



Annual Report

1 JULY 2017 - 30 JUNE 2018



Mauritius Cane Industry Authority

REPORT AND ACCOUNTS

1 JULY 2017 to 30 JUNE 2018

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

6 December 2019

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

Sir

I have the honour to submit the Report and Accounts of the Mauritius Cane Industry Authority for period 1 July 2017 to 30 June 2018.

Yours faithfully

**Bojrazsingh BOYRAMBOLI
CHAIRPERSON**

CORPORATE INFORMATION

Chairperson of Board of Directors	Mr Bojrazsingh BOYRAMBOLI
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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 per cent drastic cut in the price of sugar. For the MCIA, the objective was to bring down cess not to exceed 4 per cent 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. The Sugar Industry Efficiency (Amendment) Act 2016 was proclaimed on 23 December 2016 and became operational on 1 January 2017.

- (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.

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 para 4.1 (i), 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 standard of governance is 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

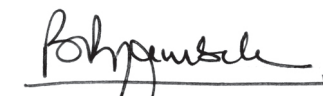
The Board of Directors is responsible for ensuring that proper standards of Corporate Governance

Statement of Compliance

We confirm that 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 MCIA Board of Directors during the period 1 July 2017 to 30 June 2018 is shown in the Table below:

Table 1. Composition of the Board of Directors during the period 1 July 2017 to 30 June 2018

Mr Vishnou Gondeea (up to 30.10.2017) Mrs Nirmala Bheenick (from 19.12.2017 to 3.5.2018) Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 4.5.2018)	Chairperson Ag. Chairperson
Mr Veersingh Boodhna (up to 21.12.2017) Mrs Damyantee Takoory (as from 22.12.2017 to 14.2.2018) Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 15.2.2018)	Representative of the Ministry of Agro-Industry and Food Security
Mr Deobrut Bundhoo (up to 25.3.2018) Mr Vikraj Ramkelawon (as from 26.3.2018)	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) (a) 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 informal 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. Five (5) meetings of the Advisory Council were held from 26 October 2017 to 4 May 2018.

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 Senèque	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 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 allowance 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 2018 amounted to MUR 750,443 and fees paid for other Board Members and Committees amounted to MUR 265,800. The salary paid to the key management personnel during the year under review amounted to MUR 13,019,380. 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)
Mr Veersingh Boodhna (up to 21.12.2017) Mrs Damyantee Takoory (as from 22.12.2017) Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 15.2.2018)	Representative of Ministry of Agro-Industry and Food Security
Mr Deobrut Bundhoo (up to 25.3.2018) Mr Vikraj Ramkelawon (as from 26.3.2018)	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)
Mr Veersingh Boodhna (up to 21.12.2017) Mrs Damyantee Takoory (as from 22.12.2017) Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 15.2.2018)	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 2017/2018. 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

Chairperson	Mr Veersingh Boodhna (up to 21.12.2017) Deputy Permanent Secretary Representative of Ministry of Agro-Industry and Food Security
Members	Mr Jean Li Yuen Fong 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

(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 (Chairperson)
2. Mr. Satish Purmessur
3. Mr. Fong Yan Ip Yam

(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

Twelve (12) Board of Directors meetings were held during period 1 July 2017 to 30 June 2018. The following table shows the attendance at the Board of Directors Meetings.

Table 6. Attendance of Board of Directors
Period 1 July 2017 – 30 June 2018

Names	Board of Directors Meeting
Chairperson: Mr Vishnou Gondeea (up to 30.10.2017)	5
Mrs Nirmala Bheenick (19.12.2017 to 3.5.2018)	4
Ag. Chairperson: Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 4.5.2018)	2
MEMBERS	
Mr Veersingh Boodhna (up to 21.12.2017)	4
Mrs Damyantee Takoory (as from 22.12.2017 to 14.2.2018)	2
Mrs Shakuntala Devi Gujadhur-Nowbuth (as from 15.2.2018)	3
Representative of Ministry of Agro-Industry and Food Security	
Mr Deobrut Bundhoo (up to 25.3.2018)	8
Mr Vikraj Ramkelawon (as from 26.3.2018)	3
Representative of Ministry of Finance and Economic Development	
Mr Jacques M d'Unienville, G.O.S.K	5
Member having wide experience in the sugar industry sector	
Mr Nundlall Basant Rai, P.D.S.M	11
Member having wide experience in the sugar industry sector	
Mr Jean Li Yuen Fong	10
In the Chair	1
Member having wide experience in the sugar industry sector	
Mr Amal Kumar Mohabeer Mungur	12
Member having wide experience in the sugar industry sector	

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 24h-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. However, during the financial year 2017/2018, Government took the decision to waive temporarily the cess on crop 2017 and contributed to meet the operational costs of the MCIA.

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 presents 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.

Matters raised by the Director of Audit in respect of Financial Statements ended 30 June 2017

The Director of Audit had, in its report for Financial Statements for the Period 18 months ended 30 June 2017, drawn the attention of MCIA on the following issues:

- (i) **Cash Advance**
The matter has been submitted to the parent Ministry and is being looked into.
- (ii) **Deposit made to Mauritius Sugar Syndicate**
The approval of the parent Ministry has been sought.
- (iii) **Pension Liability**
No cash injection has yet been made.

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 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 full time Health and Safety 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.

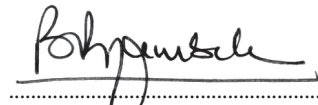
Corporate Social Responsibility

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 had been made to any political party or organisation.

A handwritten signature in black ink, appearing to read 'Bojrazsingh' followed by a stylized surname.

Bojrazsingh BOYRAMBOLI
Senior Chief Executive,
MoA&FS
CHAIRPERSON

A handwritten signature in black ink, appearing to read 'Vikraj' followed by a stylized surname.

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.

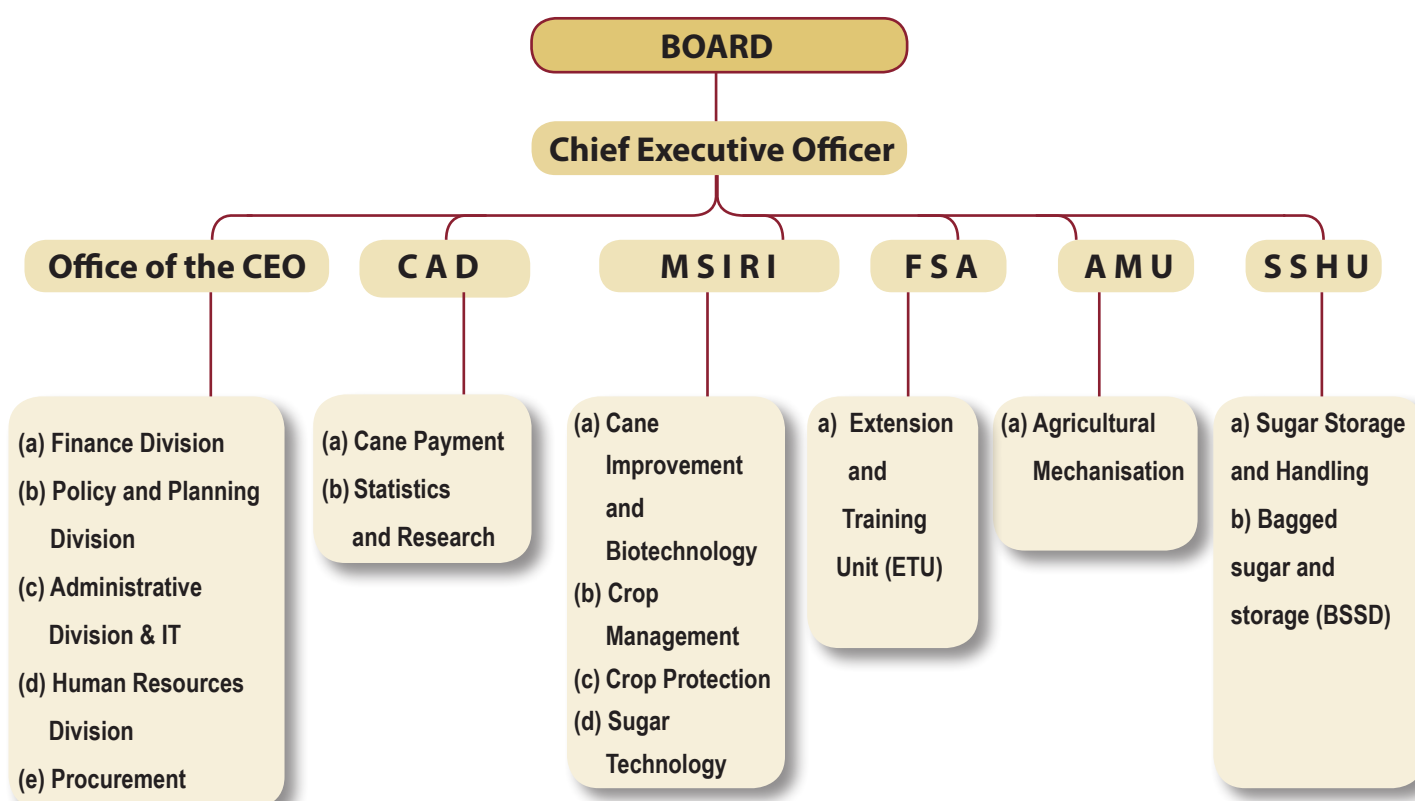
The Authority has a total workforce of 566 employees as at 30 June 2018 on its permanent and pensionable establishment.

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
- (f) Sugar Storage and Handling Unit

The Organisation Structure is depicted in the figure below:-



(a) OFFICE OF THE CHIEF EXECUTIVE OFFICER

This Department is responsible to provide support service throughout the Authority, ensuring that all resources and facilities are made available to facilitate all other departments to achieve their respective objectives. It assists the Chief Executive Officer in execution of policies and the overall administration and management of the MCIA. It also comprises of an Internal Audit unit and has eight (8) employees. It also 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. Thirteen (13) 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. Nine (9) Employees were attached to this Division.

III. Administration Division – responsible, *inter alia*, to provide secretary 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. It is also responsible for the IT section, the Project unit and the Procurement section. Twenty-two (22) employees were attached to this Division.

IV. Human Resources Division – 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 constant review of organisation structure in view of changing needs of the Authority. Six (6) employees were attached to this Division.

V. Procurement Division

The Procurement Section 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 by 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. For high value goods and services, we need to customize and prepare tender documents from the standard bidding documents depending upon the threshold of the procurement and which also includes press adverts for invitation of bids, request for proposals and expression of interest among others. From the closing of sealed quotations and tenders till the awarding of contracts in respect of machines, equipment, other materials, goods and other services all the tasks are performed by the Procurement Unit.

Six (6) employees were attached to this Division.

VI. Internal Control Division

The Board has the overall responsibility for the Authority's system of risk management and internal controls as well as for the assessment of their effectiveness. The Board views risk management as an integral component of good business practice with a view to supporting management's decision making and improving the reliability of business performance.

The Internal audit function is spearheaded by the Internal Auditor to provide independent, objective assurance aimed at adding value and improving MCIA's Operations, Governance, Risk Management and Internal Control.

The MCIA's Internal Audit function 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. 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).

The unit is headed by an IT Manager who has been appointed with effect from the 30 July 2018. The Unit comprises also one (1) IT Technician who is mainly responsible for ensuring that all the hardware/system owned by the Authority are in good working conditions. Also, assistance is given to any user having difficulties with either a software/program or with hardware such as printer, scanner, and workstations.

Two (2) employees are attached to this Division.

(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-two (22) 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 canes with a view to enhance competitiveness of the cane industry and also on technical and engineering options for improving efficiency of factories and for value addition to co-products.

131 employees were attached to this Department.

(d) FARMERS SERVICE AGENCY (FSA)

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

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

Prior to the setting of the MCIA, this Department was an autonomous parastatal body, that is, the Farmers' Service Corporation. Sixty-one 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 in preparing their lands prior to

replantation after a sugarcane crop cycle. It also provides cane loading facilities during 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 159 employees in its establishment.

(f) SUGAR STORAGE AND HANDLING UNIT (SSHU)

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-Six (36) employees were attached to this Division.

The **Bagged Sugar Storage Distribution** also falls under the supervision of the Director, SSHU and is responsible, *inter alia*, for the receipt, handling and storing bagged sugar from the Sugar Estates and to distribute Sugar for local consumption and for export. Prior to it being merged with the MCIA, this Unit was a private company, the Bagged Sugar Storage and Distribution Co. Ltd. The unit has 94 employees.

Senior Management Profile

Table 7. Senior Management Profile

SN	Name	Post	Qualifications
1	Mr Bundhoo Jugdis	Chief Executive Officer (up to 19 Sept, 2019)	BSc (Salford), MSc Soil Chemistry (Reading), MSc Information Science (City) Member of the Institute of Information Scientists
2	Mr Soniah Rajkamal	Director, Farmers Service Agency (Appointed CEO on 20 Sept. 2019)	BSc, MSc (Maur)
3	Dr Saumtally Salem	Director, MSIRI	BSc (Dund) MPhil (Cantab) PhD (Reading)
4	Mr Ip-Yam Fong Yan	Director, Agricultural Mechanisation Unit	BTech (Maur) Registered with the Council of Professional Engineers
5	Mr Purmessur Satish	Director, SSHU	BSc, MSc (Maur)
6	Mr Busgeeth Devendranath	Assistant Director (Ag. Director, CAD)	BSc, (Maur)
7	Mr Khoodoruth M. Hassen	Administrative Officer (Ag. Administrative Manager)	BCom (India), MBA HR Management (Maur)

Table 7. Senior Management Profile

SN	Name	Post	Qualifications
8	Mr Santbakshsingh Sunil	Manager, Human Resource	BA, MBA (Delhi), Master in Public Policy and Administration, (Maur)
9	Mr Deena Sachim Duth	Manager, Finance	FCCA
10	Mr Ramchurn Narottam Sharma	General Manager, SSHU (Bagged Sugar)	LCCI (H), ACCA II
11	Mr Jhurry Luckraj	Analyst/Senior Analyst (Ag. Manager Policy and Planning)	BSc (Maur), MSc (London)
12	Dr (Mrs) Dookun-Saumtally Asha	Principal Research Manager	BSc MSc (Newcastle) PhD (Reading)
13	Dr Seeruttun Sumantlall	Research Manager	BSc (Maur), MSc (Cranfield), PhD (Pretoria), MIAgre
14	Mr Rivière Vivian	Research Manager	BSc (Maur), MSc (Cranfield)
15	Dr Payandi Pillay Kessawa	Research Manager	Dip Agr,BSc (Maur), MSc (Reading), PhD (Kwa-Zulu Natal)
16	Dr Ng Cheong Ronald	Research Manager	BSc (Reading), MSc (Cranfield), MBA (Maur), PhD (Free State)
17	Mr Basant Rai Umeshlall	Manager, Operations & Research	Dip Computer and System Design (ACP), Dip Business Management, BA, MA (Delhi)
18	Mr Mungroo Ishwurduth	Field Manager	MSc (Maur), Registered Professional Engineer
19	Mr Ramdharee Yashwantsingh	Manager, ETU	BSc, MBA (Maur)
20	Mr Awotarowa Anil	Manager, ETU	BSc, MBA (Maur)
21	Mr Jhuboo Leeladhanjiv	Internal Auditor/ Senior Internal Auditor	LLB (Maur) BSc, (Oxford Brooks), MBA (Open University of Mauritius) 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 2017 to 30 June 2018

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 2017/2018, the Health and Safety Committee held fifteen 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 jobs, 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
ISO/IEC 17025: 2017 The New Standard for Laboratory Competence	Soobadar A Dr (Mrs)	Mrs Kotsanayr Katsande	17 Oct 2017	
Method Validation for Microbiologist Workshop	Goburdhun P and Mulleegadoo K (Mrs)	Easy Uphill	14 Aug 2017	15 Aug 2017
Adaptation Fund Project – National Coastal Zone Adaptation Strategy for the Republic of Mauritius	Cahoolessur K (Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	10 Oct 2017	

Table 8. Courses/Workshops

Course Title	Name	Organised by	From	To
“RNA-seq for Gene Expression analysis and Virus detection”	Parmessur Y Dr and Joomun N	University of Mauritius	06 Nov 2017	10 Nov 2017
Introduction to GIS & GIS Workflows	Chung Tze Cheong M (Ms)	University of Mauritius	03 Dec 2017	05 Dec 2017
Food Safety Management Systems (FSMS)	Sakurdeep Sc (Mrs) & Sakurdeep S	Mauritas	28 Feb 18	02 Mar 18
“Introduction to Basic Criminal Law”	Rughooputh S (Mrs)	Civil Service College Mauritius	26 Feb 18	28 Feb 18
Implementation of Quality Assurance Framework for the TVET Sector in Mauritius	Pillay Samoo K (Mrs)	Mauritius Qualifications Authority	29 Mar 18	half day
HRDC Skills Studies 2017/18	Pillay Samoo K & (Mrs) Seeruttun P (Mrs)	HRDC	08 May 18	
Nationally Appropriate Mitigation Actions (NAMA) for low Carbon Island Development Strategy for Mauritius	K. Cahoolessur (Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	10 May 18	
Violence at the Workplace: Legal & Practical Implications	Seeruttun P (Mrs)	Business Mauritius/ Ahnee-Duval Law Firm	28 May 18	
Orange rust on Sugar Cane, Réduit	Beedessee D Bhaugeerutty R Coonjan S Doorjun A.K Foolmaun G Jeeanah H Joyram P Jugun N Mistry B Mooloo V Ramburhose O.S Soniah P.K Soojhawon S Sookun M.	MSIRI, MCIA	May 2018	

Table 8. Courses/Workshops

Course Title	Name	Organised by	From	To
Stress Management, St Pierre	Bolah D Cahoolessur R Joymungul V Jugnarain N Khedoo H Khugputh A Marchurchand R Parlackee A Potiah J Purmessur S Ramguth S.B Ramnarain H Thakoor R Veeraragavoodoo K	MCIA	June 2018	
Third National Communication(TNC) – Capacity Building Workshop on Vulnerability Assessment and adaptation	K. Cahoolessur(Mrs)	Ministry of Social Security, National Solidarity and Environment and Sustainable Development	12-Jul-18	13-Jul-18

The following overseas missions were carried out during the period 1 July 2017 to 30 June 2018:

Table 9. Overseas Missions

Name	From	To	Objective of Mission
Ganeshan S Dr	25-Jun-17	09-Jul-17	Training on Crop Protection to Officers of Sucrivoire, Ivory Coast.
Ng Cheong R Dr	16-Jul-17	21-Jul-17	Mission to Cote d'Ivoire Re: Joint Venture with Sopex.
T. Gunesh	12-Sept-2017	15-Sept-2017	Facilitating Balanced Change for Rural and Urban Communities, Townsville, Australia
Umrit G	21-Aug-17	25-Aug-17	Attended a Workshop in Zimbabwe Re : Industrial Biotechnology - Driving Value Addition and Beneficiation.
T. Gunesh	30-Oct-17	3-Nov-17	3rd Africa-wide Extension Week, Durban, South Africa
Ng Cheong R Dr	06-Nov-17	10-Nov-17	Netafim 2nd Global Irrigated Sugarcane Conference in Humlanga, Durban, South-Africa and Swaziland

Table 9. Overseas Missions

Name	From	To	Objective of Mission
Behary Paray N (Mrs)	22-Oct-17	01-Nov-17	Attended a training workshop in connection with “IAEA Funded project : Rearing of stem borers chilo sacchariphagus (Lepidoptera : Cambidae) for quality SIT and visit to SASRI, South-Africa.
Seeruttun S Dr	27-Nov-17	29-Nov-17	Convention de Partenariat FEXTE Tripartite - Bioelectricity Workshop in Reunion Island.
Ng Cheong R Dr	09-Dec-17	23-Dec-17	Consultancy visit to Lam Son Sugar Joint Stock Corporation, Vietnam.
Seeruttun S Dr	09-Dec-17	19-Dec-17	Consultancy visit to KISCOL, Kenya.
Cahoolessur, K (Mrs)	27-Nov-17	29-Nov-17	Convention de Partenariat FEXTE Tripartite - Bioelectricity Workshop in Reunion Island.
Seeruttun S Dr	24-Jan-18	26-Jan-18	Workshop on “Plantes de Service”, CIRAD, Réunion Island.
Behary Paray N (Mrs)	09-Mar-18	22-Mar-18	Attended the 2nd Research Coordination Meeting on Improved Field Performance of Sterile Male Lepidoptera to Ensure Success in SIT Programmes and the Workshop to Develop a Best Practice Manual on Field Performance of Sterile Male Moths, held by the Food and Agriculture Organization of the United Nations (FAO) and the International Atomic Energy Agency (IAEA) in Palmerston North, New Zealand.
Saumtally A S Dr	19-Apr-18	30-Apr-18	Attended Mid-Term Meeting of ISSCT in view of next Congress preparation - 2019 in Tucuman, Argentina.
Dookun-Saumtally A Dr (Mrs)	19-Apr-18	30-Apr-18	Attended Mid-Term Meeting of ISSCT in view of next Congress preparation - 2019 in Tucuman, Argentina.
Pillay G Dr	30-Apr-18	15-May-18	Consultancy visit to Fiji Sugar Corporation and Sugarcane Research Institute, Fiji
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.

Table 9. Overseas Missions

Name	From	To	Objective of Mission
Mardamootoo T Dr (Miss)	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.
Parmessur Y Dr	17-Sep-18	20-Sep-18	Attended Scientific Conference & Ministerial Roundtable on FNSA and IAP-R SDG Carnegie’s Africa Workshop, Nairobi, Kenya.

Staff Matters – CAD

Mr Busgeeth, Ag Director of CAD was invited by the Committee of the World Plantation Conference & Exhibition to be one of the speakers in the conference that was held at Grand Sahid Hotel in Jakarta, Indonesia from 18 to 20 October 2017.

The theme of the Conference was “Plantation in the current and future challenges”. Participants from all five continents attended the Conference to share their experience and knowledge on various aspects of the six main plantation commodities in Indonesia namely: Palm Oil, Natural Rubber, Cocoa, Coffee, Tea and Sugar.

All costs pertaining to the Conference on Sugar were borne by the Indonesian Sugar Research Institute including travel and accommodation. The Ag Director made a presentation on the Cane Payment System of Mauritius on 19 November 2017. From feedback obtained, the Indonesians were very impressed with the Mauritian Relative Cane Payment System and have sought for our support in case our method of payment would be implemented in their country.

Mr K. Neermul Sugar Technologist/Senior Sugar Technologist was awarded a scholarship by the Australian Government to follow a short course on Mineral and Energy Economics for five weeks. The course was dispensed at the University of Pretoria, South Africa for the first two weeks and

the remaining weeks at the Australian National University, Canberra in Australia. The course started on the 11 March 2018 and ended on 20 April 2018.

For Crop 2017 and 2018, as in the 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, for crop 2018, the CAD has also recruited one Lorry Driver and one Lorry Helper to operate a lorry fitted with a crane used for the calibration of weighbridges and various checks performed during the crop.

Retirement

The following Officers retired during the period 1 July 2017 to 30 June 2018:

Table 10. Retirement			
Name	Post	Department /Section	Date
Mrs Stephanie Adelaide	Technical Assistant/Senior Technical Assistant	MSIRI	1-Aug-17
Dr Ganeshan Seelavarn	Research Manager	MSIRI	1-Sep-17
Mr R. Virahsawmy	Senior Test Chemist	CAD	16-Mar-17
Mr Dhanraj Krishnadas Oppuddhye Jankee	Principal Test Chemist	CAD	1-Mar-18
Mr Gunesh Toolsee	Assistant Director, ETU	Farmers Service Agency	17-Mar-18
Mr Jacques Eddy Texier	Driver HMU	AMU	7-May-18
Mr Seebrun Sachidanand	Administrative Manager	Administration Division	18-May-18
Mr Dhaneshwar Nundloll	Office Management Assistant	Human Resource Division	10-Jun-18
Mr Edmond Michel Paul Thierry	Operation Lead	SSHU (Bagged Sugar)	Jul-17
Mr Laval Rene Patient	Controller	SSHU (Bagged Sugar)	Jul-17
Mr Bisram Technarainsingh	Operator	SSHU (Bagged Sugar)	Jul-17

Termination of Employment

The employment of the following officers was terminated:

Table 11. Termination of Contract				
SN	Name	Post	Department /Section	Date
1.	Mr Nourane Chummun	WVMA	AMU	1 October 2017
2.	Mr Ravisangkur Deerpaal	AMO	AMU	5 April 2016

Leave without pay

Dr (Mrs) Aneez Soobadar, Technical Officer/ Senior Technical Officer (MSIRI), was on leave without pay for one year with effect from April 2018.

Study leave

Mrs R Mahadea-Nemdharry, Technical Officer/ Senior Technical Officer was on study Leave from 7 January 2017 to December 2018, to study for an MSc in Geographic Information Science at the University of Queensland, Australia.

B. POLICY AND PLANNING

Mandate and Functions

The mandate of 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 progress in budgetary measures for the financial years 2016 & 2017.

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

As no consensus was reached on the application of the last year price mechanism for crop 2017, the MCIA reviewed the mechanism and came up with another report to establish the deemed FOB price.

The recommendations of the report were as follows:

- (a) The deemed FOB molasses price be henceforth set at 35.52% of the average LEI price but shall not be less than MUR 2,000 per tonne;
- (b) A maximum amount of MUR 3,500 per tonne for 1.75 times deemed FOB be prescribed for distillers producing potable alcohol for local sales;
- (c) The above recommendations should be reviewed in year 2020 or whenever major developments occur that could have significant impact on the price of molasses.

The views of State Law Office were sought on the deemed FOB price. The MCIA had set the deemed FOB price of molasses at MUR 2,147.18 as compared to MUR 1,988.52 per tonne for crop 2016.

Section 15C subsections 2(C) and 3 of the SIE (Amendment) Act provide for the regulation of the price and read as follows:

“the sale price to distiller-bottlers producing potable alcohol for the domestic market or any person using molasses to produce syrups and beverages which shall be equal to 1.75 times the deemed FOB price specified in paragraph (a) and which shall not exceed such amount as may be prescribed under the Mauritius Cane Industry Authority”

“The price specified in subsection 2(C) shall apply to such other uses as may be prescribed”

Pending that the amount may be prescribed, the blended price paid to planters reached MUR 2,390.88 per tonne of molasses for crop 2017 compared to MUR 2,242.89 for crop 2016.

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 860 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

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)
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	n.a	n.a				n.a

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
abolish the \$2 commission computed in other costs that is deducted from LEI reference price

(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.

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

For the purpose of this Ethanol and Molasses Framework, the MCIA set up a Joint Molasses Allocation Committee and several meetings were held with the distillers. The agreed allocation of molasses for the crop 2017 was as follows:

Molasses allocation tel quel (tonnes)	
Grays distillery	25,806
Medine distillery	23,551
Omnicane distillery	75,915 (including all refinery molasses)
Livestock sector	4,646
Total Molasses produced less Refinery molasses	121,815.34

Following further consultation among parties, and based on certified installed capacities as at January 2016, the molasses allocation for the crop 2018 would be as follows after deducting an amount for the livestock sector.

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

However, there was reserve expressed on the refinery molasses by the distilleries who were seeking legal advice on the matter. The allocation of refinery molasses for crop 2018 is therefore kept in abeyance.

Blending Ethanol with Mogas- Provision of the SIE Act

The blending of Ethanol with Mogas is driven by the following initiatives of Government:

- (i) The SIE Act has made provision under the Section 15B (2) for a mandatory blending of ethanol with mogas.
- (ii) Mauritius has engaged with the United Nations Environment (UNE) in the implementation of the Global Fuel Economy Initiative since 2013 with a view to develop strategies and policies to green the transport sector. One of the major components of this two-phased initiative was to develop fuel economy and vehicle efficiency policies and measures with the aim of reducing fuel consumption and carbon dioxide emissions from the transport sector. The transport sector in Mauritius accounts for 26% of the total carbon dioxide emissions.
- (iii) Nationally Determined Contributions (NDC's) are political commitments that parties to the Paris Agreement under the United Nations Framework Convention on Climate Change (UNFCCC) have

taken at the 21st Conference of Parties to the UNFCCC in Paris in 2015. Parties have engaged to transform their development trajectories so that they set the world on a course towards sustainable development, aiming at limiting warming to 1.5° - 2°C above pre-industrial levels. Mauritius was among the first 15 countries to sign and to ratify the Paris Agreement since the 22 April 2016. Within Mauritius' NDC, sustainable transportation is one of the climate change mitigation measures that has been identified.

For the furtherance of the Ethanol and Molasses Framework, the Ministry of Agro-Industry and Food Security had set up a Steering Committee to coordinate activities with all the stakeholders. Works were ongoing at the level of the Mauritius Standards Bureau for the development of standards for the procurement of the Mogas and the ethanol for blending.

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.

The Ministry of Energy and Public Utilities (MEPU) 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.

Two workshops were held: one in Reunion Island from 27 to 29 November 2017 and a second one in Mauritius on 5 and 6 July 2018. The MCIA provided valuable input.

The studies identified during the first workshop were:

- (a) A cartography of the mobilisable biomass on the island
- (b) Biomass resource optimization
- (c) Opportunities for biomass import

- (d) Development of mechanisms for financial support and setting up of a robust regulatory body

It is being recalled that the roles of the Utility Regulatory Authority (URA), Mauritius Agency for Renewable Energy Agency (MARENA) and MCIA are instrumental in the development of the Biomass Framework.

The objectives of URA and MARENA are tabulated as follows:

Objectives of URA

- (a) ensure the sustainability and viability of utility services;
- (b) protect the interests of both existing and future customers;
- (c) promote efficiency in both operations and capital investments in respect of utility services; and
- (d) promote competition to prevent unfair and anti-competitive practices in the utility services industry.

Objectives of MARENA

- (a) to promote the adoption and use of renewable energy with a view to achieving sustainable development goals;
- (b) advise on possible uses of liquid natural gas;
- (c) create an enabling environment for the development of renewable energy;
- (d) increase the share of renewable energy in the national energy mix;
- (e) share information and experience on renewable energy research and technology;
- (f) foster collaboration and networking at regional and international levels, with institutions promoting renewable energy.

The SIE Act section 13B also provides for a renewable Sugar Industry Based Biomass Framework to be developed by the MCIA in order to promote the

production of energy from biomass, including sugar cane, cane trash, high fibre cane, fuel canes, gramineae and other related biomass generated by the sugar cane industry.

During discussions held at different forums, the MCIA has noted that all technical constraints being addressed, the pricing of the biomass remains the key element for the promotion of biomass and its competitiveness with other sources of energy. However, as the Government policy is to promote the renewable energy, it is felt that there is need for favorable pricing and proper incentives to boost the use of biomass for energy. For the Biomass Framework, MARENA, URA and MCIA would work in collaboration with Authorities to enhance the use of biomass in Mauritius.

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 2017 to:

- (i) Clarify that the contribution made by distiller-bottler is based on potable alcohol derived from cane and cane products;
- (ii) Introduce a contribution of MUR 40/L of absolute alcohol on imported potable alcoholic products manufactured from sugar cane or its by-products to ensure a level playing field with local distiller-bottler; and
- (iii) Empowering the MRA (Customs) to collect the contribution from distiller-bottler or an importer for ease of administration.

The contribution for crop 2017 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 139.8 million. This was generated from 3.52 million litres

of potable alcohol sold on the local market. Planters were paid at the rate of MUR 504.77 per tonne of sugar or MUR 1152.32 per tonne of molasses.

Sugar Cane Sustainability Fund

Following funds received from Government for three years starting with Crop 2015, payment effected to planters for the crop 2017 was as follows

For each category payment is effected as follows:

- (i) MUR 1100 per tonne sugar up to 60 tonnes; and
- (ii) MUR 300 per tonne of sugar in excess of 60 tonnes.

Table 14. Payment effected to planters for Crop 2017

	Crop 2015 MUR (M)	Crop 2016 MUR (M)	Crop 2017 MUR (M)
Category first 60 t sugar accrued	69.2	73.2	65.6
Category in excess 60 t sugar accrued	67.7	71.2	65.9
Total	136.9	144.4	131.5

Budgetary measures for Financial year 2017 and progress

The status and progress on budget measures taken by Government concerning the sugar sector are tabulated as follows:

Table 15. Status and Progress on budget measures

Financial Year	Budget Measure	Progress / achievement
2016	Abandoned cane lands 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 lands of small planters under productive use.	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.
	Additional support Planters producing up to 60 tonnes of sugar benefitted from an additional revenue of MUR 1,820 per tonne of sugar.	The MCIA has started working on the EDMS for the factory area of ALTEO and by the end of August. Subsequently, the EDMS will be extended to the other factory areas. The MCIA is working with the collaboration of SIL.
	Advance payment on sugar The 80% advance provided to sugar cane Planters was be maintained through arrangements with the Mauritius Sugar Syndicate.	Implemented The additional sum comprised of MUR 1100/t sugar from Sugar Cane Sustainability Fund and a premium waiver of MUR 720/t sugar. Implemented

	Distiller bottler contribution The Mauritius Cane Industry Authority Act was amended to increase the contribution made by distiller-bottler from MUR 20 to MUR 40 per liter of absolute alcohol.	Implemented
2017	Abandoned cane lands A provision of MUR 50 M was made to bring back under cane cultivation at least 500 hectares in fiscal year 2017/ 18.	Land preparation effected on 375 ha and plantation completed on 348 ha. The prevailing unfavourable climatic conditions during the first quarter of the year affected the progress of works. Works will be completed during the petite saison.
	Drone Technology 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	MCIA has already prepared the specifications and launched the tender. Bids have been received and evaluation was still ongoing as at end June 2018.
	Biomass Government is working in a scheme to encourage the use of biomass such as cane trash and woodchips by the Independent Power Producers operating in the sugar industry.	Research on the collection and transport of the trash was completed by MRC/ MCIA Discussions on pricing were initiated in the context of the new Alteo power plant project. A strategy on Biomass to bioelectricity is being worked out by Ministry of Energy and Public Utilities (MEPU) under Le Fonds d'Expertise Technique et d'Echanges d'Expériences (FEXTE) and under which, the MCIA is a stakeholder. The activity is in progress.
	Waiving of registration duty Payable on leases of agricultural lands of up to 10 ha.	System has been put in place and planters can derive the benefit upon the registration of their respective lease agreement of agricultural land.
	Replacement of old lorries VAT refund for the replacement of old lorries, which are used for carrying canes	System operational. However, no planters /service providers applied under this scheme.
	Provision of financing facilities Under LEMS for replacement of such vehicles.	System operational. However, no planters /service providers applied under this scheme.

- 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 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 employer of the Sugar Industry as per the provisions of the SIE Act. The Committee consisted of the MCIA, a representative

of employers and a representative of recognized trade unions.

MCIA had 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 relevant data.

The Ministry of Agro-Industry and Food Security had coordinated with Ministry of Labour and industrial Relations to seek relevant advice from the State Law Office. The consultations are ongoing.

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 sale of sugar on local market is MUR 3.70/kg of sugar. Furthermore, provision was made in the National Budget 2015/2016, for the introduction of a 15% duty on imported sugars for domestic consumption to render such sugar less competitive vis-à-vis locally produced sugar.

For the year 2017, 28 companies/importers were registered at the MCIA. Some 37,580 Mt of sugar were imported/sold on the local market and the MCIA has received a total contribution of MUR 139M, which have been used for the payment of pensions to 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 Standards 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: Rightsizing of production entities: the implementation of a Voluntary Retirement Scheme

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 for an additional period of 3 years (i.e. 2016 to 2018) 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 would 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 cash advance to planters was abolished as was the case under FORIP.

However, in case a planter had 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 end June 2018 is 11,293 ha (i.e. representing some 94 % of the extent earmarked under this project)

involving some 11,840 planters as indicated in Table 16.

A summary of the extent covered by FORIP / SPRP during the different phases covering the period 2016 to end June 2018 is given below.

Table 16. Area involved under the different phases of FORIP [2006 -2015] and SPRP [2016-2018]

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 (Calendar year 2016)	590	708
Phase XI (Calendar year 2017)	727	872
Phase XII (Calendar year 2018)	293	328
Total	11,293	11,843

Project 2: Centralization of sugar factories

The progress on monitoring of factory closure conditions for the period 2017 to June 2018 is tabulated below:

Table 17. Factory Closures					
Closed Factories in 2006	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 ² 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	✓	A Last tranche of MUR 3M not yet settled by Alteo	In Progress	No progress for the period	No Progress for the period

Note: ✓ means completed

Planters' Fund

Omnicane Milling with respect to closure of Union St Aubin Sugar Factory still has an overdue account of MUR 6 M.

The last tranche of payment by Alteo in the context of closure of Deep River Beau Champ is being followed by the MCIA.

Fertilizer Store/Multipurpose Complex

With regard to the erection of fertilizer stores or multipurpose complexes as per the conditions of

closure, there has been no progress by the sugar companies for the period covering 2017 to June 2018.

Road Infrastructural Works

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

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

Schemes being implemented by the Sugar Industry and monitored by the Policy and Planning Division are as follows:

1. Land allocation related to Phasing Out of Sugar Estate Camps (P.O.C).
2. Allocation of land and payment of cash compensation to workers affected by sugar factory closures as per the Blue Print 1997.
3. Allocation of land and payment of cash compensation to workers terminating voluntarily their contract of employment as per the Sugar Industry Efficiency (S.I.E) Act under the Early Retirement Scheme (ERS) for employees of sugar factories and the Voluntary Retirement Scheme (VRS) for workers of growing companies.



Fig1. New development for VRS Morcellement

Site Monitoring for Infrastructure works

- Four official site visits are carried out by MCIA with elected representative of beneficiaries, sugar companies, promoters, contractors and engineers.
- Other site visits are also done by MCIA to ensure that the works are carried out as per requirements of the Letter of Intent issued by the Ministry of Housing and Lands and the Government Authorities with the representative of workers and at the final stage with all workers prior to signature of title deeds.

Table 18. Status of handing over of title deeds for VRS/ERS/Blue Print

Schemes	No. of Beneficiaries	Title Deeds handed over 2007-2014	Title Deeds handed over Jan 2015-May 2018	Outstanding Year 2018
ERS 2007	209			
VRS 2007	6728	1500	5838	949
VRS 2012	411			
Blue Print	939			
Total	8287	1500	5838	949

All the outstanding 949 title deeds will be handed over to the beneficiaries by the Sugar Estates and MCIA on:

- Completion of infrastructural works, receipt of clearances from Authorities and Supreme Court approval.
- Receipt of Letter of Intent, Morcellement Permit.
- Receipt of the Parcel Identification Number (PIN) from Ministry of Housing and Lands.
- Beneficiaries having signed the title deeds.
- Registration and transcription of title deeds.

Table 19. Voluntary Retirement Scheme
Status of infrastructural works and clearances

Sugar Estate	No. of Beneficiaries	Site	Progress
1. St. Felix Co Ltd.	144	Chemin Grenier	Infrastructure work ongoing and it is expected to be completed by February 2019.
2. Cie de Gros Cailloux Ltée.	44	Kahin	LOI received on 28 March 2018. Sugar company is proceeding with the launching of the tender exercise and award of contract to start infrastructure works.
3. Medine Ltée.	118	Palma	<ul style="list-style-type: none"> Infrastructure works have been stopped. Authorities need to proceed with Land Acquisition for Palma roundabout. Infrastructure works have been stopped on the site by MCIA. During a site visit effected by MCIA, asbestos pipes and a tunnel/cavern were found on the site. Upon request of MCIA several meetings have been held at the level of the Ministry of Health, Environment, Labour and other Government Institutions/Authorities. All asbestos pipes have been removed from the site at La Mecque as per law. As requested by MCIA, a geotechnical investigation on the overall site is being carried out to identify the exact location of the tunnel/caves. On 9 August 2018, a communication meeting was organized by MCIA with all the beneficiaries to inform all the beneficiaries on the current status in the presence of the sugar company, promoter, contractor and engineer.
Medine Ltée.	115	Bambous	<ul style="list-style-type: none"> Onsite works completed. Government to seek funds for upgrading of the culvert. Apart from the upgrading of the culvert, dredging of the canal, clearance from the Supreme Court, a major issue has cropped up that is a Privy Council Judgement confirming that the 1 km buffer from the UBP plant at Bambous as shown in the Black River outline scheme shall exclude sensitive development (residential, health and education). A few plots appear to lie within the said buffer. Medine is liaising with the Black River District Council.

Table 19. Voluntary Retirement Scheme
Status of infrastructural works and clearances (contd)

Sugar Estate	No. of Beneficiaries	Site	Progress
Medine Ltée.	20	Chebel	PIN received on 6 July 2018. MCIA has requested Medine to prepare survey reports and to send draft title deeds to MCIA for vetting prior to signature at the earliest possible. Medine and NHDC are liaising with regard to damage caused by NHDC Contractor on the site.
4. Alteo (Mon Loisir)	70	Piton	Awaiting Morcellement Permit. The issue of a cut-off drain requested by District Council is being addressed by Alteo to avoid flood in the area of Piton.
Alteo (FUEL)	117	Melrose	Awaiting Morcellement Permit.
5. Bel Air S.E.	95	Rivière des Anguilles	Morcellement Permit already received, LOI was received on 28 February 2016. Drawing of Lots effected on 1 August 2017. On 19 July 2018, the Cadastral Unit informed the land surveyor that PIN Application could not be effected because the Government has compulsorily acquired 1500 m ² from the site. MCIA has requested on 30 July 2018, the Ministry of Housing and Lands, the Cadastral Unit, the Morcellement Board and the sugar estate to submit their views and comments. MCIA has also requested Bel Air S.E. Ltd to inquire at the level of their land surveyor and notary on land acquisition and advise MCIA on status.
Total	723		

Table 20. Blue Print - Status of infrastructural works and clearances

Sugar Estate	No. of Beneficiaries	Site	Progress
Alteo (DRBC)	26	Bel Air	Morcellement Permit received on 9 July 2018. MCIA has confirmed with Alteo Ltd and notary that PIN received on the 3 July 2018. The notary has received PIN together with the survey report and all relevant documents for preparation of Title Deeds.

Alteo (DRBC)	126	Bonne Mere	Drawing of Lots effected on 4 April 2018. Awaiting all clearances. Issue of footpath along A7 road not yet resolved. MCIA has requested Alteo and Kaselor Ltd. to liaise with Traffic Management and Road Safety Unit (TMRSU) and Contractor to proceed with the footpath.
Alteo (Mon Loisir)	25	Belle Vue Maurel	Company awaiting clearances and Morcellement Permit. Alteo has already paid the District Council (for Street Lighting) and CWA (Financial contribution and Morcellement Fee) on 5 March 2018 and 27 April 2018 respectively. CEB clearance received on the 6 July 2018. On 2 August 2018, MCIA has requested District Council to submit its clearances.
Alteo (Mon Loisir)	133	La Clémence	MCIA has been informed that site visit has been effected on 2 August 2018 between Alteo Ltd. and District Council with regard to the additional drain and other works required by District Council. MCIA has requested Alteo to take appropriate action with regard to construction of a new drain. MCIA and Alteo have requested the Chief Executive of District Council for an urgent meeting for issue of clearance.
Alteo (DRBC)	18	Queen Victoria	All signed title deeds are with the Alteo notary. Awaiting receipt of transcribed and registered Title Deeds for handing over of same to beneficiaries.
Alteo (DRBC)	9	Rivière des Créoles	MCIA has requested Alteo to finalise the transfer of land between Alteo and Ferney Ltd. as it is a long outstanding issue. Alteo has informed MCIA that Alteo needs confirmation from Ferney Board. Company to apply PIN and forward draft Title Deeds to MCIA.
Alteo (Mon Loisir)	3	L' Amitié	Works completed. Awaiting all Government clearances. MCIA has requested Alteo and Kaselor Ltd. to liaise with National Transport Authority (NTA) for NTA Clearance Certificate. Alteo to follow-up with Terra for CWA contribution payment. Awaiting clearances from TMRSU and RDA. On 1 August 2018, MCIA has requested the Authorities to submit their clearances.
Total	340		

VRS – ERS - Blue Print Scholarship Scheme

- The Sugar Sector Strategic Plan (SSSP) which was approved by Government provides for a Scholarship Scheme for the benefit of children of employees of the Sugar Industry.
 - Provisions of the SSSP and SIE Act Eleventh Schedule are as follows: “Provisions shall be made for a period of 10 years for two annual scholarships”
 - The Scheme is operated under the aegis of the Ministry of Education and monitored by the MCIA Policy Planning Unit as per the agreed guidelines set up with the collaboration of Ministry of Education, Ex-MSPA and the Cane Growers’ Association.
 - The Guidelines of the Scheme are:
 1. The Ministry of Education shall forward a copy of the draft and final communiqué to the MCIA Policy Planning Unit.
 2. The Ministry of Education shall place on its website and publish in newspapers the official communiqué for the scholarship.
 3. The Sugar Estates shall do the needful to affix a copy of the communiqué on the noticeboards of:
 - (i) Citizen Advice Bureaus
 - (ii) Community Centers
 - (iii) Health Centers
 - (iv) Social Welfare Centers
 - (v) Youth Centers
 - (vi) Social Security Offices
 - (vii) District Councils
 - (viii) Village Councils
 - (ix) Weighbridges and other institutions in the catchment area of the Sugar Factory.
 - The method of payment of MUR 18,000 per year as stipend would be mutually agreed between the student and Sugar Company.
 - The selected candidate will be required to sign a contract with the Sugar Company and the student notify the concerned company on the progress of his studies.
 - The candidate is also required to inform MCIA and Sugar Company of the completion date of the course. In the event that the candidate discontinues with the course, he shall inform the Policy Planning Unit of MCIA and Sugar Company giving the reasons thereof.
 - The priority field of studies will be as per the indicative priority field of study of the Tertiary Education Commission (TEC).
 - Priority will be given towards those who have enrolled for a full time diploma/degree course (undergraduate)
- In the event that:
- (i) There is only one full time candidate, a second candidate enrolled for a part time course could be considered; or
 - (ii) There is no full time candidate, wards who have enrolled for a part time diploma/degree courses (undergraduate) will be considered.
- All selected candidates will benefit from the annual stipend for a period not exceeding 4 years.
 - For part time courses, priority consideration will be given to unemployed wards of the VRS/ERS/Blue Print beneficiary.
 - Priority consideration will be given to wards up to the age of 30 in the first instance.
 - For the period 2007-March 2018, 46 children have benefitted from the scheme as indicated in Table 21.

Table 21. Scholarship scheme

Year	Schemes	No. of Students
2007	Blue Print	2
	VRS	5
2009	Blue Print	4
	VRS	7
2011	VRS	4
2012	Blue Print	3
	VRS	8
2013	Blue Print	2
	VRS	3
2014	Blue Print	1
2015	Blue Print	2
	VRS	2
2016	VRS	1
2017	Blue Print	2
Total		46

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:

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

- 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:

- Approval of MCIA as the Morcellement has been approved by the Morcellement Board under certain socio-economic projects under the supervision of MCIA.
- Plot of land to be kept and maintained on a regular basis until a decision is taken.
- No one will be authorized to occupy the plot of land.
- All plots should be properly pegged.
- 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 22. Surplus plots of land under the VRS/ERS/Blue Print/Phasing out of Sugar Cane Schemes

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

- N.B. Alteo Ltd. and Medine Ltd. 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.

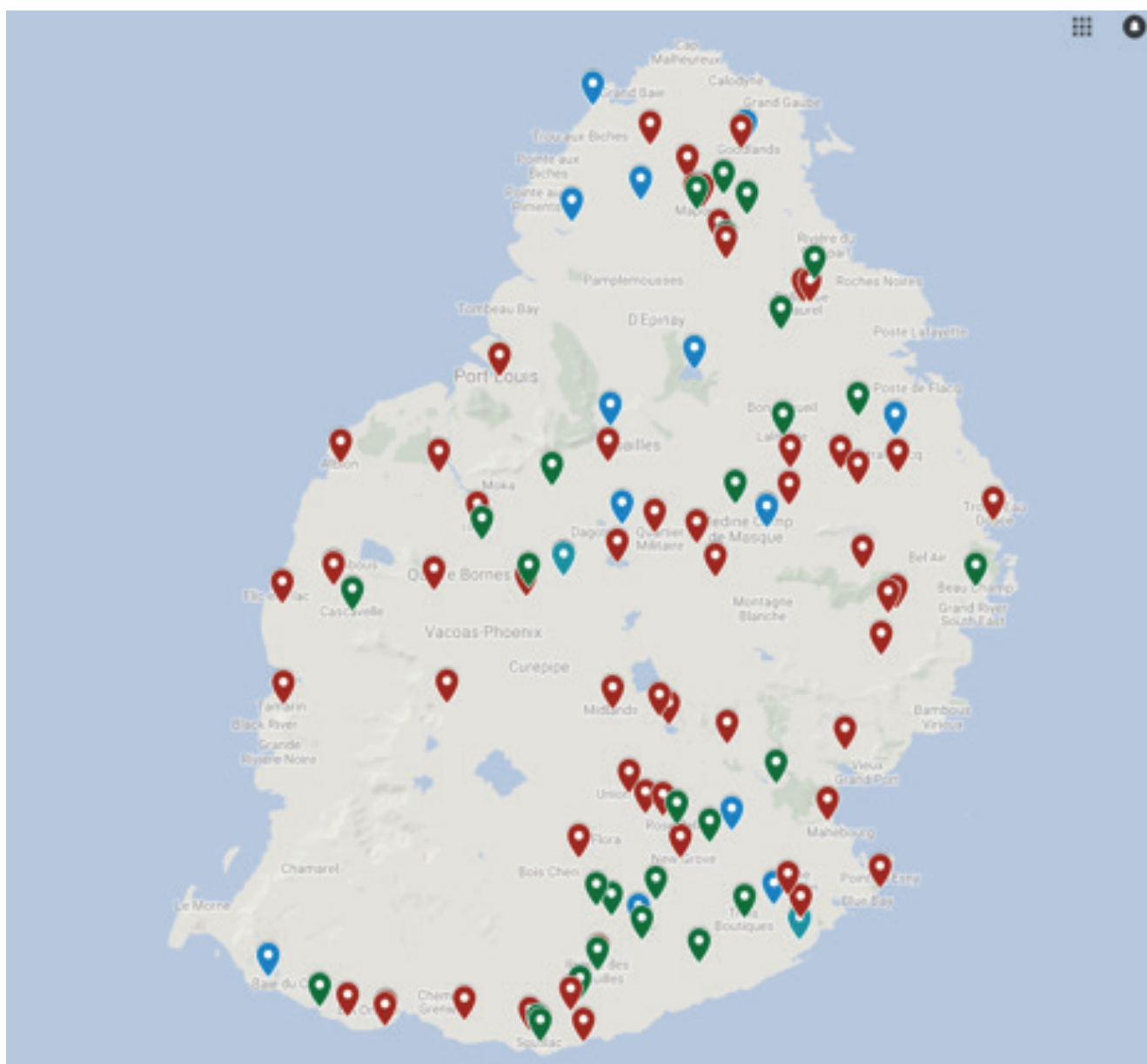


Fig 2. Sugar Camps

Note:

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.

The implementation of Phase I of the project was initiated following the publication of the Mungur Report. The ex-MSA was concerned with the elimination of the camps. During Phase I, eighteen Sugar Estates eliminated the sixty-six unsuitable camps under the supervision of ex-Mauritius Sugar Authority.

During the second phase, a further sixty seven sugar camps were phased out.



Fig 3. Sugar Camp



Fig 4. Rehabilitation

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.

The 12 beneficiaries of St Aubin Ltée. received their title deeds on 20 April 2018 from the Policy and Planning Division of the MCIA.

Other components

Electricity Generation

In 2017, electricity generation went up by 3.8% from 3,042 GWh (262 ktoe) in 2016 to 3,157 GWh (272 ktoe), of which 79% (2,496 GWh or 215 ktoe) was generated from non-renewable sources and 21% (661 GWh or 57 ktoe) from renewable sources.

The Independent Power Producers produced around 60% of the total electricity generated and the Central Electricity Board produced the remaining 40%.

During the same period (2016-2017), sales of electricity increased by 2.3% from 2,559 GWh (220 ktoe) to 2,618 GWh (225 ktoe) and the average sales price remained at around MUR 6 per kWh.

The CEB/IPP's Power Purchase Agreements

Proposed Power Plant at ALTEO Ltée.

The proposal for a power plant at Alteo Ltée., with higher pressure boilers of 86 bar and two units of 45 MW each, was submitted to Government in July 2015. It is proposed that the plant will use a new mix of combustibles that is bagasse and cane trash during crop and coal during inter-crop.

Government had set a Restricted Negotiation Committee at the level of the Ministry of Energy and Public Utilities in December 2017. Discussions are ongoing.

Agricultural Land Management System

Development of an Electronic Data Management System

One of the main components of the Agricultural Land Management System (ALMS) comprises the development of an Electronic Data Management System (EDMS). The EDMS acting as a knowledge management system is expected to provide all relevant information on agricultural land which is being used for cane production as well as land previously under cane and its current use.

The EDMS being developed is based on Geographic Information System (GIS) technology with in-built map capabilities to enable, in particular, the identification and visualization of abandoned cane land. It will be a web-based application built on Cloud technology such that it is accessible to authorized users anytime and from anywhere on the globe through any smart device.

The EDMS is being developed for Alteo Factory Area in collaboration with State Informatics Limited.

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 sugar cane, either in their abandoned fields or renew their fields which have already completed a cane cycle under the Field Operations, Regrouping and Irrigation Project through the payment of a cash grant of MUR 71,000/hectare. As at end June 2018, planters holding a total area of about 550 ha had signed a contract agreement with the MCIA to benefit from the scheme and about 350 ha were already planted.

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 provisions of the agreement. The MCIA will continue to monitor and act as a facilitator until all the issues concerned with the implementation of the agreement are resolved to the satisfaction of all parties concerned.

This agreement makes provision for the possibility for a métayer to buy the land he/ she is presently 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.

CLG Ltée. has already finalised the sale of métayers lands leased to six (6) métayers in the regions of Camp Bouillon, La Porte, Mare La Chaux and Quatre Cocos based on their valuations of land and cross valuation by the Valuation and Real Estate Consulting Services (VRECS) (ex-Valuation Department of the Ministry of Finance).

The MCIA has also received six requests from CLG Ltée. for the sales of metayers land and has initiated procedures for the valuation and the cross valuation of these metayers' land.

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 per tonne of sugar under this label has decreased from 33,000 t in 2016/17 to a provisional figure of 22,000 t in 2017/18 due to deregistration of certain co-operative societies. However, 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 2017 is estimated around MUR 43M.

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, the 800 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.

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

The MCIA is responsible:

- (i) to submit its clearances to the parent Ministry whenever there is an EIA application by a promoter on a case to case basis;
- (ii) to submit monitoring status to the parent Ministry in line with conditions imposed by the Ministry of Environment in the EIA permit. Monitoring status reports were sent for the stack and ambient air quality covering period July 2017-June 2018; and
- (iii) to review the environment monitoring report submitted by the promoter for actions deemed necessary as per the mandate of the MCIA.

Climate Change Initiatives

The MCIA has participated in a number of capacity building workshops and coordinated activities and provided input related to the National Communications Report, the National Inventory Report and other climate related activities at the request of the Ministry of Social Security, National Solidarity and Environment and Sustainable Development.

Draft Environment Protection (National Standards for Ambient Air Quality and Stack Emission) Regulations

The Ministry of Environment had in October 2016 proposed to repeal the EPA (Standards for Air) Regulations 1998. In that context a draft new regulation was circulated to the MCIA. The MCIA had studied same in consultation with all the stakeholders of the sugar sector and had submitted its views to the Ministry of Environment. The draft regulation is still under consideration by the Ministry of Social Security, National Solidarity and Environment and Sustainable Development.

Air Pollution Monitoring System

Several companies have availed themselves of the services provided by the air pollution monitoring system in order to show compliance to environmental standards as well as conditions set in the EIA Licences. For the period July 2017 - June 2018 the number of tests carried out was recorded and is shown in Table 23.

**Table 23. Number of tests carried out for period
July 2017- June 2018
Number of tests performed**

Parameters tested	2017(July 2017 to June 2018-12 months)
Stack emissions	76
Particulate matter	76
Ambient air quality	37
PM 10	24
Indoor Air Quality	21
Total	234

The spread of the tests on a monthly basis is shown in the chart below.

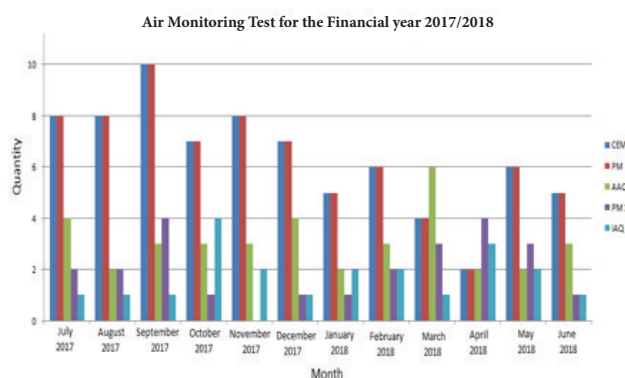


Fig 5. Air Monitoring Test

The revenue generation for the period July 2017-June 2018 was Rs 6.8 M and the trend with respect to previous financial years is shown below:

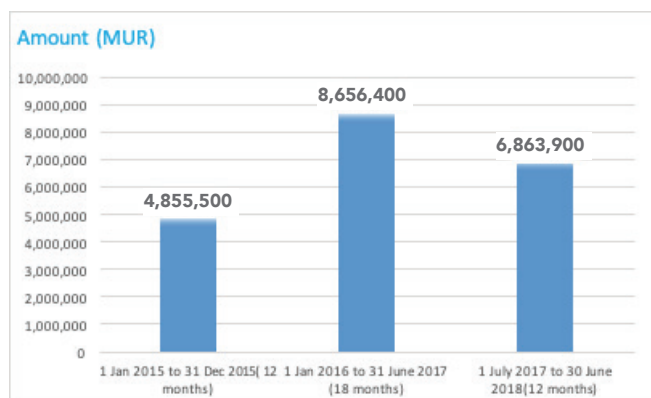


Fig 6. Revenue

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 Business Mauritius Limited, as representative of the Mauritius Chamber of Agriculture, and also comprising the representatives of the MoAIFS, MoFED, MCIA and MSS.

In the meantime, given that the situation continued to deteriorate, with a sugar price dropping to an unprecedented level compared to the past decade, Government decided to implement the following measures for the producers:

- (i) a financial assistance of MUR 500 million from the Sugar Insurance Fund in favour of all the insured producers for the Crop 2017;
- (ii) the suspension of the “cess” for the Crop 2017, which will contribute an additional revenue to producers; and
- (iii) the need for an increase in the import duty on sugar not destined for refining.

There were signs that market conditions were not going to change for the better in the near future. The industry was facing the full brunt of open market conditions owing to an oversupply of sugar on its main export market, the EU. In order to address the immediate difficulties of the producers, the Terms of Reference (TOR) of the JTC were reviewed and extended to cover all the forthcoming challenges to be faced by the industry.

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. As at end June 2018 this exercise was still ongoing.

International Scene

On the international scene, with the abolition of the quota on beet sugar and isoglucose on the European market as well as the maintenance of external tariffs as from October 2017, Mauritius will need to react to face very tough competition from other sugar producing countries. This has increased the level of competition within the EU, reduced import of sugar and eroded the price preference from which ACP countries have benefitted in the past. It is also expected to result in an increase of EU sugar exports. The impact of the erosion of preferences on the ACP will differ from country to country, depending on their level of exposure. Mauritius is categorized as a country with a large exposure to the EU market and/or has higher costs of production.

Thus, there is 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.

The situation will get more difficult with Brexit especially now where Mauritius will be called upon to renegotiate new trading agreements with Great Britain for the export of our sugar. Mauritius exports most of its sugar on the EU market, which implies that the impact of Brexit will be more significant for our sugarcane industry. However, until Brexit has been finalized there will be no disruption in the trade with EU and UK during the transitional period.

At the SADC level, the trade of sugar is regulated by Annex VII of the SADC Trade Protocol. This annex is of a discriminatory 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 respective 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 SADC. Mauritius is exploring all possibilities to remove this trade restriction for its sugar traded on the regional markets.

C. MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE – RESEARCH AND DEVELOPMENT

R&D Committee

The R&D Committee met eleven times (Table 24) during the year under review and discussed a number of R&D matters as well as issues of relevance pertaining to the sugarcane industry. The allocation of a budget of MUR 13 M was considered in accordance with the R&D Plan 2016-2020. The status of the four MSIRI experiment stations situated in different agro-climatic environments was reviewed given that the original locations have been subjected to considerable pressure to relocate to other areas. Efforts have been undertaken, despite limited resources, so that transitions occurred smoothly and the stations remained functional. The progress of new and on-going projects, including externally funded ones, was discussed. The performance of promising varieties was considered. The slow adoption of newly released varieties in a context of low replantation was a matter of concern. It was felt necessary to encourage the plantation of new varieties to increase productivity. Regular updates on the status of the yellow sugarcane aphid, first recorded in January 2017 in Mauritius and the occurrence of orange rust in March 2018 were presented and mitigation measures to contain the pest and disease were evoked. Various agreements for variety exchange and requests for training with foreign countries were discussed and approved.

Table 24. Attendance to the R&D Committee

Names	No. of meeting attended
Chairperson: Prof. (Dr) Louis Jean Claude Autrey, CSK	11
MEMBERS	
Mr. Jean Li Yuen Fong, Representative of the Board of Directors	8
Representative of Ministry of Agro-Industry and Food Security	vacant
Mr. Jean Robert Lincoln, Representative of the Chamber of Agriculture	4
Mr. Denis Lavoipierre (Alternate to Mr Jean Robert Lincoln)	6
Mr. Jean Claude Desvaux, Representative of Millers	11
Mr. Nundlall Basant Rai, PDSM, Representative of Planters	7
Mr. Rajendra Kumar Hemoo, Representative of Planters	11
Prof. (Dr) Theesan Bahorun, GOSK, Independent Member having wide experience in the field of Agro-Industry	6

The 2017 Crop

Cane elongation measurements were made on a fortnightly basis during the period December 2016-June 2017 in 48 sites located in the different agro-climatic zones of the island. Monthly samplings of cane were later carried out in some 141 fields (representative of the different agro-climatic zones and different cultivated varieties), during the period April-December 2017 to assess ripening and assist planters in planning the optimal harvest schedule during Crop 2017.

Total sugar production in 2017 amounted to 355, 213 t from 3, 710, 918 t cane at an extraction rate of 9.57%. The 2017 Crop suffered from water stress during the early stage of the elongation phase in all sectors except in the East. The salient feature during

the ripening phase was the above normal rainfall recorded in all sectors from May until August which, together with below normal solar radiation and temperature amplitude were detrimental to optimum sucrose accumulation and as such the extraction rate over the island was 4.8% below that of the mean of the past 5 years. The resulting sugar productivity of 7.11 TSH for the island in 2017 lagged behind that of 2016 and that of the mean of the last 5 years by 5.3%.

Breeding and Selection Programme

A total of 1,026 crosses were carried out and comprised 418 genetic combinations involving 180 different female and 61 male fertile parents. The population produced was as follows: 21,185 seedlings for the dry zone (including fuzz imported from SASRI, South Africa), 14,047 seedlings for the humid zone, 14,681 seedlings for the super humid zone and 2,634 seedlings for the interspecific programme for selecting high biomass and multi-purpose varieties.

Selection of clones at in the different stages (1, 2, 3 and 4) was carried out during the year based on cane quality characters, morphological attributes and the best genotypes were advanced to the next stage of selection.

At the final phase of selection, 16 trials were established with 86 promising varieties. Seventy-one varieties were planted for harvesting at mid-season in five different soil types. Seventeen varieties were planted for harvesting in the early-season in the L soil and 14 varieties for harvesting in the late-season in the P irrigated and P rainfed soils.

Previous studies had identified four different types of biomass varieties that could be exploited for different end uses. Replicated trials on relatively large plots were planted in order to study the performance of a highly-selected population of high biomass varieties in two environments: dry non-irrigated (Belle Vue) and super-humid (Valetta) regions, and for harvests in June and December. Results confirmed that in the super-humid region, the best energy canes yielded up to

90% more aboveground dry biomass compared to existing commercial varieties. The energy canes showed potential for year-round harvest and possibly for three harvests in two years. In the dry regions, commercial type varieties with high sugar and low fibre were best biomass yielders. The selected best biomass varieties showed stable yields across years.

Release of new varieties

Four promising varieties *M 1256/04*, *M 1561/01*, *M 216/02* and *M 853/05* were proposed to the Cane Release Committee for release and *M 1256/04* was approved for commercial cultivation (Figure 7). It is a high cane and sugar yielding variety, with fairly high sucrose content and high profitability at mid-season harvest. It is adapted to a wide range of environments and it consistently outperformed existing commercial varieties in advanced selection trials under both mechanized and manual harvests. It is fairly tall and fairly erect, it flowers sparsely and has good ratooning ability and ground coverage. It is resistant to smut and brown rust, slightly susceptible to gumming and highly susceptible to yellow spot. It is recommended for cultivation in the L and P soils of the humid and sub-humid zones as a potential substitute for commercial varieties *M 1176/77*, *M 1246/84*, *M 1400/86*, *M 2593/92*, *R 570* and *R 573*.



Fig 7. Variety *M 1256/04*

Field Experimentation and Liaison with stakeholders

Some 124 trials established on around 55 ha on the four main MSIRI stations at Réduit, Ferret, Belle Rive and Union Park and on the substations at Valetta, Trois Ilots and La Sourdine were monitored. Over and above the 150 t of seed cane used for establishing new trials and observation plots, some 2337 t of cane were harvested and sent for milling. With the relocation of the office of the MSIRI Experiment Station of Mon Rocher, Pamplemousses to Ferret, Mapou and the relocation of the Bon Espoir sub-station to Ferret, the Ferret Experiment Station now occupies a total of 14.25 ha.

Some 35 final phase trials (6 in the North, 14 in the Centre/East, 11 in the South and 4 in the West) were monitored during the year and 33 were harvested, while the remaining 2 were discarded. At harvest, the recently released varieties, namely *M 683/99* and *M 1392/00*, *M 2502/99*, *M 1002/02* confirmed their good performances, whilst several experimental varieties under test and in particular, *M 1561/01*, *M 1698/02*, *M 1959/03*, *M 1863/05*, *M 2090/05*, *M 604/07* and *M 1457/07* gave promising results.

Six observation plots/industrial trials were established with promising varieties *M 591/01*, *M 1555/01*, *M 1561/01*, *M 216/02*, *M 1698/02*, *M 1961/03*, *M 833/05* and *M 2090/05* and recently released varieties *M 683/99*, *M 1989/99*, *M 2502/99*, *M 1392/00*, *M 1002/02*, *M 1256/04* and *M 915/05* at Filature de Riche Terre Ltd. and Domaine de Labourdonnais Ltd. in Northern sector, Valetta in the Centre sector, and Greenworld Ltd. and Médine Ltd. in the Western sector. During visits organized with the different producer groups to these observation plots, it was observed that the recently released variety *M 915/05* was well appreciated and some 45 t of seed cane were made available to the Farmers' Service Agency for establishing nurseries for the small planters.

Communication with the staff of sugar estates and other stakeholders in the sugarcane industry was maintained in the different sectors. Field visits were

organized with growers in the different sectors to assess the performance of newly released as well as promising varieties. Efforts were pursued to promote the adoption of recently released varieties. New varieties *M 683/99*, *M 1392/00*, *M 1002/02*, *M 1256/04* and *M 915/05* were further propagated.

Some 46 participants representing the corporate, large and medium planters, planters' advisers on sugar estates, officers of the Farmers Service Agency and the MSIRI were present at a field day, organized by MSIRI at Médine Ltd. for the Northern and Western sectors. Three discussion meetings were held at Head Office by MSIRI for the corporate planters, Farmers Service Agency, Planters' Services on estates and in large and medium planters' fields. MSIRI officers also participated in meetings held at the different Centres of the Farmers' Service Agency to brief growers on the development of the crop 2017 and good management practices.

Biotechnology

A potentially more innovative breeding approach involving the editing of the sugarcane genome by switching off some of the genes conferring undesirable traits is being investigated using profuse flowering as model. The knocking out of genes in an existing high flowering commercial variety is likely to produce a variety with attenuated impact in cane yield and sucrose content. In this respect, a project was initiated in 2017 for the knocking out of the flowering gene(s) using the CRISPR/Cas9 technology.

Genomic selection is a new plant breeding method that uses statistical modelling to predict performance of a plant. An experimental plot was established at Réduit consisting of 380 sugarcane accessions. The derived data from molecular markers will be combined with phenotypic data to identify markers associated with the traits under study.

Identification of markers linked to early ripening and high sucrose content was pursued. The linkage map of the early ripening, high sucrose parent *CP 67412*, was further enhanced after 64 individuals from the mapping population *CP 67412* x *M 245/76*

were re-sequenced using RADseq and the sequence data was analyzed for the identification of SNP markers. Markers identified and linked to a number of traits and used in combination (for example high sucrose content and stalk density, early elongation and low flowering) may significantly improve on the selection for high sucrose/early ripening varieties and will be further evaluated.

Paternity testing is commonly used to identify the male parent contributing to a variety derived from a polycross. In 2017, the parents used in two polycrosses were genotyped by microsatellite markers in order to identify the male parent contributing to promising varieties. After genotyping with three primers, variety *M 1561/01* and *M 956/02* were found to be derived from the crosses *CP 681067* x *M 96/82* and *M 2024/88* x *M 422/91* respectively.

Newly released sugarcane varieties *M 915/05* and *M 1256/04* were cultured *in vitro* and some 20,000 plantlets were propagated during the year for the establishment of nurseries.

Molecular techniques have the edge over classical methods for diagnosis of plant pathogens for several reasons including ease of use, rapidity, specificity and sensitivity of detection. Seven varieties in the International Quarantine Facility that tested positive for *Sugarcane yellow leaf virus* (SCYLV), were cleaned by tissue culture techniques. Two new polymerase chain reaction (PCR) based tests were evaluated for two sugarcane pathogens: ratoon stunt (*Leifsonia xyli* subsp. *xyli*) and smut (*Sporisorium scitamineum*) and were found to be suitable.

Next-generation sequencing (NGS) approach allows rapid generation of whole genome viral sequences and may be also used to resolve unknown ones without prior knowledge. One NGS approach, namely RNA Sequencing (RNA-Seq), was applied to investigate the cause of yellowing symptoms in variety *M 1989/89*. Leaf samples were collected from the infected fields as well as positive control infected plants of variety *R579* and total RNA extracted. These were sequenced and the sequence reads obtained for varieties *M 1989/99* and *R579*

were mapped to reference SCYLV genomes. No matching sequences with SCYLV were obtained for variety *M 1989/99*. For variety *R579*, a total of 864 reads matched SCYLV reference sequences and it covered the entire 5.8 SCYLV genome (5.8 kb). Closest similarity of the SCYLV genome from *R579* was with REU genotype -97.3 % sequence similarity with REU-YL1a genome. Phylogenetic analysis indicates that this new genome sequence is likely to represent a recombinant genotype distinct from REU and genotype MU. This is the first complete SCYLV genome sequenced from Mauritius. More interestingly, the sequence analysis from the RNA-seq data also revealed the presence of a second sugarcane virus in both varieties, namely *Sugarcane bacilliform virus* (SCBV), causing leaf fleck disease in sugarcane. In variety *R579*, 277 sequence reads matched that of SCBV. Contigs obtained have allowed the assembly of a near complete genome of a Mauritian isolate of SCBV.

Cultural Practices and Mechanization

Since 2014, MSIRI is collaborating with Terragen for the efficient collection, transport and processing of trash for bioelectricity production together with bagasse. The efficiencies have been significantly improved during the last three years with additional investments from Terragen, including new baling machines and a shredding system to bring the trash to a finer particle size before mixing with the bagasse before combustion. Some 8 500 t of trash were collected in the form of rectangular bales of around 500 kg each, in 2017. The current approach is based on the collection of approximately 50% of trash left over on the ground after mechanized harvesting; the total amount of trash left after harvest varies between 10t and 15tha⁻¹ and this has been shown to be also dependent on the cane varieties grown. Alteo has also embarked in this activity on a commercial scale in 2017 and some 1500 t of trash were collected and successfully converted into electricity. It is estimated that in the future, electricity production from trash may reach 90 GWh from a potential of collecting some 100 000 t of trash; this amount will compensate for the decreasing amount of bagasse as a result of the loss in area under sugarcane.

Field trials have been initiated at both Terragri Ltd. and Alteo Ltd. to assess the agronomic impact of partial removal of trash (50%) both under rainfed and irrigated conditions. The objectives are to evaluate the effect of trash collection on cane growth and ratoon management practices, and to integrate the best options for trash management and soil moisture conservation, weed control (particularly control of vines), fertilization, and mechanization. Under the more humid conditions of trial sites at Alteo, the effect of additional traffic in the fields for collecting and transport of trash on soil compaction is also being studied.

Preliminary results, including harvest of a trial initiated in December 2016, show that trash collection may be carried out without significant losses or adverse effects on the cane growth. It is expected that the results of these trials will help elucidate any need for modifying current nutrient management practices following partial trash removal so as ensure long-term sustainability of sugarcane production.

In 2017, a total of 1 996 110 t of cane have been mechanically harvested on 22 968 ha of millers, corporate and some large planters land. Chopper-harvesters remain the main harvester type; only 10 636 t were cut by a whole-stalk harvester on 140 ha. The trend towards green cane harvesting has been maintained with only 6% of the machine-harvested area being cut after burning. The proportion of the area cut by tracked harvesters has increased from 47% to 65% over the last decade.

Weed Management

Sets of trials in 1997 and 2008 revealed the potential of herbicide *mesotrione* as a potential alternative to atrazine together with some early post-emergence action. In 2017, six further trials were established to evaluate new tank-mixes with *mesotrione* for general pre- and early post-emergence weed control in plant and ratoon cane, particularly as an alternative to atrazine.

Three trials were laid down in pre-emergence of weeds and sugarcane (plant cane) at Rose Belle, Mon Désert Alma and Mon Trésor. At Rose-Belle, the treatments with *mesotrione* proved to

be as effective or superior to the control plots 12 weeks after spraying; *mesotrione* provided a better control of *Solanum americanum* as compared to *diclosulam* or *diuron*. At Mon Desert Alma, the higher rate of *mesotrione* tank-mixed with *oxyfluorfen* provided the best residual activity and level of control 12 weeks after spraying together with the standard *oxyfluorfen* + *diuron*. Increasing the rate of *mesotrione* impacted on the length of the residual activity. At Mon Trésor, the level of control obtained 8 weeks after spraying was comparable to the standard and those having *mesotrione*; a tendency for an improved control with the higher rate of *mesotrione* was also observed.

Three trials were also established to evaluate tank-mixes including *mesotrione* for early post-emergence control of weeds in ratoon crops. The trial sites were at Rose-Belle, Gros-Bois (Savannah) and Alma (Mon Désert Alma). The treatments at those sites were curtailed as per the weed spectrum present at the time of application, consequently *mesotrione* at 0.1 kg a.i. ha⁻¹ was tank-mixed with *fluroxypyr* and *hexazinone* or *amicarbazone* at Rose-Belle and Gros-Bois. For the trial at Alma where grass species were predominating and at an advanced stage, *mesotrione* was tank-mixed with *amicarbazone* and 2,4-D amine salt. Overall, the new tank-mixes with *mesotrione* provided similar or superior control of weeds, without any adverse effect on the crop.

These positive results, coupled with those recorded previously, have prompted the use of *mesotrione* in sugarcane (Recommendation Sheet No. 192); this new herbicide together with *diclosulam* and *amicarbazone* has finally enabled deregistration of atrazine in Mauritius.

Eight recently released sugar cane varieties, namely *M 2283/98*, *M 683/99*, *M 1989/99*, *M 2502/99*, *M 1392/00*, *M 1002/02*, *M 1256/04* and *M 915/05* have been tested for their tolerance to herbicides. *M 915/05* proved to be tolerant whereas *M 1002/02* showed signs of being more susceptible to post-emergence herbicide mixtures. The remaining varieties were found to be moderately susceptible.

Fertilizer Management

Although the ex-Syndicate price of sugar for the 2017 crop increased by 18% with respect to 2016, this did not justify a change in nitrogen (N) fertilization practice. The recommended rate for N was, therefore, 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

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 1336 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 475 Permanent Sampling Units (PSU's) and sugar estate fields, with the aim of monitoring the nutrient status of sugarcane plantations so that corrective measures could be taken where required. The percentage of PSU's showing deficiency of N, P and K was 45, 24 and 26% respectively. Available data showed that the percentage of PSU's showing N deficiency has gradually increased during the past 10 years, whereas for P and K the percentage of PSU's showing deficiency has remained unchanged.

In addition to the routine soil and plant testing, the Agricultural Chemistry Laboratory provided non-routine analytical services upon request from stakeholders in the sugarcane industry as well as from other private organizations. Some 696 samples comprising of a wide range of matrices including liquid and granular fertilizer, sugar, molasses and water were analysed.

Irrigation

The area under irrigation has continued to decrease, with a net reduction of some 100 ha in 2017. It is worth noting that the number of centre pivots has remained constant (117 units in operation), with a slight decrease in area irrigated by pivots. The area under intensive overhead irrigation has decreased, whereas area under occasional overhead irrigation has increased over a similar extent, i.e. irrigation management has changed from intensive to occasional application of water over the area concerned. The only system with a significant decrease in area is drip, with a 7% reduction compared to the previous season.

A drip irrigation trial, studying the effects of different water and fertilizer regimes in the Western sub-humid zone, was harvested in 2nd ratoon. No significant difference was observed in cane yield between single and dual row. Variety M 2502/99 had the highest cane yield in both single and dual row plots. However, no difference was observed among the varieties in terms of IRSC, irrespective of planting methods. Sugar yields showed a similar trend as for cane yield, with a general tendency for higher sugar yields under dual row with varieties M 1400/86, R579 and M 1176/77. Highest sugar yield was obtained with variety M 2502/99 under single row followed by variety M 1176/77 under dual row.

The trial was in collaboration with Netafim, and a technician from that company visited the trial to conduct an audit of the network, identify flaws and suggest solutions for repairs and maintenance. During his 1-week visit, a training exercise was done, where representatives of different cane growers involved in drip irrigation were invited to update their knowledge in the operation and management of drip irrigation of sugarcane (Figure 8).



Fig 8. Training in operation and management of drip irrigation

Comparison of rainfed and irrigated crops

A study to optimize use of limited irrigation water supplies through better on-farm water management practices in the Northern sub-humid zone was monitored in 1st ratoon, in order to benchmark yield differences between irrigated and rainfed crops under commercial conditions. Both treatments were under variety R579 in dual rows. A total rainfall of 1627 mm was recorded during the growing season, but only 767 mm were considered effective under rainfed conditions. A net irrigation of 741 mm was applied during the season to the irrigated plot, whose effective rainfall was calculated to be 439 mm. The total crop water use was thus calculated to be 1180 mm for the irrigated cane and 767 mm for the rainfed cane.

On average, dry matter content was 27.4% for the rainfed cane compared to 26.8% for the irrigated cane, while IRSC was 10.25% for rainfed compared to 9.72% for irrigated cane, showing that the plant has a positive response to water stress in terms of sucrose content. At harvest, cane yield was 126.4 tha^{-1} for the irrigated cane compared to 90.0 tha^{-1} for the rainfed crop. Even though its IRSC was lower, the higher cane yield of the irrigated crop resulted in a higher sugar yield, with a production of 12.3 tha^{-1} compared to 9.2 tha^{-1} for the rainfed field. Water use efficiency (WUE), which is cane yield per unit of water consumed was 107 $\text{kg ha}^{-1} \text{mm}^{-1}$ for the irrigated crop and 117 $\text{kg ha}^{-1} \text{mm}^{-1}$ for the rainfed crop. 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 49.1 $\text{kg ha}^{-1} \text{mm}^{-1}$. This study has thus highlighted

the high response of variety R579 to irrigation. The crop also showed a positive response to water stress in terms of sucrose content, with dry matter and IRSC being higher under rainfed conditions compared to irrigated conditions.

Crop Protection

Diseases

The incidence of gumming (*Xanthomonas axonopodis* pv. *vasculorum*) was on the decrease and was not observed in commercial fields during the year. Observations made in the East of the island on stools of variety M 3035/66, known to be highly susceptible to race 2 of the pathogen, did not show any symptoms of the disease. Leaf scald (*Xanthomonas albilineans*) was not significant during the year. Surveys in the highly susceptible recently released variety M 683/99 under commercial cultivation at Médine and Belle Vue, showed very few infected stools. This is attributed to appropriate cultural practices and control measures adopted by growers. Yellow spot (*Mycovellosiella koepkei*) infection occurred in March 2017 and the weather prevailing in the subsequent months was conducive for the disease to intensify. Peak infection in B 3337 and M 703/89 was reached in June with 48.4% and 54.8% respectively, while highest infection was noted in R570 and R579 early in July with 42.6% and 44.3% respectively. Smut (*Sporisorium scitamineum*) was insignificant during the year and only slight infection was observed in R575 and M 1176/77 in the west and the north. Mild infection of brown rust (*Puccinia melanocephala*) was observed in M 1176/77 at Beau Champ, Belle Vue and Médine. Similar infection was noted in young canes of M 2593/92 cultivated at Beau Champ and Belle Vue. Due to the rainy and humid weather that prevailed over the island in 2017, chlorotic streak was observed in several sugarcane growing areas particularly at Union Park, Belle Rive, Rose Belle, Ferney, La Flora, Beau Champ, Pamplemousses, Mon Desert Alma and Médine.

Orange rust (*Puccinia kuehnii*) was observed in March 2018 on an experimental variety. Surveys conducted showed that it was present all over the island on several varieties. Infection ranged from trace to slight. In the subsequent two months,

disease intensity increased and was prevalent on variety R570, particularly in the North (Fig 9). However with the onset of the winter period, the infection slowed down. Continuous monitoring of orange rust is to take place so as necessary action can be taken should the disease evolve.



Fig 9. Orange rust on variety R570 at Belle Vue

Nurseries

Thirty clones were selected from stage 4 of the breeding programme and planted in the first stage nurseries N0/N1 at Trois Ilots. In addition, 18 clones from N1 nursery at Médine were transferred to Trois Ilots, as the nurseries at Médine were being phased out. Four varieties namely M 1979/99, M 1551/01, M 1782/01 and M 3779/99 were promoted to N2 nursery for multiplication. During the year altogether 11 varieties were available in N2 nursery and occupied some 0.935 ha. Two varieties, M 1561/01 and M 216/02, were promoted in 2017 to N3 nursery, which together with varieties M 1688/99, M 591/01, and M 1698/02 occupied an area of 2.684 ha. No variety was promoted to N4 nursery in 2017.

Quarantine

Twenty-five varieties were imported from Australia (5), France (Réunion - 1), Guatemala (5), Philippines (5), South Africa (4) and the United States of America (6) for the 2015-2017 quarantine cycle. Sugarcane fuzz of 30 crosses imported from South Africa was sown in the facility in August

2017 and followed for visible diseases. Damping-off was observed in a few seedling trays and was controlled by fungicides. The seedlings were released in October 2017 for potting and further field evaluation.

Planting material of *M 1176/77*, *M 1246/84*, *M 1400/86*, *M 1989/99*, *M 1392/00* and *M 1002/02* from the International Quarantine facility was exported to Ghana. Varieties available in the International Quarantine for export comprise eight varieties from USA, seven varieties from Guatemala and twelve varieties from Mauritius.

Under the exchange programme of varieties five M-varieties were exported to South Africa. As was the case in 2016, some 40 crosses were exported as fuzz to Côte d'Ivoire.

Microbiological analyses of sugars, water and soils

In 2017, there was a considerable increase in the number of different samples received for microbiological analyses (427) compared to 2016 (253). Routine microbiological analyses were carried out on 346 white refined, raw and special sugar samples and related products, including molasses and massecuite, and as well as on 81 water samples. A microbiological audit exercise was undertaken at a sugar mill for a period of 2 months. In addition, there was a significantly high demand for carrying out thermophilic acidophilic bacterial (TAB) tests. In this respect, some 156 sugar and 37 water samples were received for such analysis. Participation in three new proficiency tests namely for *Enterococcus faecalis*, *Enterobacteriaceae*, *Staphylococcus aureus* were initiated, in line to widen our scope for accreditation. Tests were also carried out on 117 soil samples to check for the presence of bacterial wilt (*Ralstonia solanacearum*).

In vitro experiments were conducted in 2016 to study the antagonistic activity of five *Trichoderma harzianum* isolates on *Ceratocystis parodoxa*, causal agent of pineapple disease of sugar cane, using a dual culture method. The results showed that the isolates tested had an antagonistic effect on *C. parodoxa* and a percentage inhibition of greater

than 65% was obtained after 4 days. Following the results obtained in the laboratory, glasshouse trials were set up to compare growth of fungicide treated cuttings with 0.1% *thiophanate-methyl* (70%WP) with that of *T. harzianum*-treated ones.

Pests

A severe infestation by *Pulvinaria iceryi* occurred at Constance in March/April over an area of about 5 ha under variety *M 1400/86* in 3rd ratoon crop. The pest population was effectively controlled by coccinellid beetles and the crop was harvested early. An area of 1.3 ha under variety *M 1400/86* was also severely affected by *P. iceryi* at Nouvelle Industrie in November. The lady bird beetle *Brumus suturalis*, was found preying actively upon the pest. This natural control led to a drastic decline in the pest population. Subsequent heavy rains also boosted up cane growth. Another severe infestation was detected at Belle-Vue on *M 2593/92* and predatory coccinellids effectively controlled the pest.

During the dry summer months severe damage symptoms by the thrips *Fulmekiola serrata* occurred in a young plant cane field under variety *M 1989/99* at Constance. Unexpectedly high populations of all stages of the pest were recorded in the young rolled spindle leaves. In an adjacent field under *R570* and *M 1989/99*, damage symptoms by the pest were much more prominent on the latter variety. The infested field was irrigated as recommended and following heavy rains, the field recovered from the damage.

Armyworm infestations were recorded over a total area of about 40 ha under variety *R579* at Benares and Mon Désert Alma. The fields recovered following treatment with insecticide *lambda-cyhalothrin*.

Severe larval damage by the white grub, *Heteronychus licas*, occurred in September in young plant cane under variety *M 1989/99* at Riche Terre. The infested part of the field was replanted and drenched with insecticide *thiamethoxam*. Important damage by adult beetles, to young plant cane of variety *R573*, over an area of 62 ha also occurred at Mon Desert Alma. Field surveys

revealed the presence of a large population of the pest necessitating insecticide treatment with *lambda-cyhalothrin*.

Promising varieties in the final stage of selection were surveyed at Belle Vue, Haute Rive and Beau Champ for their reaction to major pests namely the spotted borer, *Chilo sacchariphagus* and the armoured scale insect, *Aulacaspis tegalensis*. The highest borer infestation occurred at Belle Vue and Beau Champ, with all varieties assessed severely affected at both localities. At Belle Vue, a similar trend as observed in 2016 was noted where *M 1002/02* was the most affected and *M 2283/98* was the least affected. At Beau Champ, *M 853/05* showed highest susceptibility with 15.5% of the internodes bored (IB). At Haute Rive, *M 1002/02* had 5.1% IB, and which slightly exceeds the 5% threshold for a susceptible variety, while 3.3% IB was recorded in *M 915/05*. At Beau Champ, a severe infestation of *A. tegalensis* was observed in the promising variety *M 1561/01*.

The project, partly funded by IAEA, on the rearing of the stem borer, *sacchariphagus*, for quality sterile insect technique (SIT) was pursued in collaboration with the SASRI and the University of Stellenbosch, South Africa. The first stage of the project consisted of mass-rearing of insects for a consistent and cost-effective supply of high quality insects. Weekly field collections of borers and rearing in the insectary were carried out. Mating and oviposition techniques were optimized in the insectary using the emerging moths and more than 1000 eggs were obtained per cage.

Sugar Technology

Alteo Milling Limited has increased its capacity to approximately 400 TCH in the recent years and, in this context, its evaporator station has been upgraded from a quintuple to a sextuple configuration. The major concerns with this change were the recycling operation with respect to the Falling Film evaporator, and the evaporator performance in terms of sucrose inversion and monosaccharide degradation.

The clarified juice flow rate varied between 375 and 405 m³/h and preliminary trials have shown that the evaporator station performs better at a juice flow rate of 388 m³/h taking into consideration both the evaporation rate and the pH profile across the evaporator station. A more comprehensive study will be conducted in order to estimate the sucrose inversion losses across the evaporators and to determine the root causes for sucrose losses by inversion.

Health, safety and environmental reasons demand that the use of lead will no longer be allowed in the sugar industry. The elimination of the use of lead in the determination of the polarization of sugars has attracted considerable attention. Preliminary trials on sugars using the conventional polarimetric method at 589 nm and the NIR polarimetric method at 882 nm were initiated and compared during Crop 2017. The conventional ICUMSA Method “GS1/2/3/9-1 (2011): The determination of the Polarization of Raw Sugar by Polarimetry – Official” is applicable to all raw sugars, white sugars, special sugars and plantation white sugars requiring clarification. The method measures the optical rotation of the normal solution of sugar, which is expressed in Oz of the International Sugar Scale. The lead free “ICUMSA Method “GS1/2/3-2 (2009) : The Determination of the Polarisation of sugar without wet lead Clarification – Tentative” is applicable to all raw sugars, white sugars and special sugars. It is an alternative to Method GS1/2/3/9-1 which permits the elimination of clarification with basic lead acetate by using polarimeters with light sources operating in the near infrared (NIR) wavelength range. Such polarimeters are able to read solutions with much higher colour than hitherto.

Parallel tests were conducted on twenty samples of four types of sugar, and the main findings of this preliminary study are summarized below:

Table 25. Main findings of the Parallel tests

Sugar	Polarisation (Oz)	Colour in Solution (IU)	Difference (NIR Pol – Lead Pol)
PWS	99.00-99.45	400-600	-0.12
Dry Demerara	98.70-99.40	1500-2000	-0.28
Standard Demerara	98.40-99.00	2000-3000	-0.42
Special Raw	98.80-99.40	800-1500	-0.18

The difference in polarisation becomes greater as the pol of the sugar becomes lower and the colour becomes higher. This could be due to the presence of turbidity combined with dark colour. The preliminary results obtained on sugar samples show good potential for adoption of this technique. However, a more comprehensive study must be undertaken in collaboration with the sugar factory laboratories in order to set up a database for all the various sugars produced, and a method validation must be conducted in order to establish the repeatability of this NIR Polarimetric method for sugar analysis.

The main objective of Ring Tests on mixed juice is to monitor the performance of the laboratory analysts and also to ensure that standard analytical methods are being used together with corrective actions recommended where necessary. Comparative analyses of mixed juice samples were carried out during September 2017 at both the sugar factory and CAD laboratories.

The aim of laboratory audits is to ensure that good practice is maintained in terms of product sampling and that the analytical procedures as described in the Official Methods are followed diligently. During 2017 crushing season, visits have been made to all sugar factory and CAD laboratories. Verification of laboratory equipment, such as refractometers, polarimeters, pH meters and analytical balances, has been carried out using Certified Reference Materials and known standards. Reports have been

issued and necessary corrective measures have been recommended.

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 cane 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.

Field Visits

The main form of contact with the grower is through field visits. The focus was mainly to assess cane growers' problems in the Sugarcane Planters Regrouping Project (SPRP) and FORIP, and to advise them on Good Agricultural Practices. During the year, 19,145 field visits were made by the field staff, out of which 12,757 visits targeted the regrouping projects FORIP/SPRP to monitor status of the project.

Table 26. No of Field Visits		
Year	2017	2018
FORIP/SPRP	10,238	12,757
Non-FORIP	1,152	6,388
Total	11,390	19,145

Planters Productivity Improvement Programme (PPIP)

The FSA has started a Planters Productivity Improvement Programme (PPIP) which aims at carrying out extension activities for growers in targeted blocks with below average cane yields. The PPIP has been designed to assess the production constraints, apply appropriate extension methods

and measure outcomes for some 1,299 planters identified on an area of 1,266 ha over 2018-2020 period as follows:

Table 27. PPIP planters and areas			
FSC Area	No. of Blocks	No. of Planters	Area (ha)
Solitude	10	194	128
Unité	7	465	345
Bon Accueil	8	237	200
St Pierre	9	211	298
Rose Belle	19	116	197
St Félix	4	76	98
Total	57	1,299	1,266

For the year under review, identification of blocks, collection and analysis of cane yield data, survey of constraints and cost of production of targeted growers have been completed. Specific extension work plans involving technical talks, field demonstrations and conducted tours have been carried out and are reported in the following sections.

Demonstrations

A total of 93 demonstrations were carried out on growers' field with a view to allow growers observe new technologies. These comprised result as well as method demonstrations.

The main thrust on new cane varieties.

Table 28. Demonstrations

Year	2017/2018
Herbicide Mix*	25
One Eye Setts	8
Variety**	50
Zero Budget Farming	1
Mechanised Operations***	9
Total	93

* 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 against M3035/66 and R570.

*** Harvesting and loading and earthing up.

Two demonstrations were held at Trianon and Bon Air on mechanized cane harvesting using a newly acquired cane cutter (coupeuse pei) from Reunion Island, with the collaboration of CEAL. Various stakeholders, including small planters attended the demonstrations which aim at the introduction of new equipment to address labour shortage in the sector.



Fig 10. Cane cutter in operation at Bon Air

Conducted Tours

A total of 20 conducted tours were carried out and were attended by 358 growers who visited the demonstration sites (mainly the weedicide, varietal

and mechanization demonstrations).

Surveys

The following surveys were carried out during the year:

- 66 planters were interviewed on their intentions for the study entitled "Conversion of Sugarcane Abandoned Lands for Biomass Production" undertaken by MSIRI/ CIRAD, which aims of developing a strategy for the production bioelectricity in Mauritius.
- During the period January-March 2018, surveys to determine the extent of damage by cyclones and torrential rain were carried out. 111 planters were involved.
- FSA staff was fully involved in an island wide rapid survey on cane fields affected by "orange rust" in June 2018.

Group Meetings

66 group meetings were carried out and these were attended by some 912 growers. The topics are given in table 29.

Table 29. Group Meetings

Topic	2018
Regrouping/Cane Replantation	26
Productivity Improvement	27
Cane Fire Mitigation	4
Cane Harvest	3
Good Management Practices	5
Mechanical Loading	1
Total	66

Info Sheets

A total of 1,877 information sheets were distributed to cane growers as per details below:

- (i) List of contractors available for planters;
- (ii) Clean cane: improving cane quality to the mills;
 - Posters on clean cane were distributed to Credit Cooperative Societies (CCS) in the regions.
 - Seven new info-sheets were prepared and distributed. The topics covered different aspects of fertilizer application, weed control as well as orange rust disease.

Soil Sampling

The field staff collected a total of 196 soil samples from small growers' fields which were sent for analysis to the MSIRI Soil Chemistry Laboratory. Results of the soil analysis were utilized for appropriate fertilizer regimes and soil amendments mainly in SPRP sites.

Field Days

(i) Mechanical Cane Loading

A demonstration on mechanical cane loading using a Bell Loader for planters in the super humid zones of the South was organized on 20 September 2017 at Cluny (Rose Belle) and was attended by 124 participants.

This event took place after several consultations with concerned planters to address the prevailing labour scarcity for manual harvest and loading of canes. Participants were able to observe the different field operations that are necessary to enable smooth harvest, loading and transport of cane to the mill. Furthermore, they were also apprised on the introduction of a Bell Loader hiring service offered by AMU. The adoption of mechanical cane loading is highly dependant on the degree of cooperation among small planters and close collaboration of stakeholders involved all along the cane harvest supply chain.



Fig 11. Mechanical loading in a small planter's field at Cluny, Rose Belle.

(ii) New Cane Testing Facilities at Omnicane

On the same day, a conducted tour at Omnicane sugar factory at la Barrack, L'Escalier was organized to inform planters about the Near Infra-Red Technology adopted by the Control and Arbitration Department for carrying out sugar content tests. This technology has been designed to carry out rapid and accurate tests on shredded cane samples. The main determinations are Brix, Pol and Fibre which are important components used by the CAD for the publication of Provisional/Final Sucrose Content Assessments that form the basis of payment for planters.

Visit By Planters To FSC

A total of 11,441 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.

Seed Cane Supply

Seed cane supply to small planters was an important activity of the Farmers' Service Centres. Some 7,330 t of planting material were supplied to planters during the year 2017/18, as shown in table 30.

The main cane varieties supplied were *R 570* followed by *M 3035/66*. Among the recently released varieties, *M 2283/98* and *M683/99* were particularly on demand among the small planters in the regions.

Table 30. Seed Cane Supply

Variety	Quantity Supplied 2017 (t)	Quantity Supplied 2018 (t)
R 579	336	500
R 570	3,386	4,298
M 1176/77	79	115
M 1400/86	1,569	977
M 3035/66	281	859
M 1989/99	21	18
M 2283/98	258	405
M 683/99	-	158
M 1392/00	-	18
M 1002/02	-	59
M 915/05	-	21
Total	5,930	7,428

Newly released varieties: 59 t of *M 1002/02*, 21 t of *M 915/05* and 18 t of *M 1392/00* were also supplied to planters.

Nurseries Established

During the year 2017/18, cane nurseries were established on a total area of some 71 ha as shown in Table 31.

Table 31. Nurseries Established

Variety	Area established (ha)
<i>M 2398/98*</i>	25.433
<i>M 683/99*</i>	11.704
<i>R 570</i>	11.569
<i>M 1400/86</i>	6.592
<i>R 579</i>	5.689
<i>M 3035/66</i>	3.424
<i>M 915/05*</i>	3.365
<i>M 1002/02*</i>	1.942
<i>M 1392/00*</i>	0.949
<i>M 1256/04</i>	0.520
Total	71.187

*Newly released sugarcane varieties by the MSIRI

Sugar Cane Planters Regrouping Project (SPRP)

For the year 2017/18, 358.6ha of small planters' land were contracted for implementation of SPRP. As at end June 2018, planting was completed on 293 ha. Delays were due to heavy rainfall affecting land preparation activities during the period January - April 2018.

Table 32. SPRP areas contracted and planted (2017-18)

Sector	Area Contracted (ha)	Area Planted (ha)
North	37.3	32.6
East	119.2	75.9
Centre	85.5	74.5
South	116.6	110.3
Total	358.6	293.3

Agricultural Land Management System (ALMS)

The Agricultural Land Management System was introduced in 2017/18 with a Cane Replanting Scheme aiming at reversing the land abandonment trend among small sugar cane planters. A total of 552 ha of sugar cane fields was contracted under this scheme by the cane growers during 2017/18. As at end June 2018 an area of 369 ha was replanted. Delays were due mainly to the excessive rainfall recorded during period January- April 2018, which adversely affected land preparation activities.

Table 33. ALMS areas contracted and planted (2017-2018)

Sector	Area Contracted (ha)	Area Planted (ha)
North	110	59
East	210	125
Centre	104	82
South	128	103
Total	552	369

Planters' Fund

- Some 11.25 km of field roads were repaired through patching with rough stones and 8.85 km of roads were levelled using a back hoe/loader. Five reinforced concrete drains

were built to facilitate the flow of water across field roads.

- (ii) Forty five projects were identified to be executed in the year 2017/18 comprising 60 kms of road repairs and four box culverts.
- (iii) With the passage of Cyclone Berguitta followed by torrential rains, a further 41 km of roads was damaged and earmarked for upgrading under the Planters' Fund.

Radio Talks

The following radio talks were broadcasted during year 2017/18:

Month	Topic
1 July 2017	Short season sugar cane planting
2 August 2017	Weed control in plant cane
3 September 2017	Cane quality and its impact on riches and extraction
4 October 2017	Post-harvest cultural operations
5 November 2017	Fertilizer application in ratoon cane fields
6 December 2017	Weed control in ratoon sugarcane fields
7 January 2018	-
8 February 2018	Review of harvest 2017
9 March 2018	Plant nutrition, soil conservation and the environment
10 April 2018	Control of difficult weeds and vines
11 May 2018	Cane fire prevention measures
12 June 2018	Importance of sending clean cane to the mill

TV Programmes

The FSC Managers participated in four "Mati Ke Mol" TV programmes on the following topics:

Topic	No of Programmes	Period
Land preparation and Planting in SPRP	1	July 2017
New released cane varieties	2	July 2017 March 2018
Clean Cane Campaign	1	October 2017

Events

The FSA participated in the World Food Day Celebrations organised by the Ministry of Agro-Industry and Food Security held at Domaine Les Pailles from 13 to 15 October, 2017. It was also an opportunity to portray the main activities of the FSA and to mark our 50th Independence Anniversary.

Committees

Mr T. Gunesh represented MCIA on several committees:

- (i) Standards Committee, Mauritius Qualifications Authority;
- (ii) Sectoral Committee, HRDC;
- (iii) Steering Committee, FANRPAN Node (Mauritius);
- (iv) Mount and Beau Plan fund.

E. SERVICE TO FARMERS (AGRICULTURAL AND MECHANISATION)

Objectives and Functions

- (i) To maintain a pool of machinery for agricultural purposes.
- (ii) To hire 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, Roller, as well as various equipment and accessories. Table 34 shows the different types and numbers constituting the fleet.

Table 34. 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
 - (i) Coarse
 - Bulldozing
 - (ii) Fine
 - Rock breaking
 - Ripping
 - Raking
 - Chiselling
 - Rock aligning
 - Stone crushing
2. Derocking
3. Levelling

4. Furrowing
5. Road tracing and road-making
6. Cane Loading

More than 85% of work performed by AMU machines is for sugarcane plantation.

Main Categories of Hirers

1. Small sugarcane planters

This category of planter consists mainly of small sugarcane planters and constitutes approximately 54% of the AMU's workload. More than 85% 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 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 Projects during period July 2017 - June 2018 amounts to 8664 hours only (representing 18.5% of the total effective hours performed), which is substantially less than in previous years.

4. Small non-sugar planters

This category consists mainly of vegetable and food crop growers. They constitute approximately 8.5% of the total workload. The number of planters in this category has increased during the past year and is expected to increase furthermore this year.

5. Revenue

Table 35. Revenue

Planters/Category	2014		2015		Jan 2016 – June 2017		July 2017 – June 2018	
	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)	Effective h	Revenue (MUR)
Small Sugar Cane Planters	13,246	7,287,145	18,400	10,224,595	27,138	15,572,975	25,224	14,364,372
Sugar Estates	4,002	4,561,740	3,069	3,450,050	1,363	1,399,980	2,318	1,488,000
Large Planter	433	363,510	859	721,770	5,964	6,643,935	3,616	4,035,540
Projects including SPRP	42,660	137,098,036	23,925	76,796,350	19,994	61,997,143	8,664	27,028,696
Ministry /Parastatal including Food Security Fund Project	1,135	3,402,248	55	162,085	4,318	13,811,556	1,858	6,093,259
Small Non-Sugar Planters	2,709	3,350,665	3,430	4,367,857	5,093	6,392,986	3,953	5,166,508
Others	138	387,791					1,143	3,575,772
Total	64,323	156,451,135	49,738	95,722,707	63,870	105,818,575	46,776	61,752,147

F. CANE MILLING ARBITRATION AND CONTROL

Role and Functions

The Control and Arbitration Department (CAD) is a Department of the Mauritius Cane Industry Authority (MCIA).

With the proclamation of the MCIA Act No.40 of 2011, on 19 March 2012, the Control and Arbitration Committee (CAC) has replaced the Cane Planters and Millers Arbitration and Control Board. The CAC is an autonomous entity of the MCIA as per provision made under the MCIA Act, which inter alia provides that in the discharge of its functions, the CAC shall not be subject to the directions or control of any other person. All the functions and powers of the previous CPMACB have been vested upon the Control and Arbitration Committee (CAC).

The CAD is the operational and executive arm of the CAC. The CAD is manned by a Director who is responsible for the execution of the policy of the CAC and the management of 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.

Functions and powers of the Control and Arbitration Committee includes:

1. Arbitration of disputes between planters and millers;
2. Control of the milling of canes and the manufacture of sugar;
3. Determination of the quantity of sugar and co-products accruing to planters and millers;
4. Determination of Refund of Transport Cost;
5. Registration of Cane Contracts;
6. Delimitation of Factory Areas

The composition of the Control and Arbitration Committee during period 01 January 2017 to 30 June 2018 was as follows:

Table 36. Composition of the Committee 2017 - 2018

Chairperson

Mr. Dheerendra Kumar Dabee, G.O.S.K

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	Representative of small planters
Mr. Vhinaye Dookhony P.M.S.M	Representative of large planters
Mr. Patrick de Labauve d'Arifat (From January to March 2017)	Representative of the MCIA Board
Mr. Amal Kumar Mohabeer Mungur (From April 2017 onwards)	
Vacant	Independent member

During period 1 January 2017 - 30 June 2018, the Committee held 20 meetings. Table 37 shows the attendance at the various meeting held during that period:

**Table 37. Attendance for period 1
January 2017-30 June 2018**

Mr. Dheerendra Kumar Dabee, G.O.S.K	20
Mrs.Damyantee Takoory	18
Mr. Jean Li Yuen Fong	20
Mr. Soobas Muniah	19
Mr. Vhinaye Dookhony P.M.S.M	20
Mr. Patrick de Labauve d'Arifat	2
Mr Amal Kumar Mohabeer Mungur	17
Mr. V. Boodhna in replacement of Mrs Takoory on 1 August 2017	1

Arbitration of disputes and grievance handling

During the period January 2017-June 2018, no formal dispute was reported to the Committee for arbitration. However, 15 complaints have been registered and successfully addressed by the management of CAD.

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 the 2017 crop, a one-stop-shop facility was offered to planters where all stakeholders namely the SIFB, Millers and CAD were operating under one roof. This service enabled planters to register their sugarcane plantations with the SIFB, sign their cane contract agreements with the millers and register their cane contracts with the CAD at one go. This service was available at eight different sites namely FSC (Solitude, Rivière du Rempart, St Pierre, L'Unite, Bon Accueil, St Felix) and at SIFB sub-offices (Mare D'Albert and Vacoas). The registration period was from 02 May to 31 May, 2017

After 31 May 2017, the CAD received 281 late registrations. In all, 5,921 cane contracts have been

registered by the CAD and the number of late registration permits granted was 281.

Milling Activities

Cane crushing first started at Alteo on 26 May 2017 and ended at Terra on 29 December 2017. The start and end of milling activities of all sugar factories are given in Table 38.

Table 38. Start and End of Crop 2017		
Factory	Start of Crop	End of Crop
Terra	17 July 2017	29 December 2017
Alteo	26 May 2017	26 December 2017
Medine	10 July 2017	18 November 2017
Omnican	04 July 2017	16 December 2017

During the harvest season, a total amount of 3,713,331 t of canes were supplied to the mills by sugarcane growers and 3,710,919 t were crushed, with a loss of 2,412 t during transportation between cane transit sites and factories. Figure 12 illustrates the weight of cane crushed by the four sugar factories:

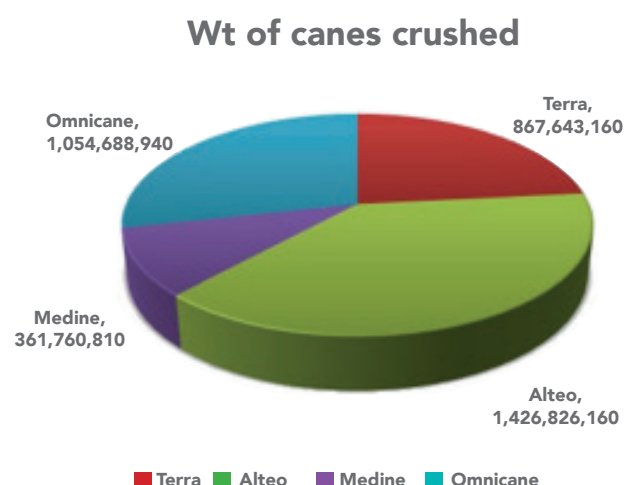


Fig 12. Cane Crushed per Factory - Crop 2017

The final sugar production for crop 2017 was 355,213 tonnes Tel Quel. The sugar production by each mill is shown in figure 13:

Net Sugar produced (Tel Quel)

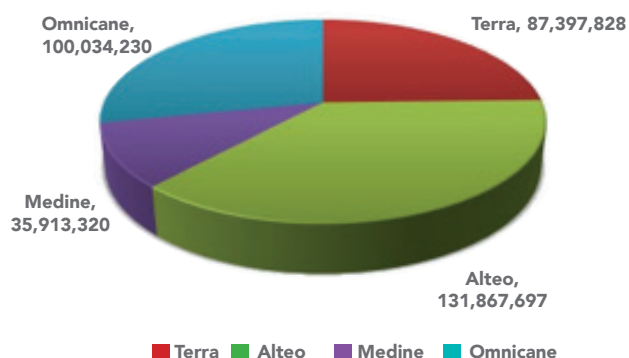


Fig 13. Sugar Produced Tel Quel per factory - Crop 2017

The island average sucrose in cane (Richesse) was 11.08 in 2017 as compared to 11.64 in 2016 indicating a decrease of 0.56%. The same trend was seen with regard to extraction which was 9.57 in 2017 compared to 10.18 in 2018 signifying a decrease of 0.61%.

Final Road Rate for Crop 2017

Pursuant to section 40 of the MCIA Act, “where the distance over which a planter’s canes are transported to a factory is greater than 6.4 kilometers, the miller shall” –

- where the transport is undertaken by the planter, reimburse to the planter the amount by which the cost of transport over that distance exceeds the cost of transport over 6.4 kilometers;
- where the transport is undertaken by the miller, be refunded the cost of the cost the transport over the first 6.4 kilometers only.

The rate of refund was determined by the Committee on 29 January 2018 and the recommended rates were not changed.

Table 39. Rate of refund for transport undertaken by the planter (above 6.4 km)

Planters supplying	Crop 2017 (MUR/t/km)
Up to 100 tonnes of canes	7.54
More than 100 tonnes of canes	6.85

Table 40. Rate of refund for transport undertaken by the miller (first 6.4 km)

Cost	Crop 2017 (MUR/t/km)
Fixed cost	24.57
Variable cost	6.85
Total	68.41

Assessment of Scum for Crop 2017

The Final Assessment of Scum for Crop 2017 based on the average quantity of scums produced by each factory per tonne of canes milled during the preceding crop year was approved by the Control and Arbitration Committee on 22 February 2018.

The amount of scums accruing to planters at specified moisture content is shown in Table 41.

Table 41. Final Assessment of Scum for Crop 2017

Factory	Moisture % Scum	kg Scums per t cane
Terra	69.32	32.30
Alteo	73.68	51.70
Medine	81.40	58.90

Omnicane factory recirculates scums produced in its diffuser to minimize sucrose loss and at the same time improve sucrose extraction. Consequently, the miller provides scum to planters only for the purpose of replantation at the rate of 7 t per acre as previously approved by the Committee.

Sucrose Content Tests

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

Every year, any planter or group of planters having an amount of canes as specified by the Committee may apply for a separate sucrose content test in

case he wants his canes to be assessed separately. The last date for the submission of an application for a separate test is 15 March in any crop year. For 2017, the Committee approved applications for six new separate tests, forty-five cancellations with low tonnage of canes and ten amendments to existing tests.

Sucrose content tests were carried out in four laboratories. The Infracana Cane Analyser previously installed at Union St Aubin has been transferred to La Barraque laboratory as from crop 2017. At the remaining eleven cane transit sites, cane consignments were sampled as usual and the samples collected were transported to the centralized laboratories for analysis.

A total of 109,371 valid sucrose content tests were carried out for the whole crop 2017 (see Table 42) as compared to 112,860 tests in 2016.

Table 42. Cane received and number of samples per site

Site No.	Site Name	Cane received t	Number of valid tests
1	Beau Champ	62,873	5,170
2	Beau Plan	67,674	5,595
3	Terra	742,331	20,348
4	Bel Ombre	24,287	1,524
5	Britannia	19,416	1,948
6	Constance	66,130	4,822
7	Alteo	1,215,009	24,628
9	Medine	351,698	8,538
10	Mon Desert Alma	52,495	1,659
11	Mon Loisir	58,036	4,668
14	Reufac	5,893	959
15	Riche en Eau	32,702	3,464
18	St Felix	65,090	5,554
19	Omnican	902,665	19,442
21	St Aubin	16,525	1,052
Total			109,371

The Final Assessment was completed in January 2017 and was approved by the Committee on 22 February 2018.

Determination of Price of Molasses

With the amendment of the Sugar Industry Efficiency Act in December 2016, the revenue accruing to a planter for molasses is derived from a basket of prices as the MCIA may determine which consists of:

- The sale price to distillers using molasses for the production of ethanol and potable alcohol for export shall be equal to a deemed FOB price as determined by the MCIA.
- The sale price to distiller-bottlers producing potable alcohol for the domestic market is equal to 1.75 times the deemed FOB price.
- MUR 2500 for molasses used locally as animal feed.
- Distiller/bottler contribution of MUR 40 per litre of absolute alcohol.

For Crop 2017, the MCIA has recommended that the sale price of molasses shall be equal to a Deemed FOB price of MUR 2,147.18 /t of molasses.

The blended price payable to planters per t of molasses at 86° Brix for Crop 2017 was MUR 3,543.20 inclusive of distiller/bottler contribution.

Weighbridge Calibrations and Checks

Pursuant to Section 32 of the MCIA Act, the CAD has to calibrate and conduct regular checks at all cane and sugar weighbridges around the island which *inter alia* includes sugar factories, cane transit sites, refineries and Sugar Storage Units of the MCIA.

The CAD possesses two lorries equipped with crane and forty-five 1-tonne cubic metallic standard weights to carry out the accuracy verification of the weighbridges. The standard weights are calibrated by the Legal Metrology Division of the Ministry of Commerce each year prior to the start of the crop season.

The number of cane weighing platforms in operation during Crop 2017 was 55. All platforms were tested throughout the year and the various accuracy checks performed are given in Table 43.

The total number of checks performed is 4,184 excluding approximately 1,500 reconciliation of weighbridge planters' tickets.

Table 43. Weighbridge calibration and accuracy checks (2017)

Types of Checks	Number of Checks
Calibration/Recalibration	59
Taring	123
Daily weighbridge accuracy checks	4,002
Total	4,184

Certification of ISO/IEC 27001:2013

The Software Labs Ltd. was awarded the contract for the enhancement of the Data Capture Module (DCM) and the Assessment Module (ASM) by the MCIA.

A Project Steering Committee (PSC) was set up to decide on major issues and monitor the activities and progress of the different phases of the project. The new software that has been named Data Capture and Sugar Assessment Module was used during harvest 2017 for the automatic capture of test results at the laboratories and the computation of the provisional and final assessments at the Head Office. However, certain improvements are still being made on the new system and it is expected that the development of the application software would be completed by the end of September 2018.

Value added products

During Crop 2017, six operators were involved in the production of rum Agricole and integral sugar from the use of either sugarcane or sugarcane juice. The equivalent amount of sugar involved was approximately 2,450 t.

During the same period, twenty operators were involved in the commercialization of sugarcane juice throughout the island. However, two of them did not renew their permit at the end of the crop year. All the operators have been using <10 t of sugarcane yearly except one who utilized about 36 t of cane. The total amount of sugar involved was 16 t from approximately 160 t of canes.

Closure of weighbridges

A miller may apply to the CAC for the closure of a weighbridge pursuant to section 36 of the MCIA Act, which stipulates that:

"Where a weighbridge has been receiving less than 500 tonnes of cane per day for the preceding 3 consecutive crop years, the miller may apply to the Control and Arbitration Committee for closure of the weighbridge".

In compliance with section 36 of the MCIA Act, in year 2017, the CAD has received several applications for the closure of cane transit sites from the millers as follows:

- (1) From Omnicane Milling Operations Ltd. for the closure of the weighbridges at Britannia, Bel Ombre and Union St. Aubin Cane Transit Sites;
- (2) From Terra Milling Ltd. for the closure of the weighbridges at Solitude and St. Antoine Cane Transit Sites;
- (3) From Medine Milling Company Ltd for the closure of the weighbridges at Reufac Cane Transit Site;
- (4) From Alteo Milling Ltd for the closure of the weighbridges at Highlands Cane Transit Site.

All the applications along with relevant information are forwarded to the CAC for decision. Once approval obtained from CAC, the views of the MCIA and the parent Ministry are sought and the final decision for the closure of a particular weighbridge rests on the Ministry or the Cabinet of Ministers.

For Crop 2017, approval has been granted for the closure of Solitude, St Antoine, Highlands and Union St Aubin weighbridges. The package offered to planters of the closed weighbridge sites comprises of three components as follows:

$$\text{Package} = (A) + (B) + (C).$$

Planters forming part of a Cooperative Credit Society which was Fair Trade certified, additionally received a premium of \$ 60 per tonne of sugar as subsidy on fertilizers, herbicides and transport which amounted to approximately MUR 2,100 per tonne sugar bringing the Total Net Income to MUR 18,283.41 for this category of growers.

- (1) Component (A) is a payment of MUR 25.00 per tonne of cane payable each year. The component A should be indexed to the Consumer Price Index as determined each year by Statistics Mauritius and reviewed accordingly.
- (2) Component (B) is calculated as $S \times RR$, the factor S being the distance between the closed platform and the new proposed platform for delivery of cane and RR being the official road rate determined each year by the Control and Arbitration Committee. Component B will be payable each year.
- (3) Component (C) is the excess of 6.4 km which is already being paid to planters for the delivery of their canes at the closed Weighbridges. Component C will also be payable to planters concerned every year.

Total Proceeds accrued to small planters from Sugarcane for Crop 2017

The different revenue streams derived by a small planter out of canes supplied by him during Crop 2017 per tonne of sugar are as follows:

1. Income from Sugar:	MUR 10,716.64
2. Income from Bagasse:	MUR 1,264.81
3. Income from Molasses:	MUR 1,552.08
4. Financial Assistance (SIFB):	MUR 1,250
5. Enhanced Support (MSS):	MUR 600
6. Financial Support (MSS):	MUR 850
7. Total Gross Income :	MUR 16,233.53
8. Interest on Advances:	MUR -50.12
9. Total Net Income:	MUR 16,183.41

Table 44. Summary of Crop 2017

Factory	Crushing Period		Crushing days	Canes (tonnes)			Richesse (Sucrose % Cane)	Extraction (Sucrose Extracted % Cane)	Sugar Produced (tonnes)				Molasses Produced (tonnes)
	Start	End		Received	Crushed	Loss in Transit			Tel Quel	Produced @ 98.5 Pol.	Average Efficiency	Diff	
Terra	17-Jul	29-Dec	138	868,091	867,643	447	11.60	10.07	87,398	88,233	88,159	41	28,921
	01-Jul	17-Dec	140	877,492	876,723	769	12.55	10.97	96,622	97,470	97,454	16	28,324
Alteo	26-May	26-Dec	174	1,427,965	1,426,826	1,138	10.68	9.24	131,868	132,305	132,006	299	42,645
	23-May	16-Dec	169	1,389,333	1,387,992	1,341	11.04	9.68	134,329	134,691	134,284	407	37,553
Medine	10-Jul	18-Nov	108	361,902	361,761	141	11.46	9.93	35,913	36,251	36,381	-130	12,026
	11-Jul	29-Nov	104	367,729	367,632	97	11.85	10.31	39,925	38,293	38,551	-258	11,631
Omnicanne	4-Jul	16-Dec	135	1,055,374	1,054,689	685	11.06	9.48	100,034	100,914	101,142	-228	38,223
	27-Jun	14-Dec	142	1,164,103	1,163,482	621	11.60	10.09	117,401	118,480	118,637	-157	40,167
Total				3,713,331	3,710,919	2,412	11.08	9.57	355,213	357,702	357,688		121,815
				3,798,657	3,795,828	2,829	11.64	10.16	386,277	388,934	388,927		117,675

Note: Figures in italic relate to Crop 2016

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 sugar receipt, 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.



Fig14. 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 15. Storage Shed

Unloading of Non-Originating Sugar at the Terminal Quay

The unloading of sugar vessels is carried on a 24-h basis which may last between 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 16. Storage of Non Originating Sugar (NOS) and Loading of trucks



Fig 17. Transport by trucks



Fig 18. 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 19. Delivery of sugar from Shed No.1



Fig 20. 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 m².

Sugar Movements

Sugar Received at the Terminal

A total of 1,131.260 t of PWS was received at the Terminal during the 2017 sugar cane crop. A breakdown of the quantity of sugar received from Terra Milling Ltd. is shown in Table 45 below.

Receipt of Plantation White Sugar (PWS)

Table 45. Quantity of sugar received		
Factory	Date	Tonnes (t)
Terra Milling Ltd.	20.12.17 - 31.12.17	1,131.260

Receipt of Non Originating Sugar (NOS)

A breakdown of the quantity of NOS received at the Terminal from each of the vessels is given in Table 46.

Table 46. Quantity of NOS received at the Terminal

Name of Vessel	Date	Tonnes (t)
MV Anna Dorothea	15.02.17 – 22.02.17	34,221.760
MV Lalis D	15.04.17 – 24.04.17	42,049.920
MV African Bary Bird	13.09.17 – 21.09.17	46,935.690
	Total	123,207.370

Delivery of Non Originating Sugar (NOS)

Table 47. Delivery of Non Originating Sugar (NOS)

Factories	Date	Tonnes (t)
Terra Milling Ltd.	26.09.17 – 15.12.17	193.340
Omnicanne Milling Operations Ltd.	26.09.17 – 15.12.17	856.300
Alteo Ltd.	26.09.17 – 15.12.17	13,556.370
	Total	14,606.010

Remaining stock Non Originating Sugar (NOS) as at 31.12.17 is 32,329.680 t

Remaining stock Plantation White Sugar (PWS) as at 31.12.17 is 1,131.260 t

Total stock of Bulk Sugar (Plantation White Sugar and Non Originating Sugar) as at 31.12.17 is 33,460.940 t

G(2) SUGAR STORAGE AND HANLDING 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 22nd 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 31st December 2014. All assets and liabilities have been transferred to the Mauritius Cane Industry Authority with effect from 1st January 2015.

Principal Activities

The principal activity of the Bagged Sugar Unit comprises 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.

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

- The Albion Docks (up to January 2018)
- MCIA Shed No 2
- Caudan

The sugars are handled in 25 kg, 50 kg and 1-t bags.

The Bagged Sugar Unit is also responsible for the following:

- Receipt of empty bags ordered by the Mauritius Sugar Syndicate from overseas and local suppliers for onward delivery to the sugar estates
- Receipt of steel bars and liners ordered by the Mauritius Sugar Syndicate from overseas and local suppliers for onward delivery to the sugar estates

The sugar weight received for the past 8 years are as shown in the Table 48 below:

Table 48. Weight of sugar								
Crop Year	2010	2011	2012	2013	2014	2015	2016	2017
Sugar Received from Sugar Estates (t)	118,847	136,144	142,772	121,042	126,714	104,172	134,566	87,457
Imported Sugar (t)	25,160	3,000	8,000	-	-	-	-	-
	144,007	139,144	150,772	121,042	126,714	104,172	134,566	87,457

Operational Standards

The Bagged Sugar Unit has been certified to be in general compliance with BS EN ISO 9001:2008. The Bagged Sugar Unit has also carried out and implemented Hazard Analysis and Critical Control Point (HACCP) on Receipt, Storage, Delivery of Bagged Sugar and Empty Bags.

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. They are 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

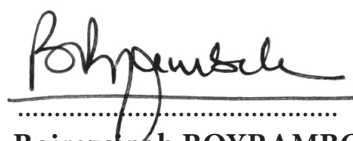
The Directors have overall responsibility for taking such steps, as are reasonably open to them, to safeguard the assets of the Authority and to prevent and detect fraud and other irregularities. The internal control system has been designed to provide the Directors with such reasonable assurance. Such systems ensure that all transactions are authorized 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.

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.....
Vikraj RAMKELAWON
Lead Analyst, MoFED
BOARD MEMBER

A handwritten signature in black ink, featuring a stylized 'B' and 'B'.

.....
Bojrazsingh BOYRAMBOLI
Senior Chief Executive, MoA&FS
CHAIRPERSON

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 2018, the statement of financial position as of 1 July 2017 and the statement of financial performance, statement of changes in net assets/equity, statement of cash flows 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 2018, 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.

Emphasis of Matter

I draw attention to the following:

- Trade Receivables amounting to Rs 258,354,867 at Note 10.2 of the financial statements. Out of this sum, Rs 207,037,932 represented cash advances to planters under Field Operation Regrouping and Irrigation Project/Sugar Planter's Regrouping Project from 2005 to 2015. As of 30 June 2018, after more than 12 years since the start of the project no repayment had been effected. The recoverability of the advances was uncertain.

- Retirement benefit obligations of Rs 802,730,742 at Note 21 of the financial statements comprised ex-MSIRI Pension Fund and that of the other five ex-Service Providing Institutions (SPIs) amounting to Rs 132,940,501 and Rs 669,790,241 respectively. With the coming into operation of the MCIA in March 2012, all SPIs pension funds including that of the ex-MSIRI should have been managed and administered under one pension fund scheme. As of 30 June 2018, the ex-MSIRI pension fund was still being administered separately.

My opinion is not qualified in respect of these matters.

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 for the year ended 30 June 2018, 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.

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 Responsibility for Compliance

In addition to the responsibility for the preparation and presentation of the financial statements described above, management is also responsible for ensuring that the activities, financial transactions and information reflected in the financial statements are in compliance with the laws and authorities which govern them.

Auditor's Responsibility

In addition to the responsibility to express an opinion on the financial statements described above, my responsibility includes expressing an opinion on whether the activities, financial transactions and information reflected in the financial statements are, in all material respects, in compliance with the laws and authorities which govern them. This responsibility includes performing procedures to obtain audit evidence about whether the Mauritius Cane Industry Authority's expenditure and income have been applied to the purposes intended by those charged with governance. Such procedures include the assessment of the risks of material non-compliance.

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

Opinion on Compliance

Statutory Bodies (Accounts and Audit) Act

The financial statements for the year ended 30 June 2018 were submitted on 31 October 2018. Due to some errors, the financial statements were amended and submitted on 31 May 2019.

In my opinion, in all material respects, the activities, financial transactions and information reflected in the financial statements are in compliance with the above Act.

Public Procurement Act

The Mauritius Cane Industry Authority is responsible for the planning and conduct of its procurement. It is also responsible for defining and choosing the appropriate method of procurement and contract type in accordance with the provisions of the Act and relevant Regulations. My responsibility is to report on whether the provisions of Part V of the Act regarding the Bidding Process have been complied with.

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.

Financial Reporting Act

The Directors are responsible for preparing the Corporate Governance Report. My responsibility is to report on the extent of compliance with the Code of Corporate Governance as disclosed in the annual report and on whether the disclosure is consistent with the requirements of the Code.

In my opinion, the disclosure in the Annual Report is consistent with the requirements of the Code.



K.C. TSE YUET CHEONG (MRS)
Director of Audit

National Audit Office
Level 14,
Air Mauritius Centre
PORT LOUIS

8 July 2019

J. FINANCIAL STATEMENTS

THE MAURITIUS CANE INDUSTRY AUTHORITY

FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2018

THE MAURITIUS CANE INDUSTRY AUTHORITY

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REPORT OF THE DIRECTORS

1. The Directors have the pleasure to submit the financial statements of the Mauritius Cane Industry Authority (MCIA) for the year ended 30 June 2018.

2. State of affairs and review of activities

The Statement of financial position as at 30 June 2018 is set on page 2 and the Statement of financial performance for the year then ended on page 4.

The main activity of the Mauritius Cane Industry Authority, is unchanged since 30 June 2017.

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.

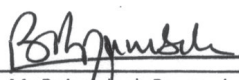
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CHAIRPERSON
MCIA Board of Directors

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF FINANCIAL POSITION
AS AT 30 JUNE 2018

	Notes	30 Jun 2018
		MUR
ASSETS		
Current assets		
Cash and cash equivalents	9	744,738,103
Trade receivables	10	35,592,849
Loans receivable	11	10,924,711
Inventories	12	51,948,807
Prepayments		1,305,874
		<u>844,510,344</u>
Non-current assets		
Trade receivables	10	222,762,018
Loans receivable	11	34,496,777
Investment in financial assets	13	692,800
Property, plant and equipment	14	2,240,588,790
Investment property	15	7,260,000
Intangible assets	16	2,125,018
		<u>2,507,925,403</u>
Total assets		<u><u>3,352,435,747</u></u>
LIABILITIES		
Current liabilities		
Trade payables	17	13,996,459
Short term borrowings	18	1,364,587
Short term employee benefit provisions	19	23,500,000
Other short term provisions	19	810,000
		<u>39,671,046</u>
Non-current liability		
Trade payables	17	12,695,812
Long term borrowings	18	16,833,674
Financial liabilities	20	1,876,051
Long term employee benefit provisions	19	155,099,504
Other long term provisions	19	3,100,000
Retirement benefits obligations	21	802,730,742
		<u>992,335,783</u>
Total Liabilities		<u>1,032,006,829</u>
Net Assets		<u><u>2,320,428,918</u></u>
NET ASSETS/EQUITY		
Contributed capital	22	300,000,000
Revaluation reserve		2,029,258,274
Fair value reserve		555,050
Accumulated surplus/(deficit)	23	(9,384,405)
Total Net Assets/Equity		<u><u>2,320,428,919</u></u>

Approved by the MCIA Board of Directors on 24 May 2019.



Mr Bojrasingh Boyramboli
Chairperson



Mr Vikraj Ramkelawon
Board member

The notes on pages 8 to 32 form an integral part of these financial statements.

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF FINANCIAL POSITION
AS AT 01 JULY 2017

	01 Jul 2017
	MUR
ASSETS	
Current assets	
Cash and cash equivalents	673,853,619
Trade receivables	112,296,951
Loans receivable	11,223,626
Inventories	54,739,900
Prepayments	1,352,680
	<u>853,466,776</u>
Non-current assets	
Trade receivables	225,467,213
Loans receivable	34,731,363
Investment in financial assets	689,400
Property, plant and equipment	2,354,695,959
Investment property	7,700,000
Intangible assets	2,179,807
	<u>2,625,463,742</u>
Total assets	<u><u>3,478,930,518</u></u>
LIABILITIES	
Current liabilities	
Trade payables	30,750,751
Short term borrowings	1,341,211
Short term employee benefit provisions	20,860,337
Other short term provisions	1,750,000
	<u>54,702,299</u>
Non-current liability	
Trade payables	6,344,362
Long term borrowings	17,882,678
Financial liabilities	2,715,919
Long term employee benefit provisions	153,353,881
Other long term provisions	1,350,000
Retirement benefits obligations	734,305,503
	<u>915,952,343</u>
Total Liabilities	<u>970,654,643</u>
Net Assets	<u><u>2,508,275,875</u></u>
NET ASSETS/EQUITY	
Contributed capital	300,000,000
Revaluation reserve	2,115,420,117
Fair value reserve	551,650
Accumulated surplus/(deficit)	92,304,108
Total Net Assets/Equity	<u><u>2,508,275,875</u></u>

The notes on pages 8 to 32 form an integral part of these financial statements.

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF FINANCIAL PERFORMANCE
FOR THE YEAR ENDED 30 JUNE 2018

		Year ended 30 Jun 2018
	Notes	MUR
Revenue		
Non - Exchange Transactions		
Cess and Grants	25	707,744,506
Levy on sale of sugar	26	155,939,540
Other non-exchange income	27	2,874,506
		<u>866,558,552</u>
Exchange Transactions		
Hire of tractors and trailers	28	63,918,583
Other exchange income	27	45,894,136
		<u>109,812,719</u>
Expenses		
Salaries and salary related expenses	29	(402,110,690)
Administrative and general expenses	30	(158,773,443)
Ex- dockers pensions	31	(113,732,225)
Depreciation of property, plant & equipment	14	(127,890,970)
Depreciation of investment property	15	(440,000)
Amortisation of intangible assets	16	(805,715)
FORIP expenses		(128,165,570)
Planters fund expenses		(1,478,438)
ALMS expenses		(23,153,925)
Sugar cane sustainability expenses		(138,774,169)
Finance costs		(385,842)
Increase in retirement benefits obligations	21	(46,059,254)
		<u>(1,141,770,242)</u>
Deficit for the year		<u><u>(165,398,971)</u></u>

The notes on pages 8 to 32 form an integral part of these financial statements.

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF CHANGES IN NET ASSETS/ EQUITY
YEAR ENDED 30 JUNE 2018

	Contributed Capital	Accumulated Surplus/(Deficit)	Fair Value Reserve	Revaluation Reserve	Earmarked Funds	Total
	MUR	MUR	MUR	MUR	MUR	MUR
As previously stated at 01 July 2017	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)	-
As restated at 30 June 2017	300,000,000	92,304,108	551,650	2,115,420,117	-	2,508,275,875
Transfer - excess depreciation on revaluation	-	86,161,843	-	(86,161,843)	-	-
Adjustment to opening earmarked funds balance	-	(85,400)	-	-	-	(85,400)
Release to Statement of financial performance	-	-	-	-	-	-
Receipt for the year	-	-	-	-	-	-
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
As at 30 June 2018	300,000,000	(9,384,405)	555,050	2,029,258,274	-	2,320,428,919

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.

The notes on pages 8 to 32 form an integral part of these financial statements.

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF CASH FLOWS
YEAR ENDED 30 JUNE 2018

	Notes	Year ended 30 Jun 2018
		MUR
Cash flows from operating activities		
Cash absorbed in operations	34.1	76,143,956
Interest paid		(294,855)
Net cash used in operating activities		<u>75,849,101</u>
Cash flows from investing activities		
Capital expenditure		(14,355,642)
Disposal proceeds		375,000
Interest received		9,819,774
Dividend received		19,960
Net cash generated from/(used in) investing activities		<u>(4,140,908)</u>
Cash flows from financing activities		
Staff loans recovered		13,761,953
Staff loans granted		(13,228,452)
Repayment of loans		(1,357,210)
Net cash flow generated from financing activities		<u>(823,709)</u>
Net Increase/ (Decrease) in cash and cash equivalents		70,884,484
Movement in cash and cash equivalents		
		MUR
As at 01 July 2017		673,853,619
Increase / (Decrease)		<u>70,884,484</u>
As at 30 June 2018	34.3	<u><u>744,738,103</u></u>

The notes on pages 8 to 32 form an integral part of these financial statements.

STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

YEAR ENDED 30 JUNE 2018

	ORIGINAL BUDGET	ACTUAL	VARIANCE	REMARKS
	MUR	MUR	MUR	
RECURRENT EXPENDITURE				
Salaries, Salary related expenses and Travelling	359,935,300	339,774,735	20,160,565	Productivity bonus to ex SSHU employees not paid and posts not filled.
Pension and Insurance of employees	61,820,700	58,142,831	3,677,869	Effect of lower salary than expected
MSS Ex- Dockers Pension	116,510,000	113,033,526	3,476,474	COLA paid lower than expected
Rent, Rates and Utilities	31,338,700	23,753,348	7,585,352	Rental for United Docks Ltd ceased as from February 2018 and exemption of Municipal rates
General Office Expenses	7,623,500	6,236,681	1,386,819	Cost saving
Maintenance and Insurance	86,604,000	87,470,958	(866,958)	Change in insurance premium and value of assets
Welfare and Health & Safety	2,386,000	2,441,841	(55,841)	
Finance Cost	456,300	383,132	73,168	
Mission	600,000	520,679	79,321	
Field Experimentation	100,000	37,498	62,502	
Publication and Advertisement	800,000	313,606	486,394	
Training & Support Services	250,000	181,313	68,687	
Security	19,819,600	14,648,513	5,171,087	Alarm system at ex SSHU not installed
Research & Development	13,000,000	9,704,664	3,295,336	
	701,244,100	656,643,325	44,600,775	
CAPITAL EXPENDITURE				
Non Current Assets	14,491,800	14,187,993	303,807	
Repayment of Loans	1,339,600	1,357,210	(17,610)	
	15,831,400	15,545,203	286,197	
TOTAL EXPENDITURE	717,075,500	672,188,528	44,886,972	
REVENUE				
MSS-Warehouse for Special Sugars	2,101,300	-	(2,101,300)	Received after year end
Hire of Tractors & Trailers	93,200,000	63,918,583	(29,281,417)	Reduction in land preparation works under SPRP
Cess	241,800,000	-	(241,800,000)	Cess suspension
Co - financing from Government	125,913,200	300,400,000	174,486,800	Cess suspension
Grant from MSS	95,169,600	95,169,600	-	
Levy on sale of sugar on local market	129,000,000	150,789,436	21,789,436	Consumption of sugar higher than expected
Others	29,881,400	26,800,598	(3,080,802)	
	717,075,500	637,078,217	(79,997,283)	

The notes on pages 8 to 32 form an integral part of these financial statements.

THE MAURITIUS CANE INDUSTRY AUTHORITY

8

NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2018

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 2018 and are presented in accordance with International Public Sector Accounting Standards (IPSASs)

The Authority applies IPSASs for the first time and elects to not prepare comparative information. An opening accrual basis statement of financial position at 1 July 2017 is being prepared and presented. As a first-time adopter, the Authority also elects 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 adopts 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.

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 2017 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 October 2018 which are mandatorily effective for annual financial statements covering periods beginning on or after 1 January 2019 but which allow early application.

- IPSAS 2 Cash Flow Statements
- IPSAS 4 The Effects of Changes in Foreign Exchange Rates
- IPSAS 5 Borrowing Costs
- IPSAS 10 Financial Reporting in Hyperinflationary Economies
- IPSAS 16 Investment Property
- IPSAS 17 Property, Plant, and Equipment
- IPSAS 22 Disclosure of Financial Information about the General Government Sector
- IPSAS 24 Presentation of Budget Information in Financial Statements
- IPSAS 31 Intangible Assets
- IPSAS 33 First-time Adoption of Accrual Basis International Public Sector Accounting Standards
- IPSAS 34 Separate Financial Statements
- IPSAS 36 Investments in Associates and Joint Ventures
- IPSAS 37 Joint Arrangements

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.

THE MAURITIUS CANE INDUSTRY AUTHORITY

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NOTES TO THE FINANCIAL STATEMENTS
YEAR ENDED 30 JUNE 2018

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.

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.

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.

(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.

(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.

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
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 692 800 (at fair value on 30 June 2018) 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
At 30 June 2018			
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.

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 2017. 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.

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
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 2018 MUR
- Deposits with MSS	379,200,000
- Bank account with SBM Ltd- FORIP Account	210,164,913
	<u>589,364,913</u>
- Bank account with Maubank	1,788
- Bank account with SBM Ltd- Main Account	74,657,239
	<u>664,023,940</u>
- Other bank balances	80,587,935
- Cash	126,228
	<u><u>744,738,103</u></u>

The effective rate of interest on bank overdrafts at the reporting date is 10.25 %.

10 TRADE RECEIVABLE

10.1

	30 Jun 2018 MUR
Receivables - Exchange transactions	253,204,763
Receivables - Non-exchange transactions (note 26)	5,150,104
	<u>258,354,867</u>
analysed as follows:	
	MUR
Current	
Exchange transactions	30,442,745
Non - exchange transactions	5,150,104
	<u>35,592,849</u>
Non Current	
Exchange transactions	222,762,018
Non - exchange transactions	-
	<u>222,762,018</u>
TOTAL	<u><u>258,354,867</u></u>

10.2 Receivables consist of:	MUR
Cash advance to planters	207,037,932
Planters - Hire of tractors	16,373,273
Planters funds	14,589,930
MSS - Levy on sale of sugar	5,150,104
Analytical & Agronomic Services	5,622,180
Interest & dividend	2,415,664
Air Pollution Monitoring Unit	1,089,500
Rodrigues Assembly	437,849
Ministry of Agro-Industry	1,399,089
WIKWIO	77,967
Others	4,161,379
	<u>258,354,867</u>

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 2018 MUR
11.1 Staff loans	
Car loan	42,785,926
Motorcycle loan	2,522,262
Personal loan	113,300
	<u>45,421,488</u>
<i>analysed as follows:</i>	MUR
- Current	10,924,711
- Non-current	34,496,777
	<u>45,421,488</u>

11.2 Movement in Staff Loans	Car Loan MUR	Motorcycle Loan MUR	Personal Loan MUR	TOTAL MUR
Opening balance	43,149,758	2,661,866	143,364	45,954,988
New loan	12,117,370	659,083	452,000	13,228,453
Repayment	(12,481,202)	(798,687)	(482,064)	(13,761,953)
Closing balance	<u>42,785,926</u>	<u>2,522,262</u>	<u>113,300</u>	<u>45,421,488</u>

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 10.25 %.

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
12 INVENTORIES

	<u>30 Jun 2018</u>
	<u>MUR</u>
Cost of spare parts and consumables	
SSHU	28,892,059
AMU	22,597,992
MSIRI	458,756
	<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 the inventories is estimated to be not less than their carrying amount. No impairment loss is noted.

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 2018</u>
	<u>MUR</u>
SIT	74,000
SBM Ltd	618,800
	<u>692,800</u>

Cost

Available-for-sale financial assets
At 30 June 2018

222,750

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 30 JUNE 2018

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
COST OR VALUATION						
As at 01 July 2017	1,933,289,000	715,944,977	7,059,466	5,583,052	15,354,688	2,677,231,183
Adjustment	-	-	-	-	-	-
Additions	409,500	11,747,771	448,456	1,509,681	216,208	14,331,616
Disposal	-	-	-	-	-	-
As at 30 June 2018	1,933,698,500	727,692,748	7,507,922	7,092,733	15,570,896	2,691,562,799
DEPRECIATION						
As at 01 July 2017	144,592,723	162,529,984	3,121,803	2,793,627	9,497,087	322,535,224
Charge for the Year	57,845,278	64,671,398	1,322,325	1,591,680	3,008,104	128,438,785
Disposal	-	-	-	-	-	-
As at 30 June 2018	202,438,001	227,201,382	4,444,128	4,385,307	12,505,191	450,974,009
NET BOOK VALUE						
As at 30 June 2018	1,731,260,499	500,491,366	3,063,794	2,707,426	3,065,705	2,240,588,790

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NOTES TO THE FINANCIAL STATEMENTS
YEAR ENDED 30 JUNE 2018

- 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:

	<u>30 Jun 2018</u>
	<u>MUR</u>
Cost	1,555,189,311
Accumulated depreciation	<u>(1,245,833,892)</u>
Net book value	<u>309,355,419</u>

15 INVESTMENT PROPERTY

	<u>30 Jun 2018</u>
	<u>MUR</u>
15.1 COST OR VALUATION	
As at 01 July 2017 & 30 June 2018	<u>8,800,000</u>
DEPRECIATION	
As at 01 July 2017	1,100,000
Charge for the year	440,000
As at 30 June 2018	<u>1,540,000</u>
NET BOOK VALUE	
As at 30 June 2018	<u>7,260,000</u>

If the investment property was stated on a historical cost basis, the amounts would be as follows:

	<u>30 Jun 2018</u>
	<u>MUR</u>
Cost	1,561,251
Accumulated depreciation	<u>(1,155,327)</u>
Net book value	<u>405,924</u>

- 15.2** The following have been recognised in the statement of financial performance:

	<u>30 Jun 2018</u>
	<u>MUR</u>
Rental income	300,000
Direct operating expenses arising from investment property that generates rental income	<u>17,330</u>

16 INTANGIBLE ASSETS

	30 Jun 2018 MUR
<u>Computer software</u>	
COST OR VALUATION	
As at 01 July 2017	4,056,345
Additions	915,830
Revaluation adjustment	-
As at 30 June 2018	4,972,175
DEPRECIATION	
As at 01 July 2017	1,876,538
Charge for the year	970,619
As at 30 June 2018	2,847,157
NET BOOK VALUES	
As at 30 June 2018	2,125,018

If the intangible assets were stated on a historical cost basis, the amounts would be as follows:

	30 Jun 2018 MUR
Cost	12,990,789
Accumulated depreciation	(11,697,033)
Net book value	1,293,756

17 TRADE PAYABLES

	30 Jun 2018 MUR
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17.1 Payables	26,692,271
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17.2 analysed as follows:

	MUR
- Current	13,996,459
- Non-current	12,695,812
	26,692,271

	MUR
17.3 Omnicane & others	1,327,580
Ex- dockers pensioners	5,746,726
Planters	4,929,106
Mauritius Revenue Authority	900,361
Scomat Ltee	12,101
University of Mauritius	722,400
National Pension Fund	400,970
AWL Trading	198,375
RSL Security Services	1,145,343
National Audit Office	900,000
Feber Associates	100,625
Ministry of Agro-Industry	7,000,000
Others	3,308,684
	26,692,271

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
18 BORROWINGS

	<u>30 Jun 2018</u>
	<u>MUR</u>
Loans	
- EDF loan	18,066,691
- Australian aid loan	131,570
	<u>18,198,261</u>
 Repayable as follows:	
- Within one year	1,364,587
- Within two to five years	5,458,348
- After five years	11,375,326
	<u>18,198,261</u>
 <i>analysed as follows:</i>	
- Current	1,364,587
- Non-current	16,833,674
	<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 loss of MUR 331,582 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 2017	80,617,347	22,825,443	70,771,429	1,500,000	1,600,000	177,314,219
Earned	19,957,040	10,480,077	5,545,234	-	-	35,982,351
Increased / (Decreased)	(9,413,381)	(1,152,723)	4,365,041	1,881,436	(430,000)	(4,749,627)
Paid	(11,055,204)	(10,802,341)	(3,538,458)	(621,436)	(20,000)	(26,037,439)
Balance as at 30 June 2018	80,105,802	21,350,456	77,143,246	2,760,000	1,150,000	182,509,504

analysed as follows:

	MUR	MUR	MUR	MUR	MUR	MUR
Current	8,800,000	11,000,000	3,700,000	760,000.00	50,000	24,310,000
Non-Current	71,305,802	10,350,456	73,443,246	2,000,000	1,100,000	158,199,504
	80,105,802	21,350,456	77,143,246	2,760,000	1,150,000	182,509,504

Current Liabilities	MUR
Employee benefit provision	23,500,000
Others	810,000
Non-Current Liabilities	
Employee benefit provision	155,099,504
Others	3,100,000
	182,509,504

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
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.

The financial asset is offset with the financial liabilities.

	<u>30 Jun 2018</u> <u>MUR</u>
Gross financial liabilities	30,864,167
Financial assets set-off	(28,988,116)
Net financial liabilities	<u><u>1,876,051</u></u>

21 RETIREMENT BENEFITS OBLIGATIONS
21 A 30 JUNE 2018 - 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 MSIRI 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 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 A.3 Amounts recognised in statement of financial performance			
Service cost:			
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
Charge to statement of financial performance (Note 21 A.7)	16,154,993	59,642,758	75,797,751
Remeasurement:			
Liability (gain)/loss	10,386,291	37,989,463	48,375,754
Assets (gain)/loss	(15,791,363)	(10,218,406)	(26,009,769)
Remeasurement recognised in net assets/equity	(5,405,072)	27,771,057	22,365,985
Total	10,749,921	87,413,815	98,163,736
21 A.4 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	132,940,501	669,790,241	802,730,742
21 A.5 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	628,274,712	963,104,562	1,591,379,274

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
21 A.6 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	495,334,211	293,314,321	788,648,532

21 A.7 Amounts recognised in the Statement of financial performance with respect to retirement benefits obligations are as follows:

		MUR
<i>Included in Salaries and salary related expenses</i>		
Contribution to MSIRI Pension fund	(note 29)	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
		29,738,497
<i>Other increase in net retirement benefits obligations</i>		46,059,254
<i>Total charge to Statement of financial performance</i>	(note 21 A.3)	75,797,751

21 A.8 The plans are exposed to actuarial risks such as investment risks, interest rate risk, longevity risk and salary risk.

The cost of providing the benefits is determined using the Projected Unit Method.

Discount rate determined by reference to market yields on bonds.

Significant actuarial assumptions for determination of the defined benefit obligation are discount rate, expected salary increase and mortality.

21 B 30 JUNE 2018 - 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 1,593,193

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>300,000,000</u>

23 RECONCILIATION OF ACCUMULATED SURPLUS OR DEFICIT

23.1 Accumulated Surplus / (Deficit)

	MUR
As previously stated at 01 July 2017	(714,207,841)
Prior Year Adjustment - Deferred Income	61,517,294
Prior Year Adjustment - Earmarked Funds	744,994,655
As restated at 30 June 2017	<u>92,304,108</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 December 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. As from July 2017, 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

	As Previously Stated at 01 July 2017	Prior Year Adjustment	As Restated at 01 July 2017
	MUR	MUR	MUR
Contributed Capital	300,000,000	-	300,000,000
Accumulated Surplus / (Deficit)	(714,207,841)	806,511,949	92,304,108
Fair Value Reserve	551,650	-	551,650
Revaluation Reserve	2,115,420,117	-	2,115,420,117
Earmarked Funds	744,994,655	(744,994,655)	-
TOTAL	<u>2,446,758,581</u>	<u>61,517,294</u>	<u>2,508,275,875</u>

THE MAURITIUS CANE INDUSTRY AUTHORITY
NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2018
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 the Authority 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

	<u>30 Jun 2018</u> MUR
MOFED - Co-financing from Government	293,400,000
MSS - BSSD expenditure grant	95,169,600
MOAFS - Sugar Cane Sustainability grant	138,774,906
MOAFS - Agricultural Land Management System grant	50,000,000
MOAFS - Sugar Planters Regrouping Project grant	130,000,000
MOAFS - Cyclone Berguitta grant	400,000
	<u>707,744,506</u>

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:

	<u>30 Jun 2018</u> MUR
- Received	150,789,436
- Receivable (note 10)	5,150,104
	<u>155,939,540</u>

27 OTHER INCOME

Other income consists of:

	<u>30 Jun 2018</u> MUR
Non - Exchange Transactions	
Anchorage dues	380,238
Berthing dues	1,087,348
Housing scheme for SE Workers grant	1,113,000
Stale cheques written back	140,920
Cane juice application fee	60,000
DBM - SPES decrease in liabilities	93,000
	<u>2,874,506</u>

Exchange Transactions	MUR
Interest & dividend received	10,390,695
IAEA grant	474,121
MRC grant	2,251,709
Persistent Organic Pollutants grant	600,000
Air Pollution Monitoring income	6,684,900
Refund of World Food Day expenses	414,939
Sale of cane	2,750,644
Interest on car/motorcycles loans	1,878,765
Rent received	10,306,091
Analytical & agronomic services	5,182,112
Rent of warehouse for special sugar	2,101,300
Sale of varieties	945,357
Rental of sugar boxes	64,000
Refund of medical expenses	281,821
Profit on disposal	375,000
SICOM - refund for damages & accidents	119,400
Refund for tractor repairs	201,446
Loading of non originating sugar	312,750
Accountant General	49,000
Consultancy	287,500
Weighbridge calibration	110,000
Others	112,586
	<u>45,894,136</u>
TOTAL	<u>48,768,642</u>

28 HIRE OF TRACTORS AND TRAILERS

	30 Jun 2018
	MUR
Hire of tractors	62,437,413
Hire of trailers	1,481,170
	<u>63,918,583</u>

29 SALARIES AND SALARY RELATED EXPENSES

	30 Jun 2018
	MUR
Salaries and salary related expenses consist of:	
Salaries & wages	281,522,525
Travelling	30,207,108
Uniforms	1,974,800
Pension - Ex-MSIRI	961,579
Pension contribution - SICOM	24,395,391
Pension contribution - MSIRI Pension Fund	6,788,741
Insurance of Employees - AMAS	156,517
National Savings Fund	2,885,160
National Pension Scheme	1,239,469
Family Protection Scheme	3,470,107
Civil service FPS	126,588
IVTB contribution	430,369
Sick leave	19,957,040
Vacation leave & retirement gratuity	5,545,234
Passage benefits	10,480,077
(Decrease) / Increase in provision	(6,201,063)
Insurance of employees - GPA & others	11,827,403
Medical expenses	6,343,645
	<u>402,110,690</u>

30 ADMINISTRATIVE AND GENERAL EXPENSES

	30 Jun 2018
	MUR
Audit Fees	400,000
Board & Committee Fees	1,176,304
Consultancy Fees	626,000
Legal & Professional Fees	284,625
Subscriptions	420,080
Cleaning	1,372,577
Maintenance & Repairs	5,050,201
Security	15,824,535
Tools & Spare Parts	2,696,745
Computer Maintenance	666,573
Outsourcing of IT & Remote Connection	1,332,724
Computer Supplies	612,834
Software licences	151,862
Field Experimentation Expenses	452,438
Other Office Expenses	88,839
Welfare	816,569
Advertisement	291,956
Maintenance of Office Equipment	400,904
Printing , Photocopy , Postage and Stationery	1,883,632
Health & Safety	1,680,597
Missions	520,679
Publications	52,635
Rent	11,153,540
Rates	29,288
Electricity	9,789,423
Water	1,525,240
Telephone , Internet & E-Mails	2,531,856
Research & Development	9,416,810
Running Expenses - Tractors & Cranes	73,016,866
Running Expenses - Other Vehicles	6,698,968
Training	181,313
Increase In Provision	1,451,436
Compensation and Car Benefits	827,000
Insurance of Building and Equipment	1,461,122
Other Funds Expenses	1,297,231
Air Pollution Monitoring Unit Expenses	2,374,212
Loss on Exchange	215,829
	158,773,443

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 2017 was 1697.
- (ii) Charge to Statement of financial performance is made up of the following:

	30 Jun 2018
	MUR
Paid during the period	113,205,180
Add Pension due at end	5,746,726
	118,951,906
Less Pension due at start	(5,219,681)
	113,732,225

32 FINANCIAL COMMITMENTS

30 Jun 2018

MUR

Financial commitments relating to goods and services already contracted for

10,388,168

**33 RELATED PARTY TRANSACTIONS - COMPENSATION
OF KEY MANAGEMENT PERSONNEL**

30 Jun 2018

MUR

Compensation paid during the period to and on behalf of executive
and non-executive Directors, including pension contributions.

14,035,623

The Authority has made no contribution to any defined contribution plan for its key management personnel.

THE MAURITIUS CANE INDUSTRY AUTHORITY
STATEMENT OF CASH FLOWS
YEAR ENDED 30 JUNE 2018

34 STATEMENT OF CASH FLOWS NOTES

	Year ended 30 Jun 2018
	MUR
34.1 Cash absorbed in operations	
Deficit for the year	(165,398,971)
Adjustments for:	
Depreciation on property, plant and equipment	128,438,785
Depreciation on investment property	440,000
Amortisation of intangible assets	970,619
Loss /(Profit) on disposal	(375,000)
Exchange Loss/(Gain)	325,013
Interest paid	294,855
Interest received	(9,819,774)
Dividends received	(19,960)
Actuarial loss	46,059,254
Operating deficit before working capital changes	914,821
(Increase) / decrease in accounts receivables (excluding car loans)	79,377,271
(Decrease) / increase in accounts payables	(11,294,646)
(Decrease) / increase in financial liabilities	(839,868)
(Decrease) / increase in provisions	5,195,285
(Increase) / decrease in inventories	2,791,093
Cash absorbed in operations	76,143,956
34.2 Non cash transactions	
The principal non cash transactions are the adjustments for depreciation and amortisation, interest received, exchange loss and actuarial loss.	
34.3 Cash and cash equivalents	
Cash and cash equivalents include the following for the purpose of the statement of cash flows:	
	30 Jun 2018
	MUR
Cash in hand and at bank	744,738,103
Bank overdraft	-
	744,738,103

K. LIST OF ABBREVIATIONS

ACP	African, Caribbean and Pacific
ADEME	Agence de L'Environnement et de la Maitrise de l'Energie
ALMS	Agricultural Land Management System
AMCO	Alcohol and Molasses Company
AMU	Agricultural Mechanization Unit
ASM	Assessment Module
AUF	Agence Universitaire de la Francophonie
BSSD	Bagged Sugar Storage and Distribution
CAC	Control and Arbitration Committee
CAD	Control and Arbitration Department
CCS	Carbon Capture and Storage
CEB	Central Electricity Board
CIRAD	Coopération Internationale en Recherche Agronomique pour le Développement
COMESA	Common Market for Southern and Eastern Africa
CPMACB	Cane Planters and Millers Arbitration and Control Board
CWA	Central Water Authority
DCM	Data Capture Module
EDMS	Electronic Data Management System
EIA	Environmental Impact Assessment
ERS	Early Retirement Scheme
ETU	Extension and Training Unit
EU	European Union
FANRPAN	Food, Agriculture and Natural Resources Policy Analysis Network
FAO	Food and Agriculture Organization
FOB	Free on Board
FORIP	Field Operations Regrouping and Irrigation Project
FSA	Farmers Service Agency

FSC	Farmers' Service Centre
GIS	Geographical Information System
HACCP	Hazard Analysis and Critical Control Point
HMU	Heavy Mechanical Unit
HRDC	Human Resources Development Council
IAEA	International Atomic Energy Agency
ICUMSA	International Commission for Uniform Methods of Sugar Analysis
IPP	Independent Power Producer
ISO/IEC	International Organization for Standardization and the International Electro-technical Commission
ISSCT	International Society of Sugarcane Technologists
IWRM	Integrated Water Resources Management
IWUE	Irrigation Water Use Efficiency
JTC	Joint Technical Committee
KISKOL	Kwale International Sugar Company Ltd.
LCR	Land Conversion Rights
LEI	Landbouw Economist Institute
MAAS	Multi Annual Adaptation Strategy
MARENA	Mauritius Renewable Energy Agency
MCIA	Mauritius Cane Industry Authority
MEPU	Ministry of Energy and Public Utilities
MMCO	Mauritius Molasses Company Limited
MoAIFS	Ministry of Agro Industry and Food Security
MOFED	Ministry of Finance and Economic Development
MRA	Mauritius Revenue Authority
MSA	Mauritius Sugar Authority
MSIRI	Mauritius Sugarcane Industry Research Institute
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
MUR	Mauritian Rupees
MV	Merchant Vessel
NDC	Nationally Determined Contributions
NHDC	National Housing Development Co. Ltd.
NIR	Near Infrared Spectrometer
NOS	Non Originating Sugar
NTA	National Transport Authority
PBB	Programme Based Budgeting
PCR	Polymerase Chain Reaction
PDSM	President's Distinguished Service Medal
PIN	Parcel Identification Number
PIIP	Planters' Productivity Improvement Programme
POC	Phasing out of Camps
PPAs	Power Purchase Agreement
PSU	Permanent Sampling Unit
PWS	Plantation White Sugar
R&D	Research and Development
RADseq	Restriction site Associated DNA Sequencing
RDA	Road Development Authority
SADC	South African Development Community
SASRI	South African Sugarcane Research Institute
ScBV	Sugarcane Bacciliform virus
SCYLV	Sugar Cane Yellow Leaf Virus
SIL	State Informatics Ltd.
SIE	Sugar Industry Efficiency
SIFB	Sugar Insurance Fund Board
SIT	Sugar Investment Trust

SNP	Single Nucleotide Polymorphism
SPRP	Sugar Planters' Regrouping Project
SSHU	Sugar Storage and Handling Unit
TEC	Tertiary Education Commission
TOR	Terms of Reference
TNC	Third National Communication
TMRSU	Traffic Management & Road Safety Unit
UNFCCC	United Nations Framework Convention on Climate Change
URA	Unity Regulatory Authority
UNE	United Nations Environment
VRECS	Valuation and Real Estate Consulting Services
VRS	Voluntary Retirement Scheme
WUE	Water User Efficiency



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