Movement in provisions is shown below.

	Sick Leave	Passage Benefit	Vacation Leave	Rental & Other Services	Legal Cost	TOTAL
	MUR	MUR	MUR	MUR	MUR	MUR
Balance as at 01 July 2018	80,105,802	21,350,456	77,143,246	2,760,000	1,150,000	182,509,504
Earned	14,019,648	10,642,894	8,869,108	-	-	33,531,650
Increased / (Decreased)	(212,260)	577,171	1,968,639	1,032,817	125,000	3,491,367
Paid	(12,279,030)	(10,197,131)	(4,123,251)	(1,142,817)	(125,000)	(27,867,229)
Balance as at 30 June 2019	81,634,160	22,373,390	83,857,742	2,650,000	1,150,000	191,665,292

analysed as follows:

	MUR	MUR	MUR	MUR	MUR	MUR
Current	10,800,000	10,200,000	4,200,000	1,200,000	100,000	26,500,000
Non-Current	70,834,160	12,173,390	79,657,742	1,450,000	1,050,000	165,165,292
	81,634,160	22,373,390	83,857,742	2,650,000	1,150,000	191,665,292

Current Liabilities		MUR
Employee benefit provision		25,200,000
Others		1,300,000
Non-Current Liabilities		
Employee benefit provision		162,665,292
Others		2,500,000
		191,665,292

**THE MAURITIUS CANE INDUSTRY AUTHORITY**

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**NOTES TO THE FINANCIAL STATEMENTS**
**YEAR ENDED 30 JUNE 2019**
**20 FINANCIAL LIABILITIES**

Under the Small Planters Efficiency Scheme ( SPES ), ex-MSA signed an agreement with Development Bank of Mauritius Ltd (DBM Ltd) in May 1991. Ex-MSA guaranteed DBM Ltd the repayment of loans granted to planters under the SPES . For that purpose, a savings account is held by ex-MSA with DBM Ltd.

Ex-MSA guaranteed DBM Ltd the repayment of all instalments of principal and interests of any loans granted by DBM Ltd from its own funds, remaining unpaid together with legal costs and other charges for recovery, if any. There exists a right of set off between the savings account and the loans granted by DBM Ltd under the SPES.

At its Board meeting held on 03 August 2018, the Board of DBM Ltd ruled that the total liabilities on the loan accounts falling under SPES be offset against the Guarantee Fund as per the clause of the agreement.

The financial asset is offset with the financial liabilities.

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Gross financial liabilities	-	30,864,167
Financial assets set-off	-	(28,988,116)
Net financial liabilities	-	1,876,051

**21 RETIREMENT BENEFITS OBLIGATIONS**
**21 A 30 JUNE 2019 - DEFINED BENEFIT PENSION SCHEME**

- 21 A.1** (i) The Authority operates a defined benefit pension scheme. The scheme is a final salary scheme which provides benefits to employees in the form of a guaranteed pension payable for life. The level of pensions depends on the employees' length of service and their salary at the date of retirement.
- (ii) IPSAS 39 figures are computed by qualified actuaries - Feber Associates Limited for MSRI pension liabilities and SICOM Ltd for the other ex-Service Providing Institutions.
- (iii) IPSAS 39 *employee benefits* requires estimating the amount of liability that the employer has to recognise in its financial statements with respect to employees who are going to retire at normal retirement age.

Under IPSAS 39, liabilities refer to the liability of the employer at the reporting date, in respect of retirement benefit obligations. They represent estimates of the future stream of retirement benefit obligations which have been discounted to its present value.

The fair value of plan assets represents the value at the reporting date of the investment fund that shall be used to cover the liabilities as and when they become due.

- (iv) The three components of the defined benefit plan are accounted as follows:
- Service cost and net interest components accounted for in the statement of financial performance. Service cost component includes current and past service costs and net interest component relates to the change in measurement in both the plan obligation and plan assets arising from the passage of time.
  - The remeasurement component which comprises actuarial gains and losses made on obligations and the difference between the actual investment return and the expected return on assets during the reporting period. Remeasurements are accounted for in net assets/equity.
  - Plan obligations and plan assets reported in the statement of financial position.



21 A.2 Amounts recognised in statement of financial position

	MSIRI 30 Jun 2019 MUR	OTHER SPIs 30 Jun 2019 MUR	TOTAL 30 Jun 2019 MUR
Defined benefit obligation	598,544,102	1,017,337,844	1,615,881,946
Fair value of plan assets	(487,431,211)	(270,305,053)	(757,736,264)
	<u>111,112,891</u>	<u>747,032,791</u>	<u>858,145,682</u>

21 A.3 Amounts recognised in statement of financial performance

<b>Service cost:</b>			
Current service cost	8,796,271	26,640,093	35,436,364
Past service cost	-	-	-
Employee contributions	(4,187,186)	(6,803,665)	(10,990,851)
Other contributions - redeployed members	-	(54,384)	(54,384)
Fund Expenses	1,103,240	448,296	1,551,536
Net Interest expense/(revenue)	7,668,662	41,942,023	49,610,685
<b>Charge to statement of financial performance (Note 21 A.7)</b>	<u>13,380,987</u>	<u>62,172,363</u>	<u>75,553,350</u>
<b>Remeasurement:</b>			
Liability (gain)/loss	(45,374,142)	26,084,245	(19,289,897)
Assets (gain)/loss	26,777,363	4,248,806	31,026,169
<b>Remeasurement recognised in net assets/equity</b>	<u>(18,596,779)</u>	<u>30,333,051</u>	<u>11,736,272</u>
<b>Total</b>	<u>(5,215,792)</u>	<u>92,505,414</u>	<u>87,289,622</u>

21 A.4 Movements in liability recognised in statement of financial position

At start of period			
- As previously reported	132,940,501	669,790,241	802,730,742
- Effect of restatement	-	-	-
- As restated	132,940,501	669,790,241	802,730,742
Amount recognised in statement of financial performance	13,380,987	62,172,363	75,553,350
Actuarial reserves transferred in	-	-	-
Employer contributions and direct benefits	(16,611,818)	(15,154,000)	(31,765,818)
Other contributions - redeployed members	-	(108,864)	(108,864)
Amount recognised in net assets/equity	(18,596,779)	30,333,051	11,736,272
Effect of curtailment	-	-	-
At end of period	<u>111,112,891</u>	<u>747,032,791</u>	<u>858,145,682</u>

21 A.5 Reconciliation of the present value of defined benefit obligations

Present value of obligation at start of period	628,274,712	963,104,562	1,591,379,274
Restatement	-	-	-
Current service cost	9,899,511	26,640,093	36,539,604
Interest cost	38,299,192	58,749,378	97,048,570
Benefits paid	(31,451,931)	(57,240,434)	(88,692,365)
Fund Expenses & Life Insurance	(1,103,240)	-	(1,103,240)
Effect of curtailment	-	-	-
Expected present value of obligation at end of period	643,918,244	991,253,599	1,635,171,843
Liability (gain)/loss	(45,374,142)	26,084,245	(19,289,897)
Actual present value of obligation at end of period	<u>598,544,102</u>	<u>1,017,337,844</u>	<u>1,615,881,946</u>



THE MAURITIUS CANE INDUSTRY AUTHORITY

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NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2019

21 A.6 Reconciliation of fair value of plan assets

Fair value of plan assets at start of period	495,334,211	293,314,321	788,648,532
Restatement	-	-	-
Expected return on plan assets	30,630,530	16,807,355	47,437,885
Employer contributions	20,799,004	15,097,450	35,896,454
Employee Contributions	-	6,803,665	6,803,665
Other employer contributions - redeployed members	-	108,864	108,864
Other employee contributions - redeployed members	-	54,384	54,384
Funds Expenses & Life Insurance	(1,103,240)	-	(1,103,240)
Actuarial Reserves Transferred In	-	-	-
Benefits paid + other outgo	(31,451,931)	(57,632,180)	(89,084,111)
Expected fair value of plan assets at end of period	514,208,574	274,553,859	788,762,433
Asset gain/(loss)	(26,777,363)	(4,248,806)	(31,026,169)
Actual fair value of plan assets at end of period	487,431,211	270,305,053	757,736,264

21 A.7 Amounts recognised in the Statement of financial performance regarding retirement benefits obligations are as follows:

	MUR
<i>Included in Salaries and salary related expenses</i>	
Contribution to MSIRI Pension fund	8,126,012
Contribution to SICOM - MCIA employees	23,583,256
Contribution to SICOM - Ex MSA employee	56,550
Contribution to SICOM - Redeployed employees	108,864
	31,874,682
<i>Other increase in net retirement benefits obligations</i>	43,678,668
<i>Total charge to Statement of financial performance (note 21 A.3)</i>	75,553,350

21 B 30 JUNE 2019 - DEFINED CONTRIBUTION PENSION SCHEME

A Contributory Defined Contribution (DC) Pension Scheme is implemented for new entrants in the public sector after 1 January 2013 as recommended in the PRB report 2013.

Total contributions with respect to employees appointed after 2013 amount to MUR 2,057,649 (MUR 1,593,193 for 2018).

21 C 30 JUNE 2018 - DEFINED BENEFIT PENSION SCHEME

21 C.1 Amounts recognised in statement of financial position

	MSIRI 30 Jun 2018 MUR	OTHER SPIs 30 Jun 2018 MUR	TOTAL 30 Jun 2018 MUR
Defined benefit obligation	628,274,712	963,104,562	1,591,379,274
Fair value of plan assets	(495,334,211)	(293,314,321)	(788,648,532)
	132,940,501	669,790,241	802,730,742

21 C.2 Amounts recognised in statement of financial performance

<b>Service cost:</b>			
Current service cost	9,845,078	26,138,930	35,984,008
Past service cost	-	-	-
Employee contributions	(3,895,181)	(6,750,635)	(10,645,816)
Other contributions - redeployed members	-	(73,732)	(73,732)
Fund Expenses	1,904,488	446,584	2,351,072
Net Interest expense/(revenue)	8,300,608	39,881,611	48,182,219
<b>Charge to statement of financial performance (Note 21 C.6)</b>	16,154,993	59,642,758	75,797,751

<b>Remeasurement:</b>			
Liability (gain)/loss	10,386,291	37,989,463	48,375,754
Assets (gain)/loss	(15,791,363)	(10,218,406)	(26,009,769)
<b>Remeasurement recognised in net assets/equity</b>	<b>(5,405,072)</b>	<b>27,771,057</b>	<b>22,365,985</b>
<b>Total</b>	<b>10,749,921</b>	<b>87,413,815</b>	<b>98,163,736</b>

**21 C.3 Movements in liability recognised in statement of financial position**

At start of period			
- As previously reported	136,816,351	597,489,152	734,305,503
- Effect of restatement	-	-	-
- As restated	136,816,351	597,489,152	734,305,503
Amount recognised in statement of financial performance	16,154,993	59,642,758	75,797,751
Actuarial reserves transferred in	-	-	-
Employer contributions and direct benefits	(14,625,771)	(14,965,168)	(29,590,939)
Other contributions - redeployed members	-	(147,558)	(147,558)
Amount recognised in net assets/equity	(5,405,072)	27,771,057	22,365,985
Effect of curtailment	-	-	-
At end of period	<b>132,940,501</b>	<b>669,790,241</b>	<b>802,730,742</b>

**21 C.4 Reconciliation of the present value of defined benefit obligations**

Present value of obligation at start of period	602,146,900	894,474,059	1,496,620,959
Restatement	-	-	-
Current service cost	11,749,566	26,138,930	37,888,496
Interest cost	38,109,118	58,140,814	96,249,932
Benefits paid	(32,212,675)	(53,638,704)	(85,851,379)
Fund Expenses & Life Insurance	(1,904,488)	-	(1,904,488)
Effect of curtailment	-	-	-
Expected present value of obligation at end of period	617,888,421	925,115,099	1,543,003,520
Liability (gain)/loss	10,386,291	37,989,463	48,375,754
Actual present value of obligation at end of period	<b>628,274,712</b>	<b>963,104,562</b>	<b>1,591,379,274</b>

**21 C.5 Reconciliation of fair value of plan assets**

Fair value of plan assets at start of period	465,330,549	296,984,907	762,315,456
Restatement	-	-	-
Expected return on plan assets	29,808,510	18,259,203	48,067,713
Employer contributions	18,520,952	14,908,618	33,429,570
Employee Contributions	-	6,750,635	6,750,635
Other employer contributions - redeployed members	-	147,558	147,558
Other employee contributions - redeployed members	-	73,732	73,732
Funds Expenses & Life Insurance	(1,904,488)	-	(1,904,488)
Actuarial Reserves Transferred In	-	-	-
Benefits paid + other outgo	(32,212,675)	(54,028,738)	(86,241,413)
Expected fair value of plan assets at end of period	479,542,848	283,095,915	762,638,763
Asset gain/(loss)	15,791,363	10,218,406	26,009,769
Actual fair value of plan assets at end of period	<b>495,334,211</b>	<b>293,314,321</b>	<b>788,648,532</b>



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**YEAR ENDED 30 JUNE 2019**

**21 C.6** Amounts recognised in the Statement of financial performance regarding retirement benefits obligations are as follows:

	MUR
<i>Included in Salaries and salary related expenses</i>	
Contribution to MSIRI Pension fund	6,788,741
Contribution to SICOM - MCIA employees	22,745,648
Contribution to SICOM - Ex MSA employee	56,550
Contribution to SICOM - Redeployed employees	147,558
	<u>29,738,497</u>
<i>Other increase in net retirement benefits obligations</i>	46,059,254
<i>Total charge to Statement of financial performance</i>	<u><u>75,797,751</u></u>

(note 21 C.2)

**22 CONTRIBUTED CAPITAL**

The initial capital of ex-Mauritius Sugar Terminal Corporation is MUR 300M, made up as follows:

	MUR
- Proceeds from cess levied on the sugar crop for years 1974 and 1975	109,440,675
- Interest accrued on amount of cess levied above	17,077,540
- Contribution by Government	173,481,785
	<u><u>300,000,000</u></u>

**23 RECONCILIATION OF ACCUMULATED SURPLUS OR DEFICIT**

	30 Jun 2019 MUR	30 Jun 2018 MUR
<b>23.1 Accumulated Surplus / (Deficit)</b>		
As previously stated at 01 July 2018	(9,384,405)	(714,207,841)
Prior Year Adjustment - Deferred Income	-	61,517,294
Prior Year Adjustment - Earmarked Funds	-	744,994,655
<b>As restated at 01 July 2018</b>	<u>(9,384,405)</u>	<u>92,304,108</u>
Transfer of excess depreciation on revaluation	80,252,831	86,161,843
Deficit for the year	(520,631,633)	(165,398,971)
Actuarial losses on defined benefit pension plans	(11,736,272)	(22,365,985)
Adjustment to opening earmarked funds balance	-	(85,400)
<b>As at 30 June 2019</b>	<u><u>(461,499,479)</u></u>	<u><u>(9,384,405)</u></u>

**23.2 Car and Motorcycle Loans Interest Fund**

Car Loan Fund of MUR 30,417,987 representing money obtained by MSIRI from ex MSA to be used as a revolving fund. As it is no more used for the intended purpose, it has been transferred to Accumulated surplus / (deficit) in 2015.

Car Loan Interest fund of MUR 51,112,351 representing interest earned on car loans to MSIRI officers transferred to Accumulated surplus / (deficit) on 30 June 2017. Henceforth, interests earned on car loans are recognised as income for the year to which they relate.

The fund represents mainly the interest element on car and motorcycle loans to employees.

## 24 RECONCILIATION OF NET ASSETS / EQUITY

	30 Jun 2018 MUR	Movement MUR	30 Jun 2019 MUR
Contributed Capital	300,000,000	-	300,000,000
Accumulated Surplus / (Deficit)	(9,384,405)	(452,115,074)	(461,499,479)
Fair Value Reserve	555,050	(144,500)	410,550
Revaluation Reserve	2,029,258,274	(80,252,831)	1,949,005,443
<b>TOTAL</b>	<b>2,320,428,919</b>	<b>(532,512,405)</b>	<b>1,787,916,514</b>

## 25 CESS AND GRANTS

### 25.1 Cess is levied at the rate of 4% of sugar proceeds at ex MSS price.

Cess money is recognised when there is reasonable assurance that the cess will be received and all attaching conditions will be complied with.

Government grants are received to finance the Authority's operating deficit and all related conditions are fulfilled.

### 25.2 Cess on sugar proceeds

Following the impact of reform in the EU Market, the main export market of the sugar industry, together with the response of the market to surplus supply of sugar, the price of sugar has experienced a substantial decrease. Ex MSS estimated price fell drastically. Ministry of Agro-Industry informed MCIA of the decision to suspend cess for crop year 2017. Grants from the Parent Ministry were received to meet MCIA's operational costs as from January 2018. The decision has been extended to crop year 2018.

### 25.3 Grants

	30 Jun 2019 MUR	30 Jun 2018 MUR
Government of Mauritius - Co-financing	355,000,000	293,400,000
Government of Mauritius - Additional Support to Planters	55,000,000	-
SIFB - Additional Support to Planters	55,000,000	-
MSS - BSSD expenditure grant	81,010,000	95,169,600
MOAFS - Sugar Cane Sustainability grant	439,000,000	138,774,906
MOAFS - Agricultural Land Management System grant	11,892,800	50,000,000
MOAFS - Sugar Planters Regrouping Project grant	57,778,700	130,000,000
MOAFS - Cyclone Berguita grant	-	400,000
MOAFS - Sequencer and Genetic Analyzer	4,167,600	-
MOAFS - Trainee Engineers	696,005	-
MOAFS - Fair Trade Certification Fee	2,868,011	-
Medine - Closure grant	15,000,000	-
	<b>1,077,413,116</b>	<b>707,744,506</b>



**THE MAURITIUS CANE INDUSTRY AUTHORITY**
**NOTES TO THE FINANCIAL STATEMENTS**

29

**YEAR ENDED 30 JUNE 2019**
**26 LEVY ON SALE OF SUGAR**

A contribution of MUR 3.70 per kg of sugar is levied on the sale of imported sugar on the local market to meet pensions payable to ex-dockers from ex-MSTC.

Levy earned during the period:

	30 Jun 2019	30 Jun 2018
	MUR	MUR
- Received	86,104,299	150,789,436
- Receivable	33,076,150	5,150,104
	<u>119,180,449</u>	<u>155,939,540</u>

**27 OTHER INCOME**

Other income consists of:

	30 Jun 2019	30 Jun 2018
	MUR	MUR
<b>Non - Exchange Transactions</b>		
Anchorage dues	312,839	380,238
Berthing dues	680,000	1,087,348
Housing scheme for SE Workers grant	-	1,113,000
Stale cheques written back	321,615	140,920
Cane juice application fee	59,000	60,000
DBM - SPES decrease in liabilities	1,876,051	93,000
	<u>3,249,505</u>	<u>2,874,506</u>
<b>Exchange Transactions</b>		
	MUR	MUR
Interest & dividend received	6,308,059	10,390,695
MRC grant	1,430,895	2,251,709
Air Pollution Monitoring income	7,499,800	6,684,900
Sale of cane	1,524,201	2,750,644
Interest on car/motorcycles loans	1,678,716	1,878,765
Rent received	9,408,612	10,306,091
Analytical & agronomic services	4,507,667	5,182,112
Rent of warehouse for special sugar	-	2,101,300
Sale of varieties	1,045,982	945,357
Rental of sugar boxes	64,000	64,000
Refund of medical expenses	295,830	281,821
SICOM - refund for damages & accidents	211,723	119,400
Loading of non originating sugar	312,750	312,750
Accountant General	14,000	49,000
Weighbridge calibration	79,000	110,000
IAEA grant	-	474,121
Persistent Organic Pollutants grant	-	600,000
Refund of World Food Day expenses	-	414,939
Profit on disposal	-	375,000
Refund for tractor repairs	-	201,446
Consultancy	-	287,500
Exchange difference	508,170	-
Revenue from recycled oil	5,400	-
Auction sale	10,160	-
Flora fascicles income	102,767	-
Others	85,545	112,586
	<u>35,093,277</u>	<u>45,894,136</u>

**28 HIRE OF TRACTORS AND TRAILERS**

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Hire of tractors	72,085,803	62,437,413
Hire of trailers	1,764,250	1,481,170
	<u>73,850,053</u>	<u>63,918,583</u>

**29 SALARIES AND SALARY RELATED EXPENSES**

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Salaries and salary related expenses consist of:		
Salaries & wages	287,626,299	281,522,525
Travelling	30,406,247	30,207,108
Uniforms	1,355,392	1,974,800
Pension - Ex-MSIRI	793,576	961,579
Pension contribution - SICOM	25,697,455	24,395,391
Pension contribution - MSIRI Pension Fund	8,119,079	6,788,741
Insurance of Employees - AMAS	99,354	156,517
National Savings Fund	2,796,125	2,885,160
National Pension Scheme	998,714	1,239,469
Family Protection Scheme	3,619,464	3,470,107
Civil service FPS	106,401	126,588
IVTB contribution	591,723	430,369
Sick leave	14,019,648	19,957,040
Vacation leave & retirement gratuity	8,869,108	5,545,234
Passage benefits	10,642,894	10,480,077
(Decrease) / Increase in provision	2,333,550	(6,201,063)
Insurance of employees - GPA & others	5,842,747	11,827,403
Medical expenses	7,083,035	6,343,645
	<u>411,000,810</u>	<u>402,110,690</u>

**THE MAURITIUS CANE INDUSTRY AUTHORITY**
**NOTES TO THE FINANCIAL STATEMENTS**

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**YEAR ENDED 30 JUNE 2019**
**30 ADMINISTRATIVE AND GENERAL EXPENSES**

30.1	30 Jun 2019 MUR	30 Jun 2018 MUR
Audit Fees	500,000	400,000
Board & Committee Fees	1,821,219	1,176,304
Consultancy Fees	94,500	626,000
Legal & Professional Fees	401,428	284,625
Subscriptions	409,091	420,080
Cleaning	1,434,844	1,372,577
Maintenance & Repairs	9,268,458	5,050,201
Security	15,076,389	15,824,535
Computer Maintenance	587,077	666,573
Outsourcing of IT & Remote Connection	1,358,024	1,332,724
Computer Supplies	565,578	612,834
Software licences	122,303	151,862
Field Experimentation Expenses	73,386	452,438
Other Office Expenses	3,643,262	88,839
Welfare	884,464	816,569
Advertisement	247,833	291,956
Maintenance of Office Equipment	332,361	400,904
Printing , Photocopy , Postage and Stationery	937,318	1,883,632
Health & Safety	1,666,810	1,680,597
Missions	46,034	520,679
Publications	137,795	52,635
Rent	8,156,247	11,153,540
Rates	23,333	29,288
Electricity	9,661,575	9,789,423
Water	1,268,982	1,525,240
Telephone , Internet & E-Mails	2,410,870	2,531,856
Research & Development	11,124,774	9,416,810
Running Expenses - Tractors & Cranes	81,348,931	75,713,611
Running Expenses - Other Vehicles	6,920,642	6,698,968
Training	169,365	181,313
Increase In Provision	1,157,816	1,451,436
Insurance of Building and Equipment	1,464,007	1,461,122
Other Funds Expenses	2,303,899	1,297,231
Air Pollution Monitoring Unit Expenses	525,389	2,374,212
Assets written off	207,188,443	-
Inventories written down (Note 30.2)	3,973,440	-
Loss on disposal	2,680,071	-
Loss on Exchange	-	215,829
Compensation and Car Benefits	-	827,000
	<b>379,985,957</b>	<b>158,773,443</b>

**30.2 Inventories written down**

MUR 3,973,440 is recognised as write down during the period and included under Administrative and General Expenses. Assets written down are pipes, conveyor belts, fire retardant cables, aluminium sheets and rail clamp for wharf included in Inventories.

The reasons for the write down include wear and tear, rust, salt corrosion, ageing, limited usage and reduction in level of operation at Sugar Storage Handling Unit (SSHU).

Inventories reconciliation is as follows:

	30 Jun 2019 MUR
Before write down	55,773,939
Written down	(3,973,440)
After write down	<b>51,800,499</b>



### 31 EX-DOCKERS PENSIONS

(i) The Authority has a legal obligation to provide and pay pension to ex-dockers who became redundant as a result of the coming into operation of the Bulk Sugar Terminal in 1980. The pension is currently funded by a contribution levied on sale of imported sugar on the local market. The number of pensioners as at 31 December 2018 was 1643.  
(December 2017: 1697)

(ii) Charge to Statement of financial performance is made up of the following:

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Paid during the period	114,890,546	113,205,180
Add Pension due at end	5,189,565	5,746,726
	120,080,111	118,951,906
Less Pension due at start	(5,746,726)	(5,219,681)
	114,333,385	113,732,225

### 32 SUGAR CANE SUSTAINABILITY EXPENSES

Sugar Cane Sustainability expenses consist of support provided to small planters and is made up of the following:

	30 Jun 2019
	MUR
Government of Mauritius - Assistance to planters for Crop 2018	436,288,787
Government of Mauritius - Additional support to small sugarcane planters	55,000,000
Sugar Insurance Fund Board - Additional support to small sugarcane planters	55,000,000
MCIA Planters Fund - - Additional support to small sugarcane planters	49,756,348
	596,045,135

### 33 FINANCIAL COMMITMENTS

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Financial commitments relating to goods and services already contracted for	7,345,984	10,388,168

### 34 RELATED PARTY TRANSACTIONS - COMPENSATION OF KEY MANAGEMENT PERSONNEL

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Compensation paid during the period to and on behalf of executive and non-executive Directors, including pension contributions.	15,740,553	14,035,623

The Authority has made no contribution to any defined contribution plan for its key management personnel.

### 35 IMPAIRMENT OF ASSETS

The Authority carries out annual impairment test for its assets. The carrying amount of the assets is compared with its recoverable amount. Any impairment loss is then recognised in the financial statements in accordance with IPSAS 21 *Impairment of Non Cash Generating Assets*.

At 30 June 2019, no impairment loss for the Authority's assets is noted.



**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**STATEMENT OF CASH FLOWS**  
**YEAR ENDED 30 JUNE 2019**

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**36 STATEMENT OF CASH FLOWS NOTES**

	Year ended 30 Jun 2019	Year ended 30 Jun 2018
	MUR	MUR
<b>36.1 Cash absorbed in operations</b>		
Deficit for the year	(520,631,633)	(165,398,971)
<i>Adjustments for:</i>		
Depreciation on property, plant and equipment	121,841,105	128,438,785
Depreciation on investment property	440,000	440,000
Amortisation of intangible assets	1,028,481	970,619
Loss /(Profit) on disposal	2,680,071	(375,000)
Exchange Loss/(Gain)	(3,154)	325,013
Loan written off	150,510	-
Interest paid	279,645	294,855
Interest received	(7,958,315)	(9,819,774)
Dividends received	(28,460)	(19,960)
Actuarial loss	43,678,668	46,059,254
<b>Operating deficit before working capital changes</b>	<b>(358,523,082)</b>	<b>914,821</b>
(Increase) / decrease in accounts receivables (excluding car loans)	(62,698,406)	79,377,271
(Decrease) / increase in accounts payables	452,950,339	(11,294,646)
(Decrease) / increase in financial liabilities	(1,876,051)	(839,868)
(Decrease) / increase in provisions	9,155,788	5,195,285
(Increase) / decrease in inventories	148,308	2,791,093
(Increase) / decrease in prepayments	33,329	-
<b>Cash absorbed in operations</b>	<b>39,190,225</b>	<b>76,143,956</b>

**36.2 Non cash transactions**

The principal non cash transactions are the adjustments for depreciation and amortisation, interest received, loss on disposal and actuarial loss.

**36.3 Cash and cash equivalents**

Cash and cash equivalents include the following for the purpose of the statement of cash flows:

	30 Jun 2019	30 Jun 2018
	MUR	MUR
Cash in hand and at bank	784,200,123	744,738,103
Bank overdraft	-	-
	<b>784,200,123</b>	<b>744,738,103</b>

## K. LIST OF ABBREVIATIONS

ADEME	<i>Agence de L'Environnement et de la Maitrise de l'Energie</i>
AFD	<i>Agence Française de Développement</i>
ALMS	Agricultural Land Management System
AMCO	Alcohol and Molasses Company
AMU	Agricultural Mechanization Unit
BRC	British Retail Consortium
BSSD	Bagged Sugar Storage and Distribution
CAC	Control and Arbitration Committee
CAD	Control and Arbitration Department
CEB	Central Electricity Board
CIRAD	<i>Coopération Internationale en Recherche Agronomique pour le Développement</i>
CRS	Cane Replantation Scheme
CWA	Central Water Authority
CRE	<i>Commission de Régulation de L'Energie</i>
CPMACB	Cane Planters and Millers Arbitration and Control Board
COMESA	Common Market for Eastern and Southern Africa
EDMS	Electronic Data Management System
EIA	Environmental Impact Assessment
ERS	Early Retirement Scheme
ETU	Extension and Training Unit
EU	European Union
FAO	Food and Agriculture Organization
FANRPAN	Food, Agriculture and National Resources Policy Analysis Network
FAREI	Food and Agricultural Research and Extension Institute
FEXTE	<i>Fonds d'Expertise Technique et d'Échanges d'Expériences</i>
FOB	Free on Board
FORIP	Field Operations Regrouping and Irrigation Project

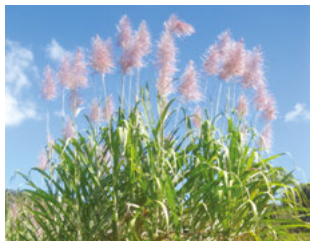
FSA	Farmers Service Agency
FSC	Farmers Service Centre
FSMS	Food Safety Management Systems
HRDC	Human Resources Development Council
ICAC	Independent Commission Against Corruption
IAEA	International Atomic Energy Agency
IPP	Independent Power Producer
IPSAS	International Public Sector Accounting Standards
ISO	International Organization for Standardization
ISO/IEC	International Organization for Standardization and the International Electro-technical Commission
ISSCT	International Society of Sugarcane Technologists
JTC	Joint Technical Committee
JICA	Japan International Corporation Agency
IWUE	Irrigation Water User Efficiency
LCR	Land Conversion Rights
LEI	Landbouw Economist Institute
LOI	Letter of Intent
MAAS	Multi Annual Adaptation Strategy
MAS	Marker Assisted Selection
MCIA	Mauritius Cane Industry Authority
MEPU	Ministry of Energy and Public Utilities
Morc.	Morcellement
Min.	Ministry
MMCO	Mauritius Molasses Company Limited
MoAIFS	Ministry of Agro-Industry and Food Security
MOESDDBM	Ministry of Environment, Sustainable Development, and Disaster and Beach Management
MSA	Mauritius Sugar Authority
MSB	Mauritius Standards Bureau
MSIRI	Mauritius Sugarcane Industry Research Institute

MSML	Medine Milling Company Limited
MSPA	Mauritius Sugar Producers' Association
MSS	Mauritius Sugar Syndicate
MSTC	Mauritius Sugar Terminal Corporation
MSTCEU	Mauritius Sugar Terminal Corporation Employees Union
MSTCSA	Mauritius Sugar Terminal Corporation Staff Association
Mts	metres
MUR	Mauritian Rupees
MT	Mauritius Telecom
NDU	National Development Unit
NCS	New Cropping Systems
NEC	National Energy Commission
NOS	Non-Originating Sugar
OMOL	Omnicanne Milling Operations Limited
OS	Operating System
PBB	Programme Based Budgeting
PCR	Polymerase Chain Reaction
PIN	Parcel Identification Number
PIO	Passport and Immigration Office
POC	Phasing out of Camps
PPIP	Planters Productivity Improvement Programme
PSU	Permanent Sampling Unit
PWS	Plantation White Sugar
R&D	Research and Development
RDA	Road Development Authority
RTC	Regional Training Centre
RT-PCR	Reverse Transcription - Polymerase Chain Reaction
SADC	South African Development Community
SASRI	South African Sugarcane Research Institute



SACU	Southern African Customs Union
ScMV	Sugarcane Mosaic Virus
SCSMV	Sugarcane Streak Mosaic Virus
SIE	Sugar Industry Efficiency
SIFB	Sugar Insurance Fund Board
SIT	Sugar Investment Trust
SIT	Sterile Insect Technique
SME	Small and Medium Enterprises
SU	Stellenbosch University
SPMPC	Sugar Planters Mechanical Pool Corporation
SPRP	Sugar Planters' Regrouping Project
SSSP	Sugar Sector Strategic Plan
SSHU	Sugar Storage and Handling Unit
TMRSU	Traffic Management and Road Safety Unit
TVET	Technical and Vocational Education and Training
URA	Utility Regulatory Authority
USD	United States Dollar
VRS	Voluntary Retirement Scheme
WUE	Water User Efficiency





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