







## **Report and Accounts**

**PERIOD 1 JULY 2020 - 30 JUNE 2021**

## **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

19 April 2022

**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 2020 to 30 June 2021.

Yours faithfully

Medha GUNPUTH

**CHAIRPERSON**

## **CORPORATE INFORMATION**

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## **A (1) CORPORATE MATTERS**

### **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became the apex organisation of the sugar cane industry and the relevant Acts of the six cess funded institutions were repealed and the operations and activities of the institutions were vested with the MCIA.

Following Cabinet's decision on 22 August 2014, the MCIA took over the activities of the Bagged Sugar Storage Co Ltd, which now operates under the name Sugar Storage and Handling Department.

### **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 Section 5(1)(i) of the MCIA Act, the facilities to be provided by the Authority shall include:

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

## **Powers of Authority**

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

- (a) enter into a contract, in accordance with the Public Procurement Act, including a contract for the supply of goods, services, plant, equipment or materials for the execution of works;
- (b) receive grants and donations, and raise funds;
- (c) subject to para e (i), fix and levy fees and charges;
- (d) enter into an agreement with any person for the performance, or provision, by that person, of any service or facility which the Authority is authorised to perform or provide;
- (e) with the Minister's approval:
  - (i) fix the rate of charges in respect of the storage, bagging, packing, loading or unloading, at the sugar terminal, of sugar or any other commodity;
  - (ii) undertake, by agreement with the Mauritius Ports Authority, the execution of bulk handling or automated or semi-automated cargo handling operations in respect of any commodity other than sugar;
  - (iii) give such guidelines as it considers appropriate to the Mauritius Sugar Syndicate for the purpose of formulating, coordinating and harmonising the policies of those organisations in keeping with the objectives of the MCIA Act.

## Monopoly of Authority

- (1) Subject to para 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 para 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.

## Corporate Governance Report

Corporate governance is the set of processes, customs, policies and laws affecting the way an organisation is directed, administered or controlled. Corporate governance is the structure that governs direction and performance of an organisation. It is about how the Board of Directors of the organisation can contribute to the success of the organization by setting values and an organized framework that focusses on long term continuity and success to achieve operational effectiveness, financial efficiency, higher values and strong reputations. Corporate Governance also includes the relationships among the many stakeholders involved and the goals for which the organization is governed.

The key elements of good corporate governance principles include honesty, trust and integrity, openness, accountability, mutual respect and commitment to the organization.

The new Code of Corporate Governance of Mauritius was launched in 13 February 2017 by the Minister of Financial Services, Good Governance and Institutional Reforms and the Chairman of the National Committee on Corporate Governance. The code comprises a set of principles and guidance. It aims to improve and guide the governance practices of organisations within Mauritius. It also forms part of existing laws, rules and regulations, principles and best practices. Codes are different to other parts of the legal system as principles-based is adopted rather than a rules-based approach. 'A principles-based approach provides an organisation with the flexibility to adopt systems and procedures that suit its individual circumstances'.

### 'Apply-and-Explain' as per the Code of Corporate Governance

The Code of Corporate Governance employs an 'apply-and-explain' methodology. The Code of Corporate Governance for Mauritius is the first to adopt this new approach to corporate governance.

As such, rather than being a rigid set of rules, the Code includes eight simple principles.

## PRINCIPLE 1: GOVERNANCE STRUCTURE

The MCIA is headed and administered by a Board of Directors as established under the MCIA Act (No 40 of 2011). The appointment of the MCIA Board of Directors is depicted at Principle 3.

### ***Powers of the Board of Directors***

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

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

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

### ***Conflicts of Interest***

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

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

The Chairperson of the Board of Directors is non-executive and is appointed by the Minister of Agro-Industry and Food Security under Section 8(2)(a) of the Act.

The role and functions of the Chairperson are set out below:

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

## ***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 finance 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.

### **Quorum**

The quorum of the Board shall be 3.

The profile of the Senior Management of the MCIA is detailed at A(2) HUMAN RESOURCE MANAGEMENT.

## **PRINCIPLE 2: THE STRUCTURE OF THE BOARD AND ITS COMMITTEES**

### **Structure and composition of the Board of the Mauritius Cane Industry Authority**

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

The Board of Directors of the MCIA is committed to achieve high standard of corporate governance. The aim is to maximise long term value for all stakeholders. The Board has the responsibility to ensure accountability, transparency and performance of the organisation. Sub-Committees have been set up to enable the Board to discharge its duties in more effective and efficient manner. However, the Board is ultimately responsible.

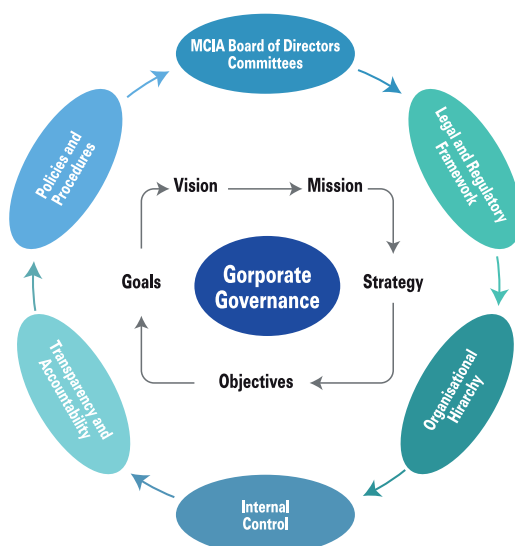


Fig 1. Corporate Governance

### Board Structure for year 2020/2021

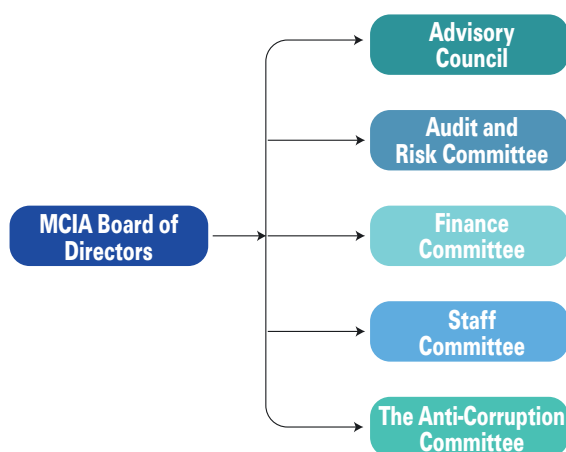


Fig 2. Board Structure for year 2020/2021

### Composition of the Mauritius Cane Industry Board of Directors

The composition of the Mauritius Cane Industry Board of Directors during the period 1 July 2020 to 30 June 2021 is shown in the Table below:

Table 1. Composition of the Board of Directors during the period 1 July 2020 to 30 June 2021	
Mr Boyrazsing Boyramboli (up to 14.10.2020)	<b>Chairperson</b>
Mr Koosiram Conhye (as from 30.10.2020)	
Mrs Indira Rugjee	Representative of the Ministry of Agro-Industry and Food Security
Mr Vikraj Ramkelawon	Representative of the Ministry of Finance and Economic Development
Mr Jacques M d'Unienville, G.O.S.K	Member having wide experience in the sugar industry sector
Mr Nundlall Basant Rai, P.D.S.M	Member having wide experience in the sugar industry sector
Mr Jean Li Yuen Fong	Member having wide experience in the sugar industry sector
Mr Amal Kumar Mohabeer Mungur	Member having wide experience in the sugar industry sector

**Tenure of Office**

Every member of the Board, other than the ex-officio member, holds office for a period of 2 years and shall be eligible for reappointment. The Chief Executive Officer is in attendance at Board Meetings and may take part in its deliberations, but does not have the right to vote. The other Directors, Assistant Director and Managers are also called to be in attendance as and when required.

**Board and Sub-Committees**

Seven (7) Board of Directors meetings were held during period 1 July 2020 to 30 June 2021. The following table shows the attendance at the Board of Directors Meetings.

<b>Table 2. Attendance at the Board of Directors Meetings Period 1 July 2020 to 30 June 2021</b>	
<b>Names</b>	<b>Board of Directors Meeting</b>
<b>Chairperson:</b> Mr Boyrazsingh Boyramboli (up to 14.10.2020)	2
Mr Koosiram Conhye (as from 30.10.2020)	3
<b>MEMBERS</b>	
Mrs Indira Rugjee (in the Chair)	2
Representative of Ministry of Agro-Industry and Food Security	5
Mr Vikraj Ramkelawon	5
Representative of Ministry of Finance and Economic Development	
Mr Jacques M d'Unienville, G.O.S.K	7
Member having wide experience in the sugar industry sector	
Mr Nundlall Basant Rai, P.D.S.M	7
Member having wide experience in the sugar industry sector	
Mr Jean Li Yuen Fong	7
Member having wide experience in the sugar industry sector	
Mr Amal Kumar Mohabeer Mungur	7
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:

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

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 is constituted of the following Board Members:

Table 3. Finance Committee	
Mr Jacques M d'Unienville, G.O.S.K	Member having wide experience in the sugar industry sector (as Chairperson)
Mrs Indira Rugjee (as from 7.1.2020)	Representative of Ministry of Agro-Industry and Food Security
Mr Vikraj Ramkelawon	Representative of Ministry of Finance and Economic Development

## Composition of Staff Committee

The Staff Committee is constituted of the following Board Members:

Table 4. Staff Committee	
Mr Amal Kumar Mohabeer Mungur	Member having wide experience in the sugar industry sector (as Chairperson)
Mrs Indira Rugjee (as from 7.1.2020)	Representative of the Ministry of Agro-Industry and Food Security
Mr Jean Li Yuen Fong	Member having wide experience in the sugar industry sector

## The Advisory Council

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

### Structure and Composition of the Advisory Council

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

The composition of the Advisory Council was as follows:

Table 5. Composition of the Advisory Council	
Mr Marie Joseph Gerard CHASTEAU DE BALYON	Chairperson
Mrs Soovidama Ponien VENCATACHELLUM	Representative of the Ministry responsible for the subject of cooperatives
Vacant	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 (From Jan 2016-Dec 2018) Replaced by Mr New-Fon Hey Tow Y. K. J.	Chief Executive Officer 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

**Table 5. Composition of the Advisory Council (Contd.)**

Mr Satyanand GOVINDA	Representative of the Fair Trade Cooperative Federation
Mr Louis Lindlay Clifford VERNY	Representative of the employees of the MCIA
Mr Sebastien LAVOPIERRE	Representative of millers
Mr Louis Jean Francois SENEQUE	Representative of power producing companies
Mr Ajay PARSAN	Representative of refiners and agro-processors
Mr Raffick CHATAROO, MBE Mr Hemant Rao Anand SONOO Mr Trilock K. UJODAH	3 representatives of planters, one of whom shall represent small planters
Mr Pranjeewan RAMJUTTUN Mr Gerard LALL Mr Sachidanand RAJARAM Mr Lan Hing PO HEE FOON	4 representatives of recognized trade unions of the sugarcane industry, including a representative of staff, overseers, non-agricultural employees and agricultural employees

**Tenure of office**

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

The composition of the Advisory Council is being reconstituted.

**Other Committees****(1) The Audit and Risk Committee**

The Audit and Risk Committee has been set up in April 2017 and has met twice during the financial year 2020/2021. It monitors and reviews the effectiveness and integrity of MCIA's internal financial controls, audit functions and risk management systems. 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 and the internal audit function.

The composition of the Audit and Risk Committee is as follows:

**Table 6. Audit and Risk Committee**

Chairperson	Representative of Ministry of Agro-Industry and Food Security Mrs Indira Rugjee Deputy Permanent Secretary 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

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

MCIA has set up its Anti-Corruption Committee to oversee the corruption risk areas. The committee has met 3 times during the financial year 2020/2021.

The Anti-Corruption Committee has the following tasks:

- overseeing and coordinating the implementation of corruption prevention strategies
- advising Senior Management on corruption prevention issues with respect to new policies
- advising on corruption prevention issues
- reviewing the Anti-Corruption Policy of MCIA which comprises risk assessments for all major activities of the institution

### **(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.

## **PRINCIPLE 3: DIRECTORS APPOINTMENT PROCEDURES**

### **Section 8 of the Act refers to the appointment of Directors:**

- (1) The Board shall be administered by a Board, to be known as the Board of Directors.
- (2) The Board shall consist of-
  - (a) a Chairperson;
  - (b) a representative of the Ministry;
  - (c) a representative of the Ministry responsible for the subject of finance;
  - (d) 4 members having wide experience in the sugar industry sector, including at least one representative from the milling activities sector and one from the small planter sector.
- (3) Every member, other than members referred to in subsection (2)(b) and (c), shall hold office or 2 years and shall be eligible for reappointment.
- (4) Every member shall be paid such fees and allowances as the Board may, with the approval of the Minister, determine.

## **PRINCIPLE 4: DIRECTORS DUTIES, REMUNERATION AND PERFORMANCE**

The duties of the MCIA Board of Directors is to lead and guide the MCIA.

- To monitor, review and evaluate strategies, policies and corporate plans
- To ensure that the organisation complies with the codes of corporate governance.
- To ensure that the organisation has an effective system of controls in order to assess and monitor risks properly
- To ensure that all information to stakeholders are communicated in all transparency and accountability
- To prepare a statement of objectives for the organisation

#### **a) General Responsibilities**

The Board oversees the general performance of the MCIA. The entire Board is responsible for such supervision.

#### **b) The Board Acts in the Interest of the Organisation**

The Board shall act in the best interests of the MCIA and its Departments.

#### **c) Quality of Performance**

The Board is responsible for the quality and effective performance of the MCIA.

d) Provision on Information

The Chief Executive Officer and the Board Secretary shall see to it that Management, in a timely manner, provides Board and its Committees with the necessary information for effective and efficient function.

e) Responsibility for Securing Information

The Board and its individual members each has responsibility to get all information from Management and the internal and external auditors required to carry out their duties efficiently and effectively.

### ***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 2021 amounted to MUR859,170 and fees paid for other Board Members and Committees amounted to MUR692,746. The salary paid to the key management personnel during the year under review amounted to MUR 10,035,135. 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.

### **PRINCIPLE 5: RISK GOVERNANCE AND INTERNAL CONTROL**

The Board of MCIA has the responsibility to develop and execute a vigorous risk management framework.

The Audit and Risk Committee has been set up to design a sound risk governance system in order to implement it effectively and efficiently. Its 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.

#### ***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.

## **PRINCIPLE 6. REPORTING WITH INTEGRITY**

The full set of the MCIA Annual Report is published on the MCIA's website ([www.mcia.mu](http://www.mcia.mu)).

The Financial statements of the MCIA have been prepared in accordance with the Statutory Bodies (Accounts and Audit) Act and are in line with the International Public Sector Accounting Standards (IPSASs).

### **Donations**

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

## **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'.

### **Code of 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. Some of the ethics are Integrity, Selflessness, Honesty, Impartiality, Accountability and Transparency.

<b>Integrity</b>	To put the obligations of the MCIA above one's own personal interests.
<b>Selflessness</b>	To avoid seeking financial or other material benefits for oneself or any other person through one's official position.
<b>Impartiality</b>	To act solely as per the merits of a case and to serve the Government of the day, irrespective of his or her own political affinity or preference.
<b>Objectivity</b>	To favour meritocracy basing his or her advice and decisions on rigorous analysis of evidence.
<b>Accountability and Transparency</b>	One should be responsible and accountable for his or her decisions and actions.
<b>Openness</b>	To be as open as possible in his or her decisions and to provide justification for his or her actions whenever required.
<b>Honesty</b>	To act in good faith and to be truthful.
<b>Justice</b>	To adhere to the principles of natural justice.

## PRINCIPLE 7: AUDIT

Internal auditing is an independent and objective assurance activity designed to add value and improve an organisation's operations. It helps an organisation accomplish its objectives by bringing a systematic, disciplined approach to the evaluation and improvement of risk management, control and governance processes. MCIA has an effective and independent internal audit function which reports to the Board. The audit function is comprised of the Internal Auditor/Senior Internal Auditor and Internal Control Officers.

The aim of the internal audit function is to assess the policies, methods and procedures in place at the organisation in order to cater for their adequate application. Independent assurance is provided on the quality and effectiveness of internal control, governance and processes, thus helping to protect the organisation. The MCIA's Internal Audit function reports functionally to the Board's Audit Committee and administratively to the Chief Executive Officer.

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.



### Internal Audit

The objective of the Internal Audit function is to assist in the effective discharge of MCIA responsibilities. It also undertakes reliable assessment and value adding services relating to systems, internal controls and procedures. The Internal Auditor / Senior Internal Auditor has unfettered access to documentations and records in the execution of his function.

### Internal Controls

The internal control system is primarily designed to manage rather than eliminate the risks of failure in meeting business objectives. Internal controls can provide only reasonable assurance against material misstatement or loss. MCIA's internal controls are tested on a regular basis by the Internal audit function.

## 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.

## **PRINCIPLE 8: RELATIONS WITH SHAREHOLDERS AND OTHER KEY STAKEHOLDERS**

The responsibilities of the Board of Directors of the MCIA is to achieve and sustain the highest standards of Corporate Governance. The objective is to help to continue survival and maximize the long term value with different stakeholders. Good governance is important for the continuous success and survival of the organisation.

## **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.

Moreover, the Policy Planning Unit (PPU), under the Scheme of Phasing out of sugar camps provides grant for an amount of Rs7,000 to all ex-sugar camp dwellers who have moved from a sugar camp to a new site. The amount is released by MCIA once the construction of their house has reached the slab level and upon certification by the PPU.

Furthermore, the Policy Planning Unit is also involved in the monitoring of the Scholarship Scheme for graduated courses, diploma, BSC offered by recognised institutions to children of Planters and workers in the context of factory closures and implementation of the Voluntary Retirement Scheme project.



**Vikraj RAMKELAWON**  
BOARD MEMBER



**Medha GUNPUTH**  
Senior Chief Executive,  
Ministry of Agro-Industry  
and Food Security  
CHAIRPERSON

## Corporate Governance Report

### Compliance and Enforcement

The Board of Directors adheres to the highest principles of good governance and ensures that proper standards of Corporate Governance 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.

### 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**  
BOARD MEMBER



**Medha GUNPUTH**  
Senior Chief Executive,  
Ministry of Agro-Industry  
and Food Security  
CHAIRPERSON

## A (2) HUMAN RESOURCE MANAGEMENT

### Introduction

The role of the Human Resource Department 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.

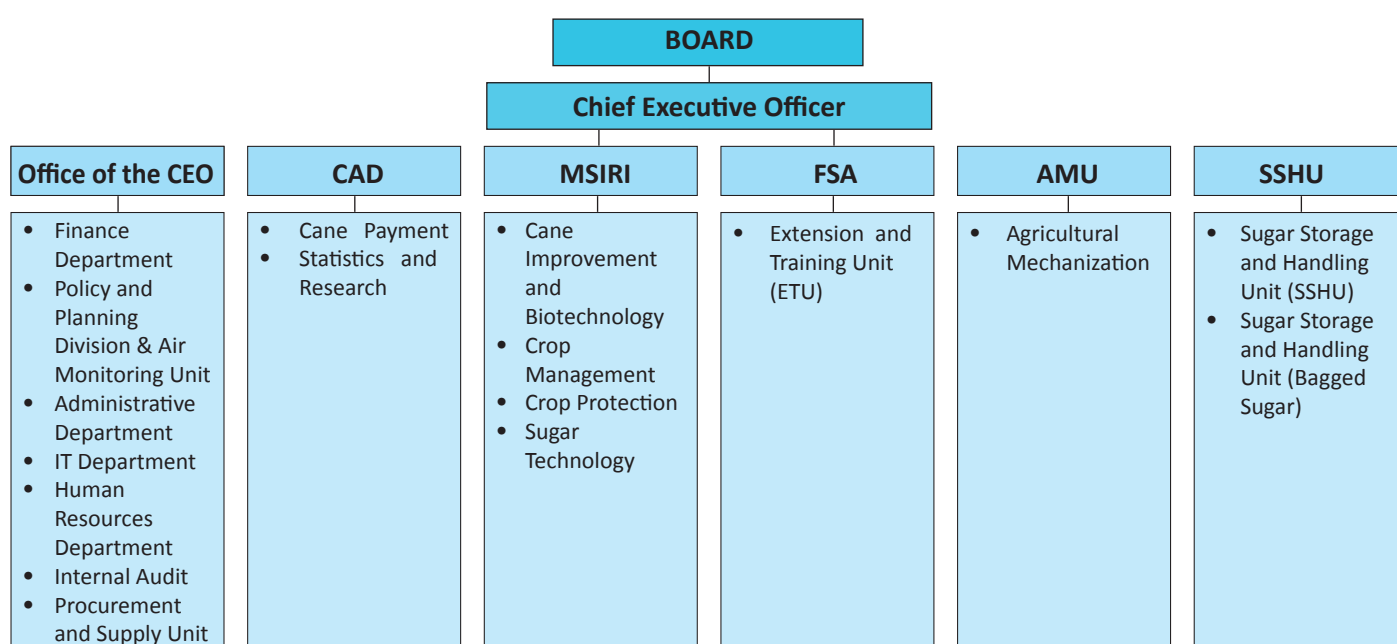
The Authority has a total workforce of 502 employees as at 30 June 2021 on its permanent and pensionable establishment.

### Organisational Structure

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

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

The Organisation Structure is depicted in the figure below:-



## **(a) OFFICE OF THE CHIEF EXECUTIVE OFFICER**

This Department is responsible to provide 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 comprises of the following Departments:-

- (i) **Finance Department** – 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. Fourteen (14) employees were attached to the Department.
- (ii) **Policy and Planning Department** – responsible, inter alia, for the preparation and reviewing of the strategic plan of the Authority, carrying out regular assessment of the challenges and opportunities of the industry, both in the local and international scene and preparation of plans and policies with the objective of ensuring long term viability and sustainability of the sugar cane cluster. It is also responsible for the Air Monitoring Unit. Ten (10) Employees were attached to this Department.
- (iii) **Administration Department** – 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. Fifteen (15) employees were attached to this Department.
- (iv) **Information Technology Department**  
The IT Section is responsible for the overall design, implementation and management of the IT infrastructure and applications within the MCIA. The unit provides support services to all the other sections in the organization including the sub-offices (outstations) and is also responsible for ensuring that all the hardware/systems owned by the Authority are

in good working conditions. Assistance is also provided to any user having difficulties with either a software/program or with hardware such as printers, scanners, and workstations. Three (3) employees were attached to this Department.

### **(v) Human Resources Department**

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

### **(vi) Internal Audit Unit**

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

The MCIA's Internal Audit Unit reports functionally to the Board's Audit and Risk Committee and administratively to the Chief Executive Officer. The Internal Audit Unit 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 Unit

### **(vii) Procurement and Supply Unit**

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

Four (4) employees were attached to this Unit

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

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

The objectives of the Control and Arbitration Department are, inter alia, to control milling activities, arbitrate disputes among Millers, Planters and other stakeholders and determine the quantum of sugar and by-products accruing to producers. Twenty-one (21) 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. One hundred and twelve (112) employees were attached to this Department.

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

This department is, inter alia, responsible for:

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

Prior to the setting of the MCIA, this Department was an autonomous parastatal body, that is, the Farmers Service Corporation. Fifty-six (56) employees were attached to this Department.

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

This Unit is primarily responsible for the provision of mechanical cultivation services to the sugarcane planters. The preparation of lands prior to replantation

after a sugarcane crop cycle is the main activity. It also provides cane loading facilities during crop season.

Like other departments, this department 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 department has 143 employees in its establishment.

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

This Department comprises of two Units:

**(i) Sugar Terminal**

This section 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-three (33) employees are attached to this section.

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

This unit also falls under the supervision of the Director, SSHU (Bagged Sugar) and is responsible, inter alia, for the receipt, handling and storing bagged sugar from the Sugar Estates and for the distribution of sugar for local consumption and for export. Prior to it being merged with the MCIA, this Unit was a private company, known as, the Bagged Sugar Storage and Distribution Co. Ltd. The unit has eighty-one (81) employees in its establishment.

## Senior Management Profile at 30 June 2021

**Table 7. Senior Management Profile**

SN	Name	Post	Qualifications
1	Mr Purmessur Satish	Chief Executive Officer	BSc (Maur), MSc (Maur)
2	Mr Ramdharee Yashwantsingh	Director, FSA	BSc (Maur), MBA (Maur)
3	Mr Busgeeth Devendranath	Ag. Director, CAD (Assistant Director, CAD)	BSc (Maur)
4	Dr (Mrs) Dookun-Sauntally Asha	Ag. Director MSIRI (Principal Research Manager, MSIRI)	BSc (Newcastle) MSc (Newcastle) PhD (Reading)
5	Dr Seeruttun Sumantlall	Ag. Principal Research Manager, MSIRI	BSc (Maur), MSc (Cranfield), PhD (Pretoria), MIAgre
6	Mr Awotarowa Anil	Ag. Assistant Director, FSA	BSc (Maur), MBA (Maur)
7	Mr Ramchurn Narottam Sharma	Manager, SSHU (Bagged Sugar)	LCCI (H), ACCA II
8	Mr Santbakshsingh Sunil	Manager, Human Resource	BA (Delhi), MBA (Delhi), Master in Public Policy and Administration (Maur)
9	Mr Deena Sachim Duth	Manager, Finance	FCCA
10	Mr Woodun Ritesh	Manager, IT	BSc (Maur), MSc (Maur)
11	Mr Rivière Vivian	Research Manager	BSc (Maur), MSc (Cranfield)
12	Dr Ng Cheong Ronald	Research Manager	BSc (Reading), MSc (Cranfield), MBA (Maur), PhD (Free State)
13	Mr Mungroo Ishwurduth	Ag Director, AMU	BSc (Maur), MSc (Maur), Registered Professional Engineer
14	Mr Chadandeo Baboolall	Manager, ETU	BSc (Maur), MBA (Maur)
15	Mr Luckraj Jhurry	Manager Policy and Planning	BSc (Maur), MSc in Agricultural Development (London)
16	Mr Hassen Khoodoruth	Administrative Manager, Administration	BCom (Punjab), MBA HR Management (Maur)

## Internal Audit

Name	Post	Qualifications
Mr Leeladhanjiv Jhuboo	Internal Auditor/Senior Internal Auditor	LLB (Maur) BSc (Oxford Brooks), MBA (Mau) 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.

## Safety and Health

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.

For the Authority, Safety and Health 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 Safety and Health Policy, through compliance with legislative requirements as a minimum standard. To achieve the objective, the Authority has appointed a full-time Safety and Health Officer.

During year 2020/2021, the Safety and Health Committee held ten (10) meetings.

### Personal Protective Equipment

With a view of minimizing the risk of injury, all employees concerned are granted Personal Protective Equipment adapted to the nature of their respective duties.

### Health Surveillance

In the performance of their respective duties, some employees are exposed to various hazardous materials such as: used engine oil, welding fumes, laboratory chemicals etc. A health surveillance exercise is carried out in respect of all employees concerned on an either 6-month basis or yearly basis depending in their nature of work to comply with:

- (i) Section 77(1)(a) and Section 77(2) of the Occupational Safety and Health Act 2005 (OSHA 2005) concerning employees exposed to substances as mentioned in the Ninth and Fourteenth Schedule of the Act to ascertain their fitness.
- (ii) Second and twelve schedule of the Dangerous Chemical Control Act 2004 (DCCA 2004).

### Machinery Inspections at the MCIA

Machinery inspections are carried out on a 6-month and yearly basis at the following departments to ensure that vehicle lifts, hoists and lifts and other machineries are of substantial construction, sound material, adequate strength and free from patent defect and are also properly maintained:

- i. Sugar Storage and Handling Unit
- ii. Sugar Storage and Handling Unit (Bagged Sugar)
- iii. Agricultural Mechanization Unit
- iv. Mauritius Sugarcane Industry Research Institute
- v. Control and Arbitration Department

### COVID-19 Pandemic

The novel coronavirus (2019-nCoV) (COVID-19) has had a profound impact on people and organisations around the globe and Mauritius is no exception.

Our island was hit by a second wave of the pandemic Coronavirus (COVID-19). Given the resurgence of local cases in February and March 2021, the Government imposed a nationwide lockdown as from 9 March 2021 at 20h00 which was maintained until 30 April 2021 at 20h00. Only essential services were authorized to operate under predefined conditions.

At the MCIA some officers at the managerial level as well as other staffs were required to attend duty using the Work Access Permit issued by the Commissioner of Police and remitted to them through the Parent Ministry. Some officers at managerial level were called upon to attend meetings at the Ministry of Agro-Industry and Food Security as well as internal management meetings at the MCIA Head Office. Moreover, officers of the Finance Department had to attend duty on a roster basis to process employees' salary and other urgent payments. Moreover, a few Messengers/Office Attendants were required to attend duty. The Work-from-Home policy was also reactivated.

### **Protocol set up by the MCIA**

The MCIA initiated necessary actions for ensuring that established sanitary protocols issued by the Ministry of Health and Wellness are observed and complied with by all the Departments.

The MCIA also reinforced the measures to prevent the spread of the disease such as provisions of (a) masks, (b) face shields, (c) desk shields, (d) equipment and disinfectant to employees. Automated dispensers fully-equipped with soap and sanitizer for practicing of good hygiene have also been installed.

Sensitization/awareness programmes were designed and implemented in different Departments, and information regarding safety measures to prevent proliferation of the Covid-19 disease was disseminated. Necessary training on use of safety masks and infrared thermometers were also provided.

### **(a) Workplace vaccination programme organised by the MCIA in collaboration with the Ministry of Health and Wellness**

The MCIA, in collaboration with our Parent Ministry sent its employees to different vaccination centres in April 2021:

- i. Taher Bagh
- ii. Plaine Verte Youth Centre
- iii. Cote d'Or Vaccination Centre
- iv. Open University of Mauritius, Curepipe

The MCIA in collaboration with the Ministry of Health and Wellness also organised a workplace vaccination programme at the MCIA Head Office, Réduit for its employees, as well as for their close relatives. A total of 400 persons was vaccinated; the first dose was administered on 24 June 2021 and the second dose on 19 July 2021.

### **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.

The following employees attended the following courses/workshops during the period 1 July 2020 to 30 June 2021:

<b>Table 8. Courses/Workshops</b>				
<i><b>Course Title</b></i>	<i><b>Name</b></i>	<i><b>Organized by</b></i>	<i><b>From</b></i>	<i><b>To</b></i>
SOP for Sling Safety	29 SSHU employees (on the job training)	HR Dept	24 August 2020	-
Forklift Safety - Practical	Messrs M Adrien, V Dowlut, N Reddi, R Zacharie, L Samba. Y Fidele & R J Appiah	HR Dept Delivered by Mechanization Co Ltd	25 August 2020	26 August 2020
Kitchen safety & hygiene	Mrs A Vythelingum	HR Dept	08 September 2020	-
Writing Effective Minutes of Meetings	L. Dwarka (Mrs) R. Doorgachurn (Mrs)	Civil Service College	28 September 2020	-
Seminar on Occupational Safety & Health for Employers/Employees in the Transport Sector	Mr S G Ramkhalawon, AMU; Mr K Mungun, MSIRI; Mrs A Brizmohun; Safety & Health Officer; Mr L D M Delaire, SSHU.	Ministry of Labour, Human Resource Development and Training	24 November 2020	25 November 2020
Seminar on Road Safety	Mr A D Veerigadu, SSHU; Mr S Poinen, SSHU; Mr R K Beedassy, SSHU; Mr S Murden, SSHU.	Mauritius Ports Authority	11 December 2020	-
SOP for Core sampling safety, fire safety and Covid protocol guidelines for employees	57 CAD employees (on the job training)	HR Dept	June 2021	

## Retirement

The following Officers retired during the year 01 July 2020 - 30 June 2021:

Table 9.Retirement				
SN	Name	Post	Department/ Section	Date
1	Mr Edouard Louis Minerve	AMO	AMU	01-Jul-20
2	Mr Sarengum Pillay Samoo	General Worker/Field Worker/Gardener	MSIRI	28-Jul-20
3	Mr Kamless Seeam	TA/STA	FSA	28-Jul-20
4	Mr Mario Gilbert Edge Kennoo	Baghandler	BSSD	12-Aug-20
5	Mr Eddy Pierre Gunputh	Security/Gate Keeper	BSSD	01-Oct-20
6	Mr Jean Daniel Cyril Radami	Mechanic	AMU	01-Oct-20
7	Mr Jean Max Eddy Bonneheure	Snr Terminal Operator (mechanical)	SSHU	13-Nov-20
8	Mr Ingamlon Arnasala	Baghandler	BSSD	17-Nov-20
9	Mr Deonarain Binda	AMO	AMU	29-Jan-21
10	Mr Shrawan Kumar Sonatun	SIPO	MSIRI	30-Jan-21
11	Mr Louis Jacques Cataperman	Operator	AMU	02-Feb-21
12	Mr Maheswarnath Sumbhoo	Snr Field Worker/General	MSIRI	10-Feb-21
13	Miss Maryse Chung Tze Cheong	RO/SRO	MSIRI	11-Feb-21
14	Mr Balakrishna Arnassalon	Operator	BSSD	01-Mar-21
15	Mrs Gaeetree Dahari	FO/SFO	Finance	07-Mar-21
16	Mr Ramjeet Kumar Chaytoo	General Worker/Field Worker/Gardener	MSIRI	16-Mar-21
17	Mr Michel Clairet Lechoumanan	Temp AMO	AMU	01-Apr-21
18	Mr Jean Luc Mootoocurpen	General Worker/Field Worker/Gardener	MSIRI	01-Apr-21
19	Mr Mootoo Munisami	General Attendant	MSIRI	01-Apr-21
20	Dr Abdess Salem Saumtally	Director	MSIRI	16-Apr-21
21	Mr Indiren Paniapen	Foreman/Baghandler	BSSD	01-May-21
22	Mr Jean Pierre Benjamin L'Assiette	WVMA	AMU	04-May-21
23	Mr Fong Yan Ip Yam	Director	AMU	12-May-21
24	Mr Desire Gerard Christian Paul	Assistant Field Officer	MSIRI	17-May-21
25	Mr Doolarchand Bolah	OMA	FSA/FSC	05-Jun-21

The MCIA organized a humble ceremony to thank its retired employees for their contribution and services rendered to the Authority. Besides, a certificate of recognition and a token were offered to each of them.

## Resignation

Table 10. Resignation				
SN	Name	Post	Department /Section	Date
1	Mr Somduth Gopaul	Air Monitoring Officer	Air Monitoring	08-Jan-21

## Leave without pay

Table 11. Leave without Pay				
SN	Name	Post	Department /Section	Period
1	Dr Aneesa Soobadar	TO/STO	Agricultural Chemistry, MSIRI.	From 1 January to 31 December 2021
2	Mr Andy Jierry	AMO	AMU	From 9 June 21 to 8 June 2022

## Appointment (Temporary Contract)

Table 12. Appointment (Temporary Contract)				
SN	Name	Post	Department / Section	Date
1	Mrs Bhavesha Sahye Seenundon	Receptionist	SSHU	18-Jan-21 (month to month)
2	Mr Kiransing Lutchmee	Driver HMU	CAD	02-Feb-21 to 01 Feb 22
3	Mr Gunshiam Umrit	Snr Research Officer	Air Monitoring Unit	01-Jul-20 to 30 June 2021
4	Miss Ryana Camden	Contractual	COWA, MSIRI	4 Jan to 30 Jun 2021
5	Mr Y Ramchurun	Contractual	COWA, MSIRI	4 Jan to 30 Jun 2021
6	Mrs Ambal Vythelingum	Cleaner/Cook	MESS	01-Jun-21 to 30 Nov 2021

## Extension of Temporary Contract

Table 13. Extension of Temporary Contract				
SN	Name	Post	Department /Section	Date
1	Mrs Sewami G Ramigadu	Cleaner/Cook	MESS	26 Sep 20 to 25 Mar 21 03 May 21 to 02 Nov 21
2	Mr A K Ramburn	Research Technician	Biotechnology	19 Mar 21 to 18 May-21 21 Jun-21 to 15 Aug-21
3	Mr G Umrit	Snr Research Officer	Air Monitoring Unit	1 Jul 21 to 31 Dec 21

## Appointment

Table 14. Appointment				
SN	Name	Post	Department /Section	Date
1	Mr Luckraj Jhurry	Manager	Policy & Planning	02-Oct-20
2	Mr Mohammad Hassen Khodoruth	Administrative Manager	Administration	02-Oct-20
3	Mrs M C Marion	OMA	CAD	02-Oct-20

**Table 14. Appointment (contd.)**

4	Miss B Auckburally	OMA	Procurement	02-Oct-20
5	Mr Krishnadayalsing Ramdin	OMA	Finance	02-Oct-20
6	Mrs Hewantee Rambhujun	OMA	Administration	02-Oct-20
7	Mrs Keerti Devi Hauzaree	OMA	AMU	02-Oct-20
8	Mrs Leena Dwarka	OMA	Administration	02-Oct-20
9	Mrs Veenuswory Booputh	OMA	SSHU	02-Oct-20
10	Mr Shastri Jugasing	OMA	AMU	02-Oct-20
11	Mrs Kallyantee Seewoonarain	OMA	AMU	02-Oct-20
12	Mr Jean Philippe Modeste	OMA	CAD	02-Oct-20
13	Mrs Chandanee Dawoodarry	OMA	Administration	02-Oct-20
14	Mrs Bindoomatee Ballah	OMA	BSSD	02-Oct-20
15	Mrs Rajini Doorgachurn	OMA	Administration	02-Oct-20
16	Mrs Pouvedi Seewooshurn	OMA	Human Resource	02-Oct-20
17	Mrs Zeenat Gaungoo	OMA	Policy & Planning	02-Oct-20
18	Mr Ajay Gadadhar	OMA	AMU	02-Oct-20
19	Mrs Omeshwaree Bundhoo	OMA	Policy & Planning	02-Oct-20
20	Mrs Soomeeta Rummun	OMA	Finance	02-Oct-20
21	Mrs Roona Devi Sookoorree	OMA	CAD	02-Oct-20
22	Miss Reshmee Ramessur	Computer Support Officer	IT	03-Nov-20
23	Mr Vishwadeo Purang	Snr Terminal Operator	SSHU	12-Jan-21
24	Mr Vijay Kumar Bundhoo	Snr Terminal Operator	SSHU	12-Jan-21
25	Mr Valaydon Manikkam	Snr Terminal Operator	SSHU	12-Jan-21
26	Miss Bela Ramlogun	Management Support Officer	SSHU	12-Jan-21
27	Mrs A Loky	Management Support Officer	Administration	12-Jan-21
28	Mrs B Jean Louis-Dabeesing	Management Support Officer	Human Resource	12-Jan-21
29	Mr Yashwantsingh Ramdharee	Director	Farmers Service Agency	01-Jun-21
30	Mr Avisheik Jugnauth	Sugar Technologist/Snr Sugar Technologist	Control Board	01-Jun-21
31	Mrs Rajeshree Lutchmanen	Sugar Technologist/Snr Sugar Technologist	Control Board	01-Jun-21

**Table 15. Termination of Contract**

SN	Name	Post	Department / Section	Date
1	Mr Sanine Beersing	AMO	AMU	15-Oct -20

### Death in Service

1. Mr Jean Gilbert Ley, WVMA, AMU, passed away on 31 July 2020.
2. Mr. Michel Gilbert Dhondee, Terminal Operator, SSHU, passed away on 4 August 2020

The objectives of the Policy and Planning Division are:

- Monitoring, overseeing and coordinating all activities relating to the operation of the cane industry and ensuring its fair, efficient and effective administration.
- Promoting efficiency and viability in the cane industry.
- Formulating and implementing policies, strategies, plans programs and schemes in relation to the cane industry.
- Assessing the challenges and opportunities of the industry both on local and international fronts.
- Promoting and facilitating the sustainable development of the cane cluster in Mauritius and in the region.
- Acting as think tank of the industry to spearhead changes and respond to future needs of the industry.

## B. POLICY AND PLANNING

### Mandate and Functions

The Policy and Planning Division under the Corporate office of the Chief Executive Officer at the MCIA continues to fulfill the important mandate and functions of the former apex Mauritius Sugar Authority (ex MSA) which is to promote the development of the sugar industry and to ensure its long-term viability and also to safeguard its interests, both at national and international level.

### 1985 - Action Plans for the Sugar Industry

- Government came with a Restructuring Program for the Sugar Industry. The program was translated into Action Plans with measures aimed at rehabilitating and modernizing the sugar mills, raising small planter productivity, improving research programs and facilities utilizing sugar by products for power generation and promoting agricultural diversification. The World Bank approved the part of the sugar industry project loan and part was financed by Government of Mauritius.

### 1985 - The Sugar Sector Package Deal Act 1985

- To provide fiscal incentives to promote the democratization of the ownership of sugarcane land, the rationalization of the export duty on sugar and the segregation of milling activities from other activities of sugar industry.

### 1988 - The Sugar Industry Efficiency Act 1988 and subsequently amended in 1993, 1995, 1997, 2001, 2002, 2007, 2013, 2016

- **1988**- To provide for an efficient and viable sugar industry, to preserve agricultural land, to promote agricultural diversification, and diversification within sugar, to ensure that all commitments under the Sugar Protocol are met and ensure fairness, equity and transparency within the sugar industry.
- **2001**- To consolidate, amend and streamline the laws relating to the package of incentives applicable to the sugar sector with a view to facilitate democratization of ownership in the industry, restore and maintain efficiency and support socio-economic development of Mauritius
- **2016**- To set the Sugar Cane Sustainability Fund, to empower the MCIA to develop the Biomass Framework and Ethanol and Molasses Framework, land conversion and seasonal labour

**1991 - Bagasse Energy Development Programme (BEDP)**

- Technology development , Energy and Environment Policy development, Review of bagasse pricing , new power purchase agreements due to new power plants

**1994 - Valuation of Assets of the Sugar Industry**

- Creation of Sugar Investment Trust (SIT) where the shareholders are the small planters, employees and pensioners of the sugar industry

**1997 - Blue Print on centralisation of Milling Operations in Mauritius**

- Setting the guidelines for closure of sugar factories and package for closure

**1998 to 2000 - Ongoing projects/studies/ measures**

- Objective was to further technology transfer and socio-economic projects

**2001 to 2005 - Sugar Sector Strategy Plan**

- More centralisation of sugar factories , cost reduction , enhanced productivity, man power rightsizing, optimal use of cane sugar resources, well planned diversification activities, improvement of value added and creation of new opportunities.

**2006 to 2015 -Multi Annual Adaptation Strategy (MASS) 2006 to 2015**

- Ensuring the long term viability of the sugar industry, while promoting alternative goods related to cane production, and increasing its energy potential
- MAAS proposes measures to reduce financing under CESS by cutting operational cost of various institutions
- MAAS strategies helped Government of Mauritius to tap funds of EU under the Accompanying Measures

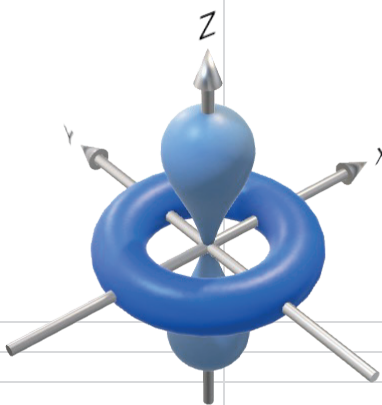
**2015** - Research and Analysis on "The Economic, Social and Environmental impact on Mauritius of Abolition of Internal Quotas of Sugar in EU Market" by LMC


- The aim was to address the key concepts namely resilience of the sugar cane industry in the teeth of multiform competition from sugar suppliers and alternative sweeteners, the importance of filiere approach, the relocation of operations in Mauritius, a bold and innovative plan in respect of small planters for their continuation of their involvement in sugar directly or through other means.

**2020** - Policy note for sugar sector review by the World Bank

- Recommendations of World Bank Study submitted to Parent Ministry in December 2020.

**Fig 1. Key achievements for the period 1985 to 2021 as a result of strategies, plans and action plans**

	Tapped funds from EU Accompanying measures through achievements of performance indicators	
Reduction in number of mills from 18 in 1994 to 3 in 2021		Promoted value addition and transformational change from raw sugar to white refined, special sugar and Direct consumption raw sugar in a sugarcane cluster approach
11,293 ha belonging to 11,843 small planters benefitted from regroupment, derocking and plantation of fields		16,382 employees of sugar industry benefitted from VRS, ERS, Blue Print package and ETC Scheme
	Expansion of electricity generation from bagasse and coal from 122 Gwh in 1994 to some 1500 Gwh in 2020	

	Better housing conditions for employees through elimination of 133 Sugar Estate Camps	
83 children of planters and workers of sugar industry benefitted from scholarship scheme under the VRS, ERS and Blue Print.		Ownership of land by metayers
Reduction of workforce from some 16,000 workers to 4,000 workers in 2019		Promoted the adoption of higher and efficient technologies in irrigation, electricity, sugar handling and milling of canes
	Export of sugar for small planters under Fair Trade and Ferrero Altromercato at premium rate	

## Milestones of the Strategies, Plans and Action plans (1985 to 2021)

The following milestones from the period 1985 to 2021 marks the important development of the sugar sector leading to key results that have shaped the sugar industry as it is today. We put on record that reform of the sugar industry is an inevitable and on-going process which means that the industry is responsive to economic, social and environmental changes.

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

Government in its Budget Speech 2021/22 announced the following historic decision for bagasse: *"In line with the vision of our Prime Minister, we shall continue to support and further develop the agricultural sector."*

*I announced earlier the introduction of the biomass framework which will enable sugar cane planters to benefit from MUR3.50/KWh of electricity. Thus, all planters and producers will benefit from a remuneration of MUR3,300/tonne of sugar for bagasse."*

Government has announced a new economic growth pole that is the Green Energy Industry and has laid much emphasis on renewable sources of energy from biomass, solar, wind and wave. The strategy is to produce 60% of our country's energy needs from green sources by 2030".

*"...the use of coal will be totally phased out before 2030"*

"Furthermore, we will provide:

- A guaranteed price of MUR25,000 per tonne for planters producing up to 60 tonnes of sugar for crop 2021;
- A waiver on insurance premium payable to Sugar Insurance Fund Board by planters producing up to 60 tonnes of sugar for crop 2021;
- A 50% subsidy on fertilizer for Crop 2021 for planters producing up to 60 tonnes sugar;
- A 50% refund on the costs related to certification, testing and accreditation with a view to achieving standards such as Bonsucro;
- A cane Replantation Scheme for small planters;
- A modern sugar storage facility of 150,000 tonnes at Riche Terre."

In order to provide for implementation of the above budget measures, the Finance (Miscellaneous Provisions) Act 2021 has amended the Sugar Industry Efficiency (amendment) Act 2016 in sections 13, 13A and 13B and the MCIA Act in sections 2,4,5(1), 17(1) (c), 39 concerned with bagasse and biomass.

The amendments have provided for:

- (a) Repealing of the Bagasse Transfer Price Fund;
- (b) Consolidation of the Sugar Cane Sustainability Fund for payment of biomass producers;
- (c) MCIA to develop the National Biomass Framework to enhance the use of biomass for electricity generation

**Table16. Amendments to the SIE Act 2016**

Sections amended	Amendments	Full text after amendment
<b>Section 13</b>	Repealing completely section 13 and sixth Schedule	
<b>Section 13A</b>	(i) in subsection (1), by deleting the words “sugar cane and bagasse” and replacing them by the words “biomass from such sources as may be prescribed”;	“There shall be a Sugar Cane Sustainability Fund for the purpose of fostering the production of biomass from such sources as may be prescribed”
	(ii) in subsection (3) –	“Any contribution made on a yearly basis by such bodies as may be prescribed and the proceeds from any trash commodity shall be credited to the Sugar Cane Sustainability Fund and operated and managed under different portfolios for the different types of biomass”
	(A) in paragraph (a) –	
	(I) by inserting, after the words “as may be prescribed”, the words “and the proceeds from any trash commodity”;	
	(II) by inserting, after the words “Sugar Cane Sustainability Fund”, the words “and operated and managed under different portfolios for different types of biomass”	“Any contribution referred to in paragraph(a) shall be made on or before 1 March of every year and in such amount as shall be prescribed for the different types of biomass”
	(B) in paragraph (b), by deleting the words “may be prescribed” and replacing them by the words “shall be prescribed for the different types of biomass”;	“Subject to sub-section(6) , the Mauritius Cane Industry shall on such terms and conditions as may be prescribed , effect payment to planters or producers, as the case may be on or before 31 March of every year.”
	(iii) in subsection (4), by inserting, after the word “planters”, the words “or producers, as the case may be”;	
	(iv) in subsection (7), in the definition of “planter”, by deleting, the words “31 May 2015” and replacing them by the words “31 May 2015 or any planter producing biomass from such sources as may be prescribed”	In this section - “planter “ means a planter registered with the Sugar Insurance Fund on or before 31 May 2015 or any planter producing biomass from such sources as may be prescribed”

**Table 16. Amendment to MCIA Act 2011(Contd.)**

Sections amended	Amendments	Full text after amendment
<b>Section 13B</b>	(i) in the heading, by deleting the words “Sugar Cane Industry Based” and replacing them by the word “National”	“National Biomass Framework”
	(ii) in sub-section (1) –  (A) by deleting the words “Renewable Sugar Cane Industry Based Biomass Framework” and “from biomass” and replacing them by the words “Renewable National Biomass Framework” and “from such sources of biomass as may be prescribed”, respectively;	“The Mauritius Cane Industry Authority shall develop and monitor a framework to be known as the Renewable National Biomass Framework to promote production of energy from such sources of biomass as may be prescribed, including sugar cane, cane trash, high fibre cane, fuel canes, Gramineae and other related biomass,”
	(B) by deleting the words “, generated by the sugar cane industry”;	
<b>Section 2</b>	in section 2 –	
	(i) in the definition of “co-product”, in paragraph (a), by deleting the words “or sugar” and replacing them by the words “, sugar, bagasse or molasses”	“co-products”-means a product of cane , sugar, bagasse or molasses
	(ii) by inserting, in the appropriate alphabetical order, the following new definitions – “biomass” means organic material from plants or animals; “producer” has the same meaning as in the Sugar Industry Efficiency Act	“biomass”- means organic material from plants or animals. “producer” has the same meaning as in the Sugar Industry Efficiency Act
<b>Section 4</b>	in section 4, in paragraph (q), by deleting the words “the use of biomass” and replacing them by the words “the use of such sources of biomass as may be prescribed”	(q) foster the use of such sources of biomass as may be prescribed, including sugar cane, cane trash, high fibre cane, fuel canes, gramineae and other related biomass, in the production of electricity and biofuels for transport;
<b>Section 5(1)</b>	in section 5(1), by repealing paragraph (rc) and replacing it by the following paragraph – (rc) promote the production of energy from such sources of biomass as may be prescribed, including biomass generated by the sugar cane industry, develop and monitor the Renewable Sugar Cane Industry Based Biomass Framework referred to in the Sugar Industry Efficiency Act	(rc) promote the production of energy from such sources of biomass as may be prescribed, including biomass generated by the sugar cane industry, develop and monitor the Renewable Sugar Cane Industry Based Biomass Framework referred to in the Sugar Industry Efficiency Act;

**Table 16. Amendment to MCIA Act 2011 (Contd.)**

Sections amended	Amendments	Full text after amendment
<b>Section 17(1)</b>	in section 17(1)(c), by inserting, after the words “as the Minister may approve”, the words “and such sources of biomass as may be prescribed”	(c) conduct research programmes on such other crops as the Minister may approve and such sources of biomass as may be prescribed;
<b>Section 39</b>	<p>in section 39 – (i) in subsection (3), by deleting the words “every planter, shall, in addition, be entitled to receive out of the value of the bagasse so sold, transferred or utilised, an amount equivalent to the fraction represented by the quantity of canes supplied by him over the quantity of canes milled at the factory in that crop year” and replacing them by the words “every planter or producer, as the case may be, shall, in addition, be entitled to receive out of the contribution made to the Sugar Cane Sustainability Fund in respect of the proceeds of bagasse an amount equivalent to his sugar entitlement”</p> <p>(ii) in subsection (4), by inserting, after the word “planter”, the words “or producer”.</p>	<p>(3) Where any bagasse produced at a factory in a crop year, other than bagasse used for the specific purpose of manufacturing sugar at that factory, is sold or otherwise transferred or is utilised in the production of any goods, every planter or producer, as the case may be, shall, in addition, be entitled to receive out of the contribution made to the Sugar Cane Sustainability Fund in respect of the proceeds of bagasse an amount equivalent to his sugar entitlement.</p> <p>(4) The quantity of sugar, scums, molasses or bagasse to which a planter or producer is entitled under this section shall be determined by the Control and Arbitration Committee.</p>

### **Mauritius Cane Industry (Sale price of Molasses) Regulations 2021**

In accordance to Section 15C2(c) of the Sugar Industry Efficiency Act 2016, the regulation governing the maximum sale price of molasses to distiller bottlers producing potable alcohol for the domestic market was valid for the period 2017 to 2019. This maximum sale price was set at MUR 3,500/t of molasses. For the crop 2020 the maximum sale price was maintained at MUR3,500/t of molasses following a decision of the Board of Directors of MCIA in February 2021.

The Board of Directors of the MCIA in February 2021 also decided that, the maximum sale price of molasses applicable for the following three crop years: 2021, 2022 and 2023 be increased to MUR4,000/t of molasses. This was effected through an amendment of the regulation in June 2021. The regulation was published in Government Notice No 175 of 2021.

### **Mauritius Cane Industry Authority (Sale Price of Cane Juice or any other intermediate Product for Production of Products other than sugar by a Miller) Regulations 2021.**

Following the budget speech 2020/2021, the Finance (Miscellaneous Provisions) Act 2020 had amended the MCIA Act in section 24(3) by adding a new subsection (6) to read as follows:

*“(6) A miller may, with the authorization of the Control and Arbitration Committee, deliver cane juice or any other intermediate product in sugar processing to a person engaged in the production of products other than sugar”*

Cane juice is currently being diverted by millers to Grays, Medine, Distillerie de Labourdonnais and Oxenham for the production of Rhum Agricole. The sale price of the cane juice being diverted was computed by the Mauritius Sugar Syndicate at an equivalent ex-

syndicate price of sugar only. It was found that the sale price should be regulated and should in principle be composed of the ex-syndicate price of sugar, and price of molasses plus a premium. As such the MCIA Board of Directors in February 2021 approved that the sale price of cane juice be fixed at MUR15,000 per equivalent tonne of sugar for crops 2021, 2022 and 2023. However further consideration was given at the level of the Ministry and it was decided to fix the price at MUR15,000 per equivalent tonne of sugar for crop 2021 only. The Regulation was published in Government Notice No 176 of 2021.

The following sections deal with the status and progress achieved during the period and related to provisions of the law and budgetary measures 2020 to 2021.

## Progress on issues related to provisions of the law

### 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.

### Revenue to planters for molasses:

Revenue to planters for molasses is derived from a basket of prices comprised of:

- Molasses sale to distillers and distiller bottlers producing potable alcohol for the local and export market;
- Molasses sale to distiller producing ethanol for the export market;
- Molasses sale to the Livestock sector; and
- Contribution of MUR40/ L of absolute alcohol obtained from distiller-bottler, importer or manufacturer in respect of potable alcohol for home consumption.

### Molasses pricing mechanism

The Molasses pricing mechanism for the different users of molasses is as per the amendments brought to the SIE (Amendment Act) 2016:

Table 17. Current pricing mechanism- Sale price of Molasses			
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
		(Omnicanne FOB for 3 years only 2014-2016)	
2015	FOB	Local market: MUR 3,500/t Export market: FOB	MUR 3,000/t
2016 (SIE Act)	Deemed FOB	Local market :1.75*deemed FOB	MUR 2,500/t revised to MUR 3,000/t in 2021 by MCIA Board of Directors.
		Export market : deemed FOB	
2021 (Sale price of Molasses) Regulations 2021		To set the upper limit of price of molasses sold to distiller-bottlers producing potable alcohol for the domestic market or any person using molasses to produce syrup and beverages and which shall not exceed MUR4,000/t molasses. This regulation is applicable for crop years 2021, 2022, and 2023. The regulation was published in Government Notice No 175 of 2021.	

As the World Bank study was ongoing, the MCIA Board of Directors in July 2020 decided to maintain the same provisional deemed FOB price of molasses for crop 2020 at MUR2,147.18 /t of molasses.

On this basis the total proceeds from sale of molasses were MUR213.6 M. The blended price of molasses paid to planters for crop 2020 was MUR2,441.16/t of molasses.

The table below shows the blended price of molasses paid to planters for the period 2004 to 2020.

Table18. Blended price paid to planters ( 2004 to 2020)							
Year	Total molasses produced (Tel quel) tonne	Tonnes molasses sold at 860 Brix after deducting amount in kind	LEI USD	Freight USD	Other costs USD	FOB (USD paid by users of molasses)	Price paid to planters (MUR/t molasses)
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	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	187.6	94.05	15.6	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	11.1	74.5	2,235.18
2013	125,837	n.a	218.64	140.59	13.52	64.53	1,970.98
2014	139,309	137,379	207.48	130(a)	12.94	64.54	2,316.51
2015	132,107	130,952	187.55	126.7(b)	10.63*	50.22	2,074.00
2016	117,675	117,215	175.04	112.7(c)	5.59	56.75	2,242.89
2017	121,815	121,367	Deemed FOB price of MUR 2,147.18/t				2,390.88(d)
2018	102,084	101,938.77	Deemed FOB price of MUR2,147.18/t				2,376.10
2019	117,106	114,953.56	Deemed FOB price of MUR 2,147.18/t				2,347.24
2020	88,912	87,507.78	Deemed FOB price of MUR2,147.18/t				2,441.16
2021			Deemed FOB price of MUR 2,620.41/t				

**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 took record of 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 crop 2016** freight taken as average 5 years period 2009- 2013

(e) **For crop 2017 to 2020:** 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 MUR2,147.18 and MUR 3,500 for distiller-bottlers producing potable alcohol for domestic market.

(f) **For crop 2021:** deemed Fob price of MUR2,620.41 has been calculated using a matrix table and the maximum price for distiller bottlers producing potable alcohol for domestic market would be MUR4,000 as per the new regulation 2021.

For the crop 2021, the MCIA Board of Directors has approved an increase in the deemed FOB price of molasses from MUR2,147.18 to MUR2,620.41/t of molasses which represents a 22% increase in the deemed FOB price. The increase was justified and exchange rate was on an increasing trend and also there was scarce supply of molasses due to the decrease in cane production as compared to crop 2020.

### Contribution of MUR40/L of absolute alcohol

The contribution collected by the Mauritius Revenue Authority for crop 2020 (July 2020 to June 2021) both from the distiller-bottler or manufacturer and importers based on potable alcohol derived from cane or cane products reached MUR 158,155,334. This contribution was generated from some 3.953 million litres of potable alcohol sold on the local market.

Planters were paid at the rate of MUR742.59/t of sugar at 98.5 pol or MUR 1,807.32/t of molasses @ 86° Brix after deducting molasses taken in kind.

The total revenue derived from molasses including the bottler contribution and paid to planters for crop 2020 amounted to MUR4,248.48/t of molasses (MUR2,441.16+MUR 1,807.32).

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

Several meetings of the Joint Molasses Allocation Committee were held during the period with the distillers as per section 15D of the SIE Act. The allocation was subsequently finalized in proportion based on certified installed capacities as at January 2016 as it was the case for previous years.

**Table19.Total Molasses produced**

Daily Capacity	HLA/Day	Allocation as a % of available molasses	Molasses tel quell (t) allocated for crop 2020	Molasses at 86 Brix (t)allocated for crop 2020
Grays Distillery	291.1	22.97%	20,466.79	20,306.198
Medine Distillery	234.3	18.49%	15,544.04	15,494.884
Omnicane Distillery	742	58.54%	48,344.156	48,383.161
<b>Total</b>		<b>100%</b>	<b>84,354.986</b>	<b>84,184.243</b>
Livestock sector			3,402.43	3,323.537
Molasses taken in kind			1,154.147	1,152.531
<b>Total molasses produced</b>			<b>88,911.563</b>	<b>88,660.309</b>

The available molasses is molasses left for allocation to distilleries after deducting molasses allocated to livestock sector and molasses taken in kind.

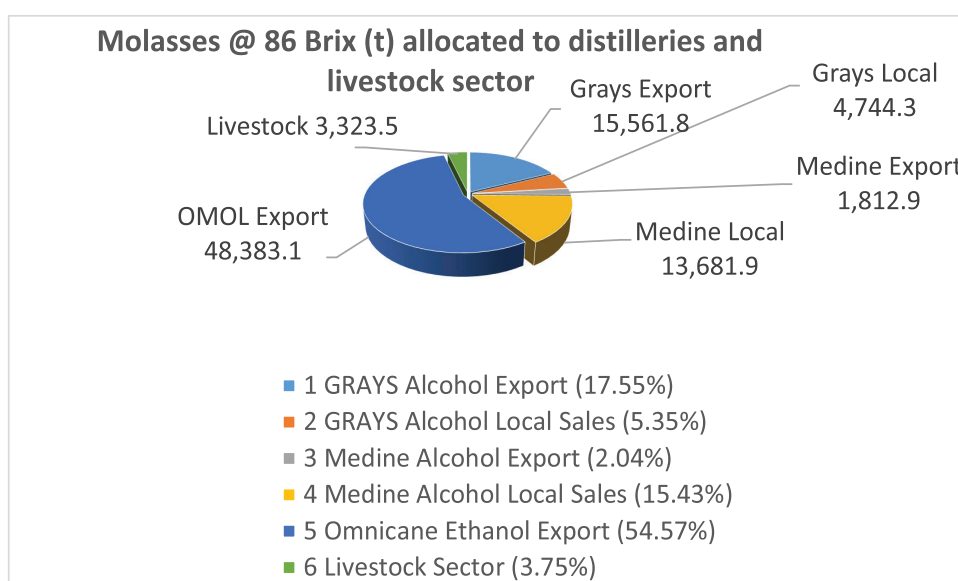


Fig 2. Molasses @ 86 Brix (t) allocated to distilleries and livestock sector

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

As there was not much progress on this issue since 2019, the MCIA Board of Directors gave its approval on 11 January 2021 to reactivate the project. Consequently, the Ministry of Finance and Economic Development is looking into the possibility to have technical assistance for this project in the EU Regional Technical Assistance Facility Programme whose consultant is “Africa RISE” (Reform for Investment and Sustainable Economies). The EU funded project through “Africa RISE” is looking at supporting 25 countries across the Eastern, Southern and Indian Ocean region on areas of Investment, Job creation and Economic Development. The circular economy is one of the important element that can benefit from this support.

The ethanol blending project is therefore subject to an assessment in the energy sector specific support by the European Commission to see whether it qualifies for this technical support. A response is awaited.

## **Biomass Framework- Provision of the SIE Act and MCIA Act**

In the context of an Inter-Ministerial Committee on Biomass Framework, a meeting was held at the Ministry of Finance and Economic Development in July 2020, whereby the MCIA was requested to work on the National Biomass Framework as provided for under section 13B of the SIE Act and section 5(1)(rc) of the MCIA Act.

The MCIA presented a draft outline of the National Biomass Framework to the Parent Ministry in presence of representatives from the Ministry of Finance and Economic Development and Ministry of Energy and Public Utilities in September 2020. Another dedicated presentation was done by the MCIA to the Minister of Energy and Public Utilities in May 2021 on the National Biomass Framework. The said National Biomass Framework had proposed the setting up of a structural organization that will give all the stakeholders the proper platform to work in a coordinated manner for the development of cane and non-cane biomass sources. The ambitious target set by Government to produce 60% of our country's energy needs from green sources by 2030 means the emergence of a new era shifting away from fossil fuel.

## **Bagasse valuation:**

A first Inter-Ministerial Committee on the National Biomass Framework was held in July 2020. A draft Final report by the Firm Nodalys of France was submitted to the Ministry of Energy and Public Utilities on 7th September 2020. The Ministry of Energy and Public Utilities had set a Technical Committee comprising of representatives from Ministry of Finance, Economic Planning and Development, Ministry of Agro Industry and Food Security, Central Electricity Board and MCIA to look into the implementation of the Nodalys Report on bagasse only, and advise the Inter-Ministerial Committee.

The valuation of the bagasse was a pressing issue as it was the only biomass resource largely in use for decades but which was undervalued and hence the demotivation of planters to continue with cane cultivation amongst other factors.

After considering the comments received from stakeholders, the Consultant submitted the final report in September 2020 to the Ministry of Energy and Public Utilities. The MCIA briefed the Ministry of Agro Industry on the recommendations of the Nodalys Report and the Technical Committee in October 2020. In parallel, the World Bank Study on Sugar also submitted its report to the Ministry of Agro Industry and Food Security in December 2020. Both reports had addressed the valuation of bagasse. Nodalys had based its valuation on the opportunity cost of coal while the World Bank had based its valuation on the opportunity cost of heavy fuel oil.

In the light of both reports, Government took a historic policy decision and announced in its Budget speech 2021/2022 that bagasse would henceforth be valued at MUR3.50/KWh and that all planters and producers would be remunerated at MUR3,300/t of sugar for bagasse for the crop 2021.

## Budgetary measures and Government decisions for Financial year 2020/21 and progress on previous measures

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

Table 20. Budgetary measures and Government decisions For Financial year 2020/21 and Progress on previous measures			
Financial year	Budget Measures		Progress/ achievements
2019/ 2020			All measures were implemented
2020/2021	(a)	For crop 2020, Government will ensure that planters receive a guaranteed price of MUR25,000/t for the first 60 tonnes of sugar	All the budget measures were implemented
	(b)	The insurance premium payable to the Sugar Insurance Fund Board by planters producing up to 60 tonnes of sugar will be waived for crop 2020.	
	(c)	The Mauritius Cane Industry Authority (MCIA) will meet the shortfall arising from the suspension of CESS payments for crop 2020.	
	(d)	The Cane Replantation Programme will be maintained to encourage planters to bring back land under sugarcane cultivation.	
	(e)	The rate of customs duty on imported sugar will be increased from 80% to 100%.	
Government Decision for Crop 2020	“As announced in Budget Speech 2019-2020, Government decided to waive 50% of the advance on fertilizers provided to planters cultivating up to 100 ha of sugar cane for crop 2019. Accordingly, for crop 2020, it has been decided that henceforth, the same Scheme would be implemented for planters cultivating up to 100 ha of sugar cane.”		Implemented

## Impact of Government Support: Crop years 2015 to 2020

Government has guaranteed a stable price of MUR25,000 per tonne of sugar for all planters with sugar accrued first 60t sugar after taking into consideration the price of sugar, bagasse, molasses and the cess and premium waiver. The Government provided a top up support varying from MUR10,910.39 to MUR 11,454.40 in 2019 and varying from MUR7,901.50 to MUR8,568.02/t of sugar in 2020 respectively in order to reach the guaranteed price of MUR25,000. The Government support for the planters' accounts for some 45% of the total gross revenue derived by planters for the first 60 t sugar accrued in

2019 and which decreased to some 33% in 2020 due to the fact that ex syndicate price of sugar increased from MUR11,383.65 in 2019 to MUR14,062.22 in 2020.

However, the Government top up support does not apply to the excess over 60 t of sugar for any category of planters.

It is to be noted from table below that government top up financial support to reach the MUR 25,000/t sugar costed some MUR567.8M in 2019 as compared to MUR352.5M in 2020 for the first 60 t sugar produced by all planters. This decrease was principally due to a decline of sugar accrued from 51,934t to 44,377t and this decline was more pronounced for the small planters.

Table 21. Total Revenue derived by planters with sugar accrued up to 60t sugar (MUR/Tonne of Sugar)

	2015	2016	2017	2018	2019	2020
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse	162.29	149.83	164.81	161.05	143.06	136.73
Molasses (including bottler)	1,262.00	1,364.06	1,539.33	1,536.71	1,640.26	1,745.59
Other Government support	3,100.00	1,100.00	2,350.00	6,887.00	10,910.39	7,901.50
Cess +insurance premium waiver	600.00	720.00	600.00	600.00	922.64	1,153.96
	18,290.66	18,905.39	16,820.78	17,884.76	25,000.00	25,000.00

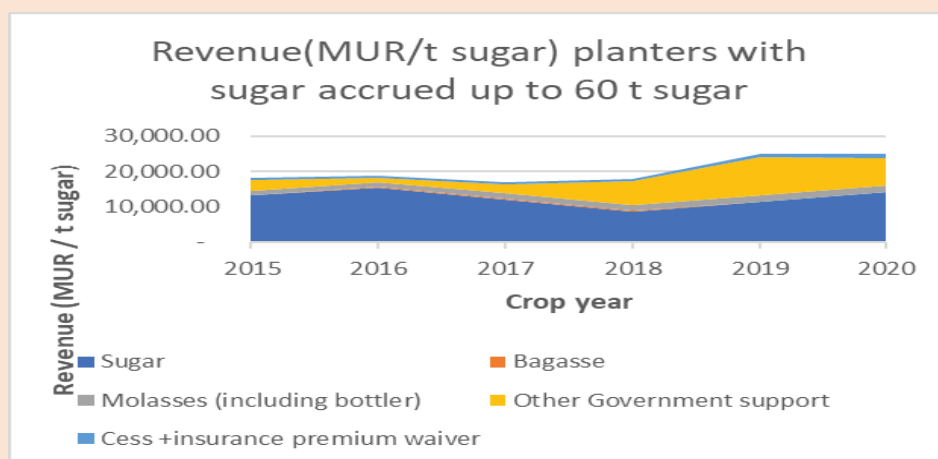


Fig 3. Revenue (MUR/t sugar) planters with sugar accrued up to 60t sugar

Table 22. Revenue by individual and corporate planters who are not millers, for excess 60t sugar, (MUR/t sugar)

Revenue derived by individual and corporate planters who are not millers, for excess 60 t sugar, (MUR/ t sugar)						
	2015	2016	2017	2018	2019	2020
					excess 60 t	excess 60 t
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse	162.29	149.83	164.81	161.05	143.06	136.73
Molasses (including bottler)	1,262.00	1,364.06	1,539.33	1,536.71	1,640.26	1,745.59
Other Government support	2,300.00	300.00	1,550.00	3,895.67	-	-
Cess +insurance premium waiver	-	-	-	-	455.35	562.49

Table 23. Revenue by individual and corporate planters who are not millers, for first 60t sugar, (MUR/t sugar)

Revenue derived by individual and corporate planters who are not millers, for first 60 t sugar, (MUR/ t sugar)						
	2015	2016	2017	2018	2019	2020
					first 60 t	first 60 t
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse	162.29	149.83	164.81	161.05	143.06	136.73
Molasses (including bottler)	1,262.00	1,364.06	1,539.33	1,536.71	1,640.26	1,745.59
Other Government support	2300	300.00	1,550.00	3,895.67	11,377.68	8,492.97
Cess +insurance premium waiver	0	-	-	-	455.35	562.49

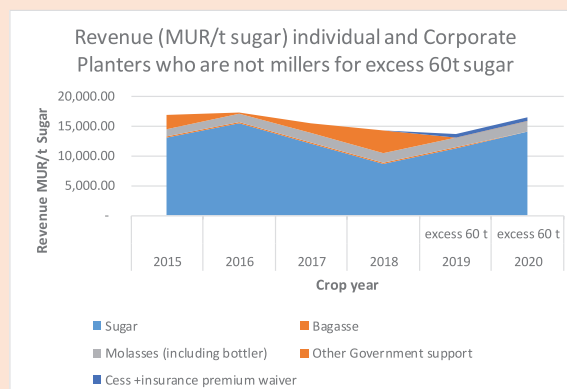
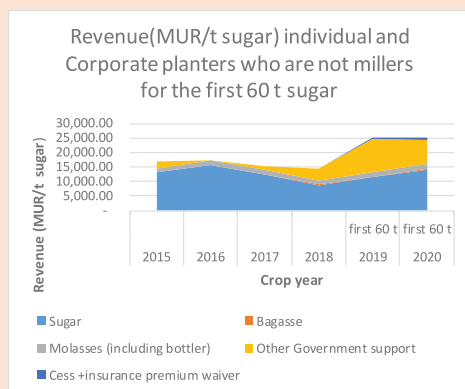


Fig 4. Revenue (MUR/t sugar) individual and Corporate Planters who are not millers for first 60t sugar

and Fig 5. Revenue (MUR/t sugar) individual and Corporate planters who are not millers for excess 60t sugar)

Table 24. Revenue by corporate planters who are millers, for first 60t sugar, (MUR/t sugar)

Revenue derived by Corporate planters who are millers, for first 60 t sugar, (MUR/ t sugar)						
	2015	2016	2017	2018	2019	2020
					first 60 t	first 60 t
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse	60.35	55.03	55.43	52.79	66.34	61.68
Molasses (including bottler)	1,262.00	1,364.06	1,539.33	1,536.71	1,640.26	1,745.59
Other Government support	2,300.00	300.00	1,550.00	3,895.67	11,454.40	8,568.02
Cess +insurance premium waiver	-	-	-	-	455.35	562.49

Table 25. Revenue by Corporate planters who are millers, for excess 60t sugar, (MUR/t sugar)

Revenue derived by Corporate planters who are millers, for excess 60 t sugar, (MUR/ t sugar)						
	2015	2016	2017	2018	2019	2020
					excess 60 t sugar	excess 60 t sugar
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse	60.35	55.03	55.43	52.79	66.34	61.68
Molasses (including bottler)	1,262.00	1,364.06	1,539.33	1,536.71	1,640.26	1,745.59
Other Government support	2,300.00	300.00	1,550.00	3,895.67	-	-
Cess + premium waiver	-	-	-	-	455.35	-

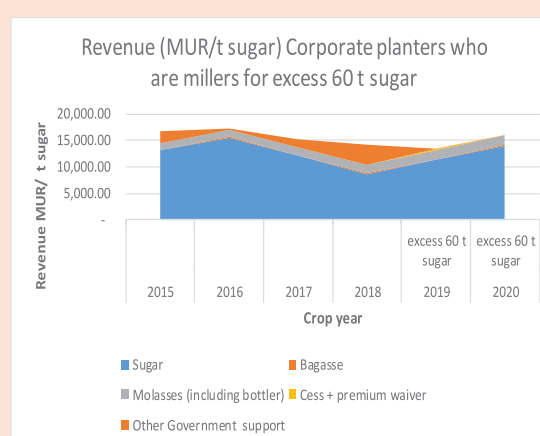
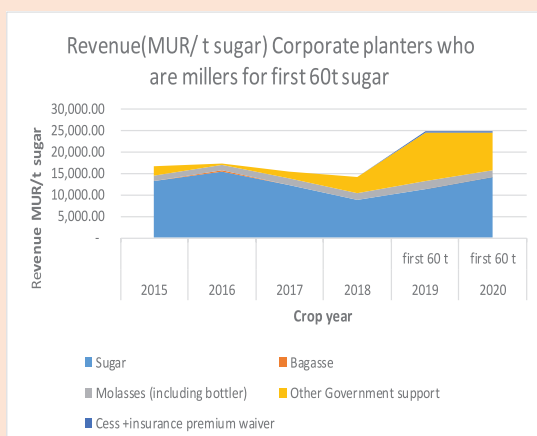


Fig 6. Revenue (MUR/t sugar) Corporate Planters who are millers for first 60t sugar and Fig 7. Revenue (MUR/t sugar) Corporate planters who are millers for excess 60t sugar)

Table 26. Revenue derived by millers (MUR/t sugar)

Revenue derived by millers (MUR/ t sugar)

	2015	2016	2017	2018	2019	2020
Sugar	13,166.37	15,571.50	12,166.64	8,700.00	11,383.65	14,062.22
Bagasse						
Molasses (including bottler)					0	
Cess + premium waiver					455.35	
Other Government support					0	

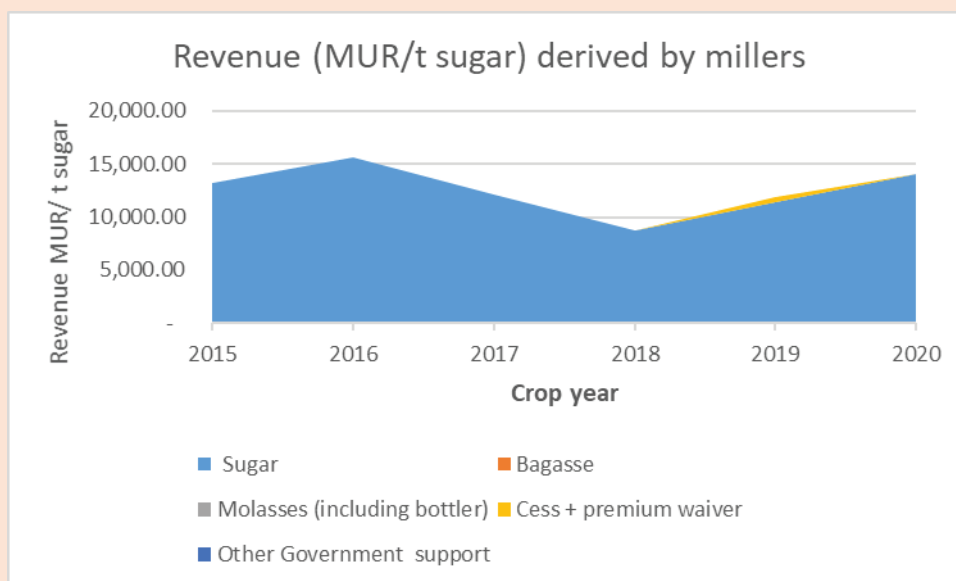


Fig 8. Revenue derived by millers (MUR/t sugar)

Table 27. Government Financial Support Crop 2019 (MUR/t sugar) on First 60 Tons of Sugar

Government Financial Support Crop 2019 On First 60 Tons of Sugar					
Category	Financial Support			Other Measures	
	First 60 Sugar Tons	Rate	Fin Support	Cess Waiver	Gen Premium Waiver
	(tons)	(MUR per Sugar T)	Amt (MUR)	(Ave MUR per Sugar T)	(Ave MUR per Sugar T)
Small Planters (with SA up to 60 tons Sugar)	49,294.35	10,910.39	537,820,528.74	455.35	467.29
Other Planters	1,320.00	11,377.68	15,018,537.60	455.35	-
Corporates	1,140.00	11,377.68	12,970,555.20	455.35	-
Miller-Planters	180	11,454.40	2,061,792.00	455.35	-
	<b>51,934.35</b>		<b>567,871,413.54</b>		

Table 28. Government Financial Support Crop 2020 on First 60 Tons of Sugar

Government Financial Support Crop 2020 On First 60 Tons of Sugar					
Category	Financial Support			Other Measures	
	First 60 Sugar Tons	Rate	Fin Support	Cess Waiver	Gen Premium Waiver
	(tons)	(MUR per Sugar T)	Amt (MUR)	(Ave MUR per Sugar T)	(Ave MUR per Sugar T)
Small Planters (with SA up to 60 tons Sugar)	41,137.69	7,901.50	325,049,449.63	562.49	591.47
Other Planters	1,860.00	8,492.97	15,796,924.20	562.49	-
Corporates	1,200.00	8,492.97	10,191,564.00	562.49	-
Miller-Planters	180	8,568.02	1,542,243.60	562.49	-
	<b>44,377.69</b>		<b>352,580,181.43</b>		

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

The MCIA has set up a committee to determine the number of man-days to be performed by workers employed by Job Contractors and seasonal workers employed by the employer of the Sugar Industry as per the provisions of the SIE Act. The total number man-days of Seasonal Workers is determined by MCIA in consultation with the recognized trade unions and the employers on or before 30 April of each year for the following crop year. The composition of the meeting shall consist of the MCIA, a representative of employers and a representative of recognized trade unions.

The employers of the industry consist of growing and milling sugar companies. In the sugar sector, employees are normally categorized as agricultural and non-agricultural workers. During the setting up of the Technical Committee, it was agreed by all stakeholders that employers will be represented by one representative from the growing companies and another one from the milling companies. Similarly, for the trade union one member from each category of employees is represented on the Technical Committee.

## Technical Committee on seasonal workers

A Technical Committee on seasonal workers and workers employed by Job Contractors was set up by SIE Act. As per SIE Act Technical Committee is composed of:

- representative of the MCIA as Chairperson;
- representatives of employer (growing and milling companies); and
- representatives at the relevant recognized trade union (Agricultural and non-agricultural workers).

For the Crop 2020, the Committee is composed as follows:

- A representative from the MCIA as Chairperson
- A representative from growing companies Mr Christian Marrot up to March 2020 (Retired from service) and was replaced by Mr. A. d'Unienville.
- A representative from milling companies Mr Mario Antonio
- A representative of agricultural workers Mr Devanand Ramjuttun

- (v) A representative of non-agricultural workers  
Mr Lall Dewnath

As per the SIE Act, the Ministry responsible for the subject of labour assists the Technical Committee in carrying out its tasks.

For the Crop 2020, MCIA has requested the sugar companies to submit the required data in-order to enable the Technical Committee to discuss on same before determining 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. After several meetings held for Crop 2020, the trade union finally agreed to the request made by the growers and millers in order not to worsen the already prevailing difficult context with

the COVID-19 pandemic in 2020. It is the first time that a consensus was reached between members of the Technical Committee in the determination of the number of man-days of seasonal workers and workers employed by job contractors at growing and milling companies.

Once more during the COVID-19 lock down period in 2021, the MCIA has carried out all co-ordination and liaison works with the sugar/growing companies for the collection and compilation of data for Crop 2021. The Committee had started individual consultations and site visits with the companies with a view to narrow down issues and discrepancies, if any, prior to proceeding with the determination of the number of man-days to be performed by workers employed by Job Contractors and seasonal workers employed by the employer of the sector for Crop 2021.

**Table 29. Attendance to Technical Committee meetings on Seasonal Workers 2020/2021**

Name	Representative of	Designation	Attendance
Mr S Purmessur	MCIA	Chairperson	1
Mr R Gutteea	MCIA	Designated Chairperson	5
Mrs V Moonian	Min. of Labour, Industrial Relations, Employment and Training	Member	1
Mr D Gopaul	Min. of Labour, Industrial Relations, Employment and Training	Member	2
Mrs B Jagarnath	Min. of Labour, Industrial Relations, Employment and Training	Member	2
Mr M Antonio	Employers	Member	5
Mr A D'Unienville	Employers	Member	1
Mr D Ramjuttun	Agricultural Workers	Member	5
Mr L Dewnath	Non-Agricultural Workers	Member	5
Mr D Nursimulu	MCIA	Secretary	5

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

As per the Regulation made under section 63 of the MCIA Act in 2012 and subsequent amendment made thereon, every importer of sugar for domestic consumption and industrial usage has to make a contribution of MUR 3.70/kg of sugar to MCIA. Furthermore, Government has increased the import duty from 80% to 100% on all imported sugars for domestic consumption to render such sugar less competitive vis-à-vis locally produced sugar.

For the year 2020, 31 companies/importers were

registered with the MCIA. An amount of 13,500 Mt of sugar was imported/sold on the local market and some 17,500 Mt of locally produced sugar was sold locally. The MCIA has received a total contribution of some MUR 114M, which have been used for the payment of pensions for the ex-dockers.

As regards the quality of sugar imported, the importers are required to submit the certificate of analysis as a prerequisite for customs clearance of the imported consignment.

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

During the course of the year 2020 to June 2021 the following activities continued under the projects related to MAAS plan:

Project 1: Field operations and the regrouping of planters

Project 2: Centralization of sugar factories

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

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

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

The implementation of FORIP was initially based on a multi-phased approach, i.e. Phases I, II and III. Phase IV was initiated in July 2009 and was completed in December 2010. For the period 2010 to 2015 the implementation of the project was based on a calendar year basis in line with the Programme Based Budgeting (PBB) for the allocation of funds. Subsequently, as from 2016 the project was implemented on a financial year basis.

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

- (i) planters who must be owners of less than an aggregate of 15 ha compared to 25 ha previously to be eligible join this project (i.e. the scheme targets the small/ medium planters who are the most vulnerable ones);

- (ii) additional conditions have been included to enable the MCIA not to proceed with works under certain specific terms and conditions;
- (iii) the previous provision pertaining to planter's contribution has been amended to link it with the viability price of sugar. Planters will need to contribute only for years when the ex-MSS price of sugar exceeds MUR 16,000 per tonne;
- (iv) under the new scheme the provision regarding the payment of cash advance to planters was abolished as was the case under FORIP.

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

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

The total cumulative extent regrouped, derocked and planted during the period covering 2006 to end June 2020 is 11,568 ha (i.e., representing some 96.4 % of the extent earmarked under this project) involving some 12,132 planters.

As from the FY 2020/2021, the MCIA is no longer implementing the SPRP as no fund is allocated for that purpose. Instead, funds are now being allocated under the Accompanying Measures to restore abandoned cane lands for the implementation of the Cane Replantation Scheme (CRS).

### Project 2: Centralization of sugar factories

No application for closure of sugar factories was reported for the year. The last factory that closed down was Medine as from crop 2019.

The progress on monitoring of factory closure conditions for the period 2017 to June 2021 is provided at Table 30.

**Table 30. 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 m2 fertilizer store or multipurpose building	Road Infrastructure
1.	St Felix closure in 2006	√	√	√	*	√
2.	Riche En Eau closure in 2007	√	√	√	*	√
3.	Mon Desert Mon Tresor closure in 2007	√	√	√	*	√
4.	Mon Desert Alma closure in 2008	√	√	√	*	√
5.	Union St Aubin closure in 2011	√	Overdue  MUR 6M not yet settled by Omnicane	√	*	√
6.	Mon Loisir closure in 2012	√	√	√	pending	√
7.	Deep River Beau Champ closure in 2014	√	√	In Progress	pending	√
8.	Medine closure in 2019	No EU fund. Payment was made to beneficiaries by Medine Ltd.	√ A total payment of MUR 6 M was made by Medine Ltd	In Progress	A site at Henrietta has been identified and agreed between Medine Ltd and MCAF	Not required

Note:√ means completed

\* pending, OMOL claims financial difficulty

### Planters' Fund

Following the closure of the Medine Sugar Factory as from crop 2019, a second payment of MUR3 M was made in January 2021. The total payment received from Medine Ltd amounts to MUR6 M for the Medine Planters' Fund.

### Fertilizer Store/Multipurpose Complex

With regard to the erection of fertilizer stores or multipurpose complexes, there was in principle an agreement that for all the closures that have occurred in the south, OMOL will provide fertilizer stores at two sites namely Plaine Magnien and Britannia. Clearance

has been obtained from District Council for the site at Plaine Magnien. However, no progress was recorded for the development of the site as OMOL claimed having financial difficulty.

In the context of closure of Mon Loisir and Deep River Beau Champ sugar factories, the cane receiving mills namely Terra Milling and Alteo Milling respectively have not proposed sites for this development.

With respect to closure of the Medine sugar factory, site for the fertilizer store has been identified and agreed between Medine Ltd, MCIA and MCAF. The site is at Henrietta.

## Other components

### Electricity Generation

In 2020, electricity generation decreased by 11.0% from 3,237 GWh (278 ktoe) in 2019 to 2,882 GWh (248 ktoe), of which 76.1% (2,194 GWh or 189 ktoe) was generated from non-renewable sources and 23.9% (688 GWh or 59 ktoe) from renewable sources.

The Independent Power Producers produced around 59.2% of the total electricity generated and the Central Electricity Board produced the remaining 40.8%. From 2019 to 2020, sales of electricity decreased by 11.1% from 2,754 GWh (237 ktoe) to 2,448 GWh (211 ktoe) and the average sales price remained at around MUR6 per kWh.

## Bagasse

Bagasse production is following similar trend as cane production which has declined from 5 million tonnes cane in 2000 to 2.6 million tonnes canes in 2020. With the declining trend in bagasse production the amount of electricity produced from bagasse has declined from 274 GWh in 2000 to 251 GWh in 2020. However, the bagasse electricity export per tonne of cane has registered an increase from an average 54 kWh/tonne cane in 2000 to an average 96 kWh/tonne cane in 2020. This increase is due to the installation of high pressure boilers at Terragen in 2000 and at Omnicane in 2007, resulting in an improvement in efficiency of bagasse combustion. In addition with the closure of Medine sugar factory, and the cane diversion plan, more bagasse is combusted at higher efficiency at the Terragen and Omnicane power plants as compared to the situation before the Medine factory closure .

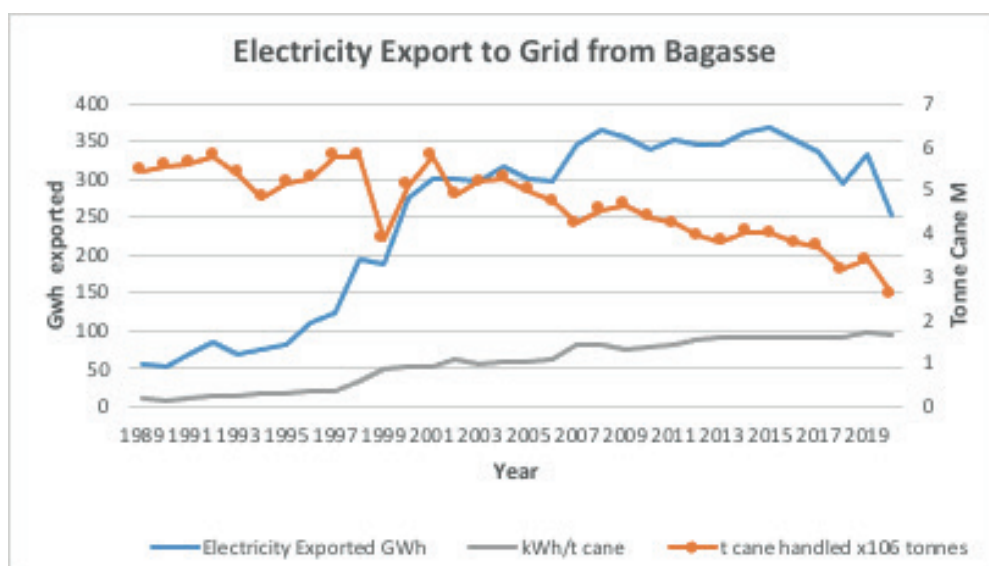


Fig 9. Electricity Export to Grid from Bagasse

However, in the case of the Alteo power plant there is still room for improving the efficiency of bagasse combustion through installation of high-pressure boilers with similar configuration to that of Terragen and Omnicane power plants.

Table 31. Bagasse Electricity Export (kWh/t)			
	Tonne Cane crushed-crop 2020	kWh Exported crop 2020	kWh/t cane
Terragen Ltd	717,619	77,708,127	108
Alteo Energy	1,037,788	79,912,479	77
Omnicane	879,006	93,547,129	106
<b>Total / Average</b>		<b>251,167,735</b>	<b>97</b>

## Cane trash

**Table 32. Cane trash**

	Alteo Energy Ltd			Terragen		
	Kwh from trash	Tonnes cane trash	Kwh / T trash *	Kwh from trash	Tonnes cane trash	Kwh / T trash
2017	1,100,000	1943	566	7,561,385	7,433	1,017
2018	3,900,000	6370	612	7,730,212	8,154	948
2019	1,489,807	4379	340	9,003,956	9,639	934
2020	6,000,000	3968	1512	4,106,101	4,171	985

In order to counter effect the decline in the production of bagasse, the sugar sector in collaboration with the MCIA has made technical progress in the collection, transport and storage of the cane trash for delivery to the power plants. The utilization of cane trash for electricity generation has been 8,139 tonnes with a production and export of around 6.6 GWh in 2020 at both Terragen and Alteo Energy Ltd.

The method of computation of the electricity export from cane trash is a derived method which is based on cane fibre and weight at Alteo whereas at Terragen it is based on the heat rate of 600 g coal/kWh . There is therefore a need to harmonise this methodology when the CEB contracts for both power stations are reviewed. \*The efficiency of trash combustion measured at Terragen is a more precise as than measured at Alteo since there are wide variations due to changes in cane fiber content.

The average efficiency of trash combustion claimed by Terragen and Alteo are 955 kWh /t trash and 650kWh/t trash respectively.

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

#### **VRS/ERS/Blue Print**

Employees in the sugar industry terminate their contract of employment voluntarily under the SIE Act 2001 and the 1997 Blue Print on Centralization of Sugar Milling Operations in Mauritius.

#### **Voluntary Retirement Scheme (VRS)**

Under this scheme, employees employed by the sugar growing companies are allowed to retire voluntarily.

#### **Early Retirement Scheme (ERS)**

This scheme was benefitted by employees of the following Milling companies in 2007:

- (i) Médine Sugar Milling Co. Ltd
- (ii) FUEL Sugar Milling Co. Ltd
- (iii) Belle Vue Milling Co. Ltd
- (iv) SUDS

#### **Blue Print**

This is a package for workers who have opted to accept that their contract of employment with a Milling company and a company should be terminated on closing down of the sugar factory.

#### **Phasing out of Sugar Camps & Blue Print Schemes**

The phasing out of housing estates (sugar camps) of the sugar industry was one of the major policy objectives of the Government as explicitly highlighted in the sugar sector programme which accompanied the publication of the Action Plan for the sugar industry in 1985.

The winding up of the phasing out of sugar camps was held on 20 December 2017. Employees who vacated sugar camps and have constructed their house on a new site are eligible to a housing grant.

#### **Housing Grant**

Under the Phasing Out of sugar Camps (POSC) and the Blue Print (BP) schemes, beneficiaries are eligible for a housing construction grant of MUR7 000 upon reaching the slab level of their house and on submission of their building and land permits.

The Policy and Planning Unit at the MCIA monitors the payment of a housing grant payable to beneficiaries. Officers of the Unit carry out site visits for eligibility purposes prior to the disbursement of the grant.

#### **No. of beneficiaries**

(i) Since the setting up of the MCIA up to 30 June 2020, the number of beneficiaries of the housing grant is provided in Table 33.

<b>Table 33. No. of Beneficiaries since setting up of MCIA up to June 2020</b>	
<b>Scheme (POSC/BP)</b>	<b>No. of beneficiaries</b>
Phasing out of Sugar Camp	113
Blue Print	115
Total	228

(ii) No. of Beneficiaries during period 1 July 2020 to 30 June 2021 is provided in Table 34.

<b>Table 34. No. of Beneficiaries during 2020/2021</b>	
<b>Scheme (POSC/BP)</b>	<b>No. of beneficiaries</b>
Phasing out of Sugar Camp	4
Blue Print	2

<b>Table 35. Status on VRS/Blue Print Title deeds to be handed over</b>					
<b>Sugar Companies</b>	<b>Scheme</b>	<b>No. of beneficiaries</b>	<b>Sites</b>	<b>Morc. Board Ref.</b>	<b>Status</b>
Médine Ltd	VRS	118	Palma	17443	Awaiting amended LOI to restart infrastructure works
	VRS	115	Bambous	17402	Title deeds in preparation
St Félix SE	VRS	144	Chemin Grenier	17413	Awaiting Morcellement Permit
Cie de Gros Cailloux Ltée	VRS	44	Kahin (Petite Rivière)	18726	Awaiting clearance from Authorities
		<b>421</b>			
Alteo Ltd	B. Print	126	Bonne Mère	17165	In process to hand over
	B. Print	25	B Vue Maurel	17033	In process to hand over
Médine Ltd	B. Print	107	Casela	19914	Infrastructure works ongoing
		<b>249</b>			

Site visits are carried out by the Project Operations Executive from the Policy Planning Unit (PPU) of the MCIA on a regular basis for proper monitoring of the projects.



**Fig 10. Employees of MCIA and Medine at the VRS Ceremony**

<b>Table 36. Drawing of lots exercise Title deeds handed over to VRS and Blue Print (2001-2007 beneficiaries)</b>	
<b>Scheme</b>	<b>No. of beneficiaries</b>
VRS 1	8,317
Blue Print	1,051
<b>Table 37.No. of beneficiaries under VRS/ERS/Blue Print (Employment terminated in period 2007-2014)</b>	
<b>Scheme</b>	<b>No. of beneficiaries</b>
VRS 2007	6,772
VRS 2012	411
ERS	209
Blue Print	1,252

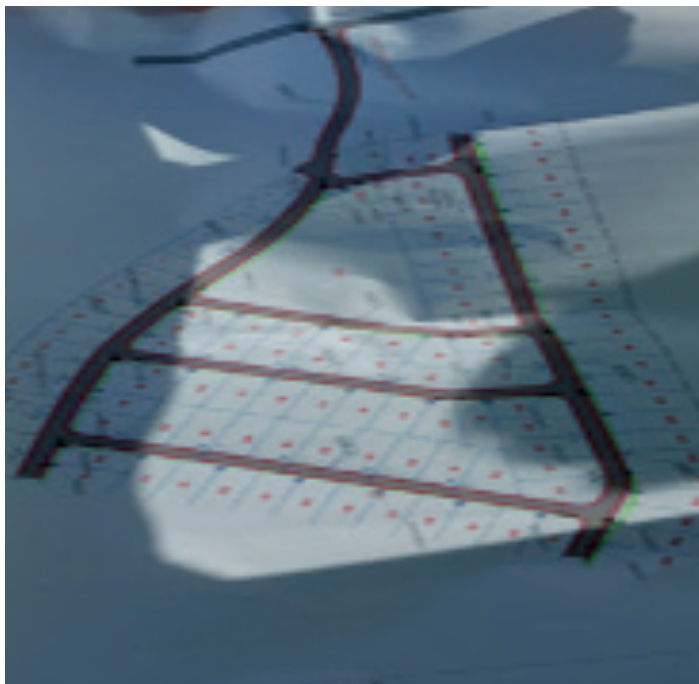
#### **Inter-Ministerial Meetings on VRS/ERS/ Blue Print**

Since 2017 an inter-Ministerial Committee on Land to be allocated to former employees of sugar estates under the VRS/Blue Print project has been set up by Government. Several meetings have been held.

At the meetings, Ministries, Government Authorities and Sugar Companies are requested to give clarifications on delay caused on the following:

- (i) Clearances from Authorities
- (ii) Issue of Letter of Intent (LOI)
- (iii) Issue of Morcellement Permit
- (iv) Preparation of Title deeds

Due to the Covid-19 pandemic there has been delay in infrastructure works for around 3 months.



**Fig 11. Land Parcelling at Cascadville (Blue Print)**

## Surplus plots of land

*(On VRS/ERS/Blue Print employees' sites and Phasing out of sugar camps sites)*

Surplus plots of land, if sold, are subject to some agreed conditions.

**Table 38. Surplus plots of land available as at June 2021**

SN	Sugar Company	Schemes VRS/ERS/ Blue Print (BP)/ Phasing out of sugar camps (POC)	Name of Site	No. of surplus Plots
1	St. Félix Co. Ltd	VRS1	Chemin Grenier	45
2	Mont Choisy	POC	Mont Choisy	2
3	St. Aubin	VRS1	Riv. Des Anguilles	2
4	Médine Ltd	POC	Eaux Bonnes	8
		VRS1	Camp Mapou	5
		VRS1	Chebel	2
5	Cie. Sucrière de Bel Ombre	VRS1	Case Noyale	2
6	Terragri Ltd	VRS1	Bois Mangués	8
		VRS2	Bois Mangués	1
		VRS2	Mont Gout	1
		VRS2	Maison Blanche	6
7	Omnican Ltd	VRS1	Batimara, Riv. Des Anguilles	2
		VRS1	Britania	1
8	Omnican Ltd (Britania)	POC	Camp Berthaud 1	4
9	Mon Trésor Mon Désert	POC	Cote d'Or	4
		POC	Deux Bras	1
		POC	Sauveterre	1
10	Omnican Milling Operations Ltd	BP	Tyack	8
11	Omnican (St. Félix)	BP	St. Félix	14
12	Omnican (Mon Trésor)	BP	Mont Trésor	4
13	Omnican Ltd	POC	Desplaces	41
				162
14	Alteo Ltd	VRS/ERS/BP/POC	*	*

\*Awaiting details from Alteo Ltd. Upon completion of projects, Alteo Ltd will submit details on surplus plots to MCIA.

### Termination of contract of employment in the sugar industry:

(i) There are mutually agreed terms and conditions between employees and sugar companies to terminate a contract of employment.

(ii) Optional retirement is also being accepted by sugar companies on the request of employees.

(iii) Bel Air Agricultural Ltd (BAA Ltd):

A total of 26 employees of BAA Ltd have terminated their contract of employment under an agreed scheme called "Early Termination of Contract of Employment Scheme" (ETCES)

(iv) Landscape (Mauritius) Ltd

Under an agreed scheme called “Voluntary Early Termination of Contract of Employment”, 59 employees have terminated their contract of employment after mutual agreement with the company.

## **SCHOLARSHIPS**

Under the VRS, ERS and Blue Print schemes, the ward of beneficiaries are eligible to scholarships for higher education at recognized institutions. The scholarships scheme is monitored jointly by the Ministry of Education, Tertiary Education, Science and Technology (scholarship department) and the MCIA.

The scholarships scheme is financed by the sugar companies concerned.

## **Agricultural Land Management System**

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

In order to bring back abandoned land to efficient use, particularly in the context of declining production, the Government has set up a scheme known as the Agricultural Land Management System (ALMS). Under the ALMS project, the MCIA is implementing the Cane Replantation Scheme (CRS) to assist all those planters who are committed to bring back their abandoned fields under cane cultivation. In parallel, the MCIA has implemented the Electronic Data Management System (EDMS) project, which is described below.

The EDMS shall provide real-time information and visuals identifying the physical and exact geographical location of each plot of land through a satellite image. It will initially track the land that is under sugarcane cultivation and also the current land use of fields which were previously under sugarcane cultivation by using colour codes to represent the different status of the lands. The system is targeted to be used as a knowledge-based management system on land utilization for policy formulation on how to make the best use of land resources.

Initially the system will be used to track status of lands pertaining to non-corporate sector of the cane industry but eventually, it will be scalable so as to take on board the corporate sector as well as other agricultural lands (e.g. FAREI and Forestry Department among others).

MCIA has procured the services of a supplier to complete this exercise in all factory areas. The supplier has completed its assignment and the system is now live and running on the cloud and can be accessed from anywhere provided a username and password have been allocated to the person accessing the system. The MCIA shall proceed with the mapping of cane fields belonging to the Corporate Sector and subsequently other crop cultivations /forests will be included.

In the Budget 2020/21, Landscape Mauritius (LM) was entrusted with the responsibility for the setting up of an agricultural land bank project. LM has already started with the implementation of Phase I of the land bank project on an extent of approximately 350 arpents of state land. LM has launched an expression of interest and has received applications and is currently evaluating the offers received. LM will embark on Phase II of the project shortly, which will consist of the inclusion of abandoned/unutilized lands belonging to individual planters within their land bank scheme.

## **Cane Replantation Scheme**

Another component of the ALMS is the implementation of the Cane Replantation Scheme (CRS). The objective of the CRS is to motivate planters to replant sugarcane, either in their abandoned fields or renew their fields which have already completed a cane cycle of at least 6 years under the Field Operations, Regrouping and Irrigation Project through the payment of a cash grant of MUR 83,000/ha. Whereas those Planters who had not completed a cane cycle of 4 years would be eligible for a reduced cash grant of MUR58,000/ha only for the replantation of their fields. This scheme will ensure that planters do not eventually abandon their plantations given the difficulties they are facing.

Eligible planters will be required to make their own arrangements and incur all the expenses for the land preparation and plantation of their fields. Upon completion of works and verification to the satisfaction of the MCIA, the one-off cash grant will be paid to the planters. As at end June 2021, land owners holding a total extent of 570 ha (some 860 planters) have signed their respective contract agreements under this scheme and an extent of 417 ha has already been replanted. Work is ongoing on the remaining areas.

## Métayers

In line with the agreement reached between the Ministry of Agro-Industry and Food Security (MoAIFS) representing Government and MSPA in 2010, the MCIA requested sugar estates to implement provisions of the agreement. This agreement made provision for the possibility for a métayer to buy the land under cane cultivation if it is considered as non-strategic or an alternative plot of land if the land occupied is considered as being strategic by the owner estate. The final price will include a discount of 35% as per the provision of the said agreement.

The MCIA is acting as a facilitator regarding the implementation of the provisions of the agreement. For the Crop 2020, only Constance La Gaiete (CLG) Co. Ltd has submitted its request to the MCIA for the sales of métayers land to its métayers. MCIA has made arrangement with the Ministry of Agro-Industry and Food Security to request the Government Valuation Office to proceed with cross-valuation of the land based on the valuation report submitted by CLG Co. Ltd.

## Sugar produced under sustainable and accredited trade labels

Export of sugar for small planters under sustainable and accredited trade labels is yet another avenue for generating additional revenue and placing the country on the world sugar niche markets map. Adherence to voluntary sustainability standards of production is therefore an important step to diminish supply chain risks and improve environmental management so as to enhance accessibility to the market.

There is a potential for growers to export some 40,000 t of sugar under the Fairtrade label. Export of sugar sold at a premium rate of 60 USD/t of sugar under this label has increased from 16,500t in 2019/20 to some 17,200 t in 2020/21. The total premium received and paid to producers for Crop 2020 is estimated around MUR39M.

In order to address problems faced during the past years regarding the deregistration of certain co-operative societies which had impacted negatively on our export volume under this label, the MSS has resolved to drive and facilitate the process with the setting-up of a co-operative within the Syndicate to group the island's sugar cane planters with the priority aim of preparing them for Fairtrade certification.

This will enable the country to optimally fulfill its Fairtrade sales potential during the forthcoming years. The MSS Multi-purpose Co-operative Society Ltd was consequently registered in January 2021 and the process for the enlistment of planters has started and is still ongoing.

A new system of accreditation for the small planters who are grouped into cooperatives has been set up under the under the Ctm Altromercato/Ferrero Sustainable Development Programme, which involved the export of some 4,000t of white refined sugar shipped to Ferrero whereby an additional premium of €40/t of sugar was received by the cooperatives. Under this scheme, some 700 registered cooperative planters are also eligible to receive both bio and chemical fertilizers free of cost in line with the recommendation made by the MSIRI after soil analysis.

Bonsucro is a global multi-stakeholder non-profit organization aiming at promoting voluntary sustainable sugarcane production, processing and trade around the world. Omnicane, Alteo, Terra and MSIRI are members of Bonsucro in Mauritius. The MSIRI is involved in Research and Development to assist the industry in meeting the standard in cultivation practices. In September 2020, Bonsucro has announced that it has included the Syndicate's certification to its Chain of Custody Standard, making the MSS to become the first sub-Saharan marketing organisation to be awarded this recognition. This accreditation will enable the MSS to source out their sugar requirements in priority from sustainable producers.

Organic production is becoming more prevalent along with many suppliers which are setting company policies to increase their organic offerings to mainstream consumers who have a rising interest in these products. In a spirit to further increase the revenue of producers and to promote the marketing of value addition to the cane industry, stakeholders are currently working on mechanisms and modalities for the production and marketing of certified organic sugars with the support and assistance from Government.

## Environment Issues of the Sugar Cane Cluster

### Air Pollution Monitoring System

For the period July 2020 - June 2021 the total number of tests carried out was 140. In spite of the negative

impact of the sanitary confinement due to Covid-19 in 2020, the air monitoring unit has been able to provide monitoring services and met the requirement of the companies in Mauritius to demonstrate compliance with the Environment Protection Regulations 1998 standards.

Table 39. Number of tests carried out for period July 2020- June 2021				
	Number of tests performed			
Parameters tested	2017 (Jul 2017 to June 2018- 12 months)	2018 (Jul 2018 to June 2019- 12 months)	2019 (Jul 2019 to June 2020-12 months)	2020 (Jul 2020 to June 2021-12 months)
Stack emissions	76	78	48	39
Particulate matter	76	73		
Ambient air quality	37	45	31	56
PM 10	24	17	15	22
Indoor Air Quality	21	25	16	23
<b>Total</b>	<b>234</b>	<b>238</b>	<b>110</b>	<b>140</b>

The gross revenue generated from activities of the air pollution monitoring was MUR 2.85 M for the 140 tests for 2020 which was lower than the gross revenue calculated for 2019 and which amounted to MUR5.5M for 110 tests. This was because certain tests which did

not conform to the standard methodology as per the Environment Protection Act were not claimed from the clients.

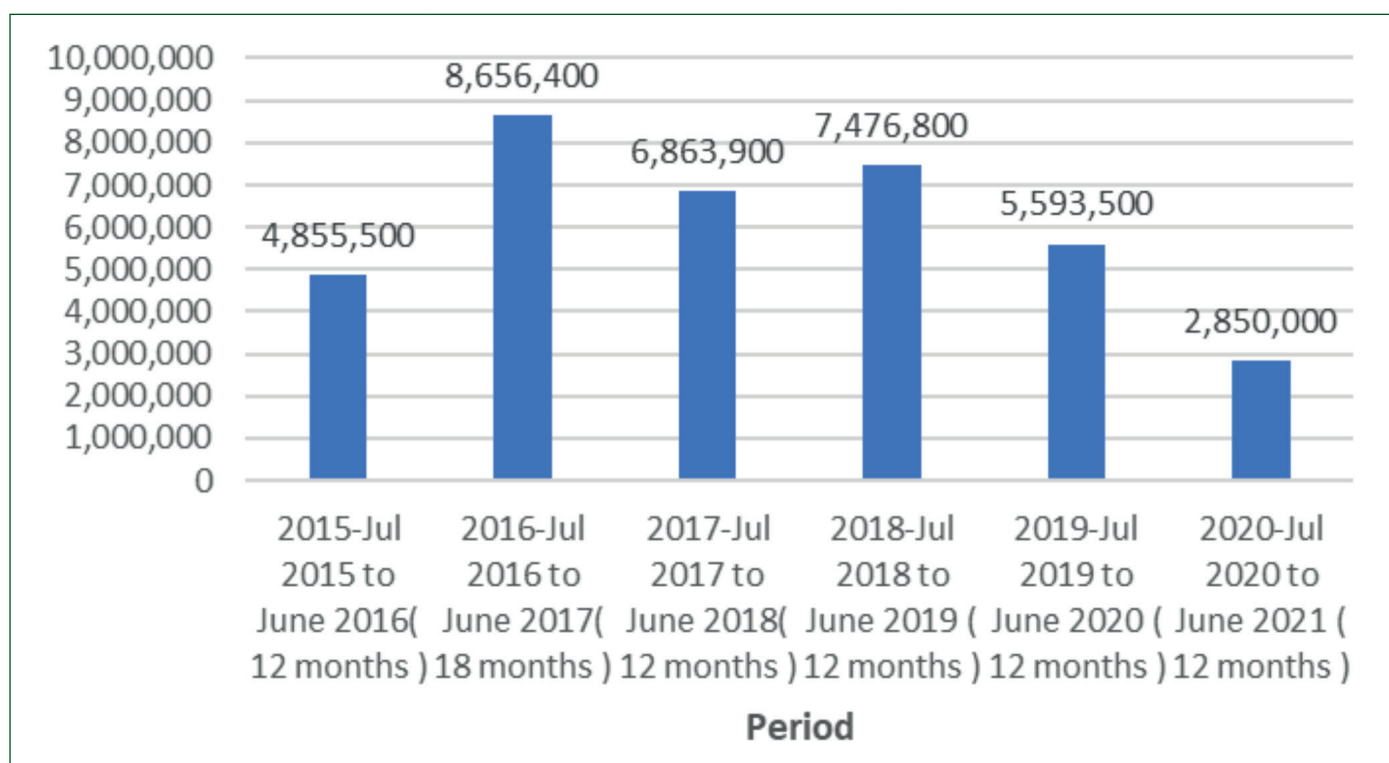


Fig12. Gross Revenue (MUR)

## Study by the World Bank on the Sugar Cane Industry

The objective of the Advisory Services is to provide policy recommendations to the Government of Mauritius regarding the development of the sugarcane sector and help in finding solutions which will ensure the long-term viability of the sector. The Advisory Services include the following activities and deliverables:

### A. Competitiveness assessment of the sugar cane sector

A competitiveness assessment of the advantages of the agro-industrial enterprises and farmers, including: productivity; cost of productions; opportunity costs; and revenues from different potential market sources. The assessment will use simple Excel-based models, farm budgets and firm-level costs for the production and processing of sugar, energy and other by-products to simulate different scenarios for the industry based on external factors.

### B. Vision exercise with sector stakeholders

Discuss various scenarios and options for the future of the sugar sector with sector stakeholders, including undertaking institutional assessments and using design thinking tools and approaches.

### C. Proposed policy actions and implementation plan:

A policy note summarizing the sector review and providing main recommendations for public policy and programs for the future development of the sugar cane sector.

### D. Timeframe:

The Advisory Services Agreement was signed in January 2020 and closed on November 30, 2020.

### E. The Process adopted by the World Bank


For the conduct of this assignment, the World Bank has adopted the following process, namely:

- (i) Consultations with the different stakeholders of the sugarcane sector to have information on the sector;

- (ii) World Bank proceeded with data collection from all stakeholders;
- (iii) the local representative of World Bank had the opportunity to further meet stakeholders of the industry on a one-to-one basis to seek additional and specific clarifications on the sector;
- (iv) Liaisons with the different partners of the industry for the preparation of a Multi-Year Template for Collecting Farm-Level Data on costs and revenue of Sugar Cane Production;
- (v) As and when required, sessions of Visio-Conference were held between the World Bank Team in Washington and the stakeholders in Mauritius, especially during the COVID-19 period;
- (vi) Presentations and discussions were held on the Competitiveness Model Farm Level Analysis and Sector-wise Model Analysis to all stakeholders of the industry;
- (vii) Conduct a Vision Exercise with the industry using the design thinking tools to discuss on various scenarios and options for the future of the sugar sector and the final outcome of this exercise;
- (viii) Undertaking an institutional analysis on the sector pertaining to the structure of various organizations, the annual income/budget and expenditure, and on the objectives/functions of each service providing institution;
- (ix) Organizing a final stakeholders meeting via Visio-Conference concurrently to present and fine-tune on the major findings and results; and
- (x) Preparation and finalising the Reports on the Competitiveness Analysis, Vision Exercise and Policy Note.

### F. Progress achieved

The Consultant World Bank has submitted the final Policy Note to Government in December 2020. The Ministry has set up a small working group to analyse



the recommendations made by the Consultant and to submit different policy options to Government. Some of the policy options have already been considered by Government for the formulation of proposals for the Budget 2021/22.

Given that Government has not yet taken a final decision on the recommendations made by the World Bank, same have not yet been disclosed to the stakeholders and public.

## **International Scene**

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

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.

At the SADC level, the trade of sugar is regulated by Annex VII of the SADC Trade Protocol. This annex is discriminatory in nature, given that only member countries of the SACU are able to restrict access to their markets while non-SACU countries have agreed to open their markets to other SADC member States. Such a unilateral quota restriction by the SACU is considered as a non-tariff barrier to trade. In response to these barriers to trade, non-SACU Member States have also introduced tariff and non-tariff barriers for sugars imported from other SADC countries and this situation is penalising the export of Mauritius. Mauritius is exploring all possibilities to remove this trade restriction for its sugar traded on the regional markets. The interest of Mauritius was discussed at meeting of the Technical Committee on Sugar last July. The fact that the Mauritius sugarcane industry is in

a very difficult situation and pending the proposed review of the SADC sugar regime, Mauritius has asked for a duty-free quota of 50,000 tonnes in the SADC sugar market. The Mauritius Sugarcane Industry has also witnessed the efforts made to help to open new market opportunities in order to safeguard the interest of all partners of this sector. It is with very much difficulties that persistent marketing strategies coupled with economic diplomacy has finally managed to make a breakthrough on the Chinese market, which has allowed Mauritius to benefit from a reduced tariff quota for 50,000t of the export of its special sugars, which will become effective progressively as from 2022. Furthermore, efforts are being made to secure an additional export volume of our sugars on the Indian market.

# C MAURITIUS SUGARCANE INDUSTRY RESEARCH INSTITUTE

## Research and Development

Despite the COVID-19 confinement and the unprecedented situation that prevailed during 2020, the R&D Committee met on eight occasions to deliberate on various aspects of research at MSIRI. Attendance of members to the Committee is given in Table 40.

Discussions focussed on the R&D budget, urgency to recruit new staff as a result of retirement and resignations of a number of staff, varieties proposed for release, shortening of the breeding and selection programme, exchange of varieties with different breeding stations, maintenance of the accreditation system at the Institute, progress of research activities and new technologies introduced during the year, amongst others.

The Committee was also apprised of the implications of the COVID-19 lockdown on MSIRI R&D programme. During the confinement period, a number of MSIRI staff attended work at the main office, while most officers worked from home, which allowed progress of paper work. After receiving the work access permit (WAP), a phased resumption took place. In terms of activities, some field experiment data could not be recorded during the lockdown period, although overall, there was no major disruption.

At the end of the year the R&D Committee reviewed the MSIRI R&D Plan 2016-2020 consisting of seven Research Focus Areas (RFAs). Members were very satisfied of the achievements obtained in the implementation of the 5-year plan and commended the MSIRI staff for the work performed.

<b>Mr J R Lincoln</b>	6
<b>Mr D Lavoipierre (Alternate)</b>	1
<b>Mr J Li Yuen Fong</b>	7
<b>Mr Y Mungroo</b>	8

## Visitors

A number of visitors called at the MSIRI, during the year to discuss projects of mutual interest including: Mr Samuel Ku Gbei, *Consultant, International Fund for Agriculture Development (IFAD) from Sierra Leone*

Mr Getachew M Alemu, *Specialist in Intellectual Property Rights from USA*

Mr Mathias Stangel, *Researcher at Trimble Germany Company, from Germany*

Mr Patrick Kormawa, *FAO Sub-Regional Coordinator for Southern Africa*

Mr Biyi Daramola, *Consultant, African Development Bank*

Mr Davide Signa, *Consultant, World Bank*

H.E Dr Kate O'Shaughnessy, *Australian High Commissioner in Mauritius*

Ms Yasmina Hosanoo, *Senior Political and Public Diplomacy Officer, Australian High Commission in Mauritius*

## The 2020 Crop

Cane elongation measurements were taken in 47 sites located in the different agro-climatic zones of the island on a fortnight basis from the last week of December 2019 to end of the end of June 2020, except during the lockdown period. Monthly cane samplings were carried out in 118 fields during the period May to November 2020, to monitor the evolution of sucrose.

During the growth phase, the total amount of rainfall recorded across sectors and over the island was above the normal. However, below normal rainfall was recorded in February and April 2020 in all sectors coupled with below normal rainfall in November in

<b>Table 40. Attendance of Members to the R&amp;D Committee January – December 2020</b>	
<b>Names</b>	<b>Number of meetings attended</b>
<b>Dr J C Autrey, CSK, Chairperson</b>	8
<b>Members</b>	
<b>Prof T Bahorun, GOSK</b>	4
<b>Mr N Basant Roi, PDSM</b>	6
<b>Mr J C Desvaux</b>	8
<b>Mr R K Hemoo</b>	7

the North and East. This impacted on elongation rate, which for the island was at 92% of the normal at end of April 2020. Solar radiation recorded, across sectors and over the island, was lower than those of crops 2019 and 2018. The maximum air temperature over the island and in all sectors was in general higher than the normal. The ripening phase was characterised by below normal rainfall over the island and all the sectors except for the month of June. The total rainfall of the island for crop 2020 was 364 mm compared to 559 mm for the Normal. The rainfed regions of the North and West suffered the most from the dry conditions prevailing at the end of the ripening phase.

Crop 2020 was characterised by a lower national sugar production of 270 875 t from a total of 43 711 ha harvested. This figure is the lowest recorded in the last decade, with a decrease of 1 343 ha compared to 2019. The total cane milled stood at 2,619,015 t compared to 3,403,310 t in 2019. Overall cane productivity in 2020 stood at 60.0 TCH and was much lower than the 75.6 TCH and 66.2 TCH for 2019 and 2018, respectively, and the 73.3 TCH for the mean of the past 5 years. Cane quality in 2020 was lower than in 2019 with fibre content being 16.45% compared to 15.96% in 2019 and 16.20% for the mean of the last five years. Moreover, sugar productivity over the island in 2020 was 6.20 TSH and was much lower than those of 2019 (7.35 TSH) and the mean of the past five years (7.15 TSH).

## Breeding and Selection Programme

Flowering during the year was generally of normal intensity. On account of COVID 19 lockdown, the crossing season started with 2 weeks delay and lasted from 26 May to 1 July 2020. A total of 635 bi-parental and polycrosses were done for the dry, humid and superhumid zones. Only eight genetic combinations were done for high biomass and genetic base broadening as flowering, in most of the wild and interspecific-derived clones, was over by the time crossing started.

Some 55 290 seedlings were produced comprising 17 360 for the dry zone, 21 093 for the humid zone and 12 157 for the superhumid zone, while 4 680 seedlings were produced for high biomass and multi-purpose varieties.

Strategies were developed, evaluated and agreed upon for the merging of stages 2 and 3 of the selection programme and for selection in first ratoon crop in selection stages 2/3 and 4, without loss in precision (Figure 13). These new approaches would allow more judicious use of resources, and reduce the time to release new varieties.

Concurrently novel techniques including the Linear Mixed Models (LMM) and statistical tools namely AMMI and GGE multivariate models were adopted

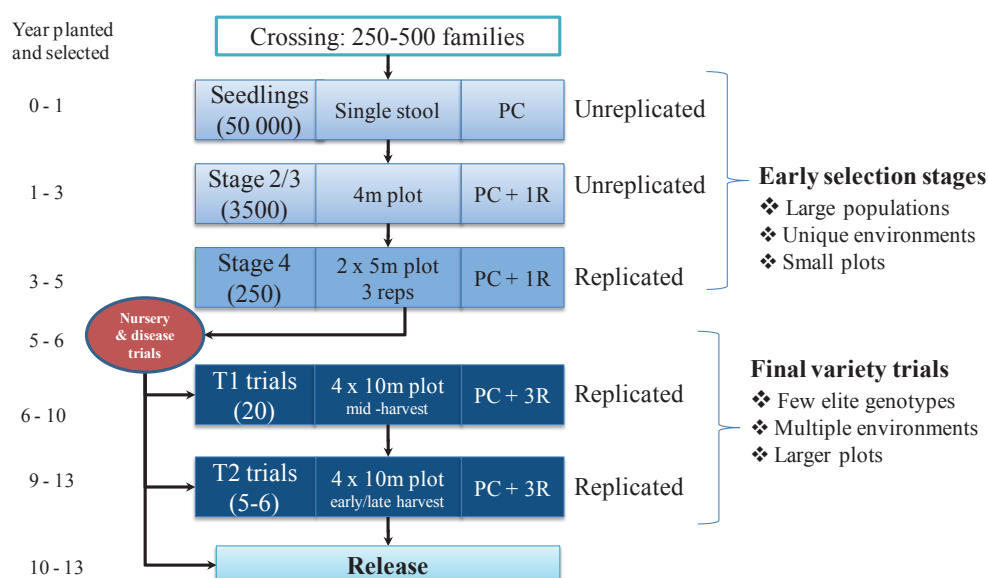


Fig 13. New selection flowchart indicating merging of stages 2 and 3 and selection in ratoon crop in stages 2/3 and 4.

for plant breeding data analysis as these provide pertinent and unbiased results more rapidly. At the final phase of selection, preliminary results using the Best Linear Unbiased Prediction (BLUP) estimates, that allows ranking of existing commercial and newly released varieties for major agronomic characters (TCH, IRSC%, TSH, total biomass), showed genetic gain as a result of new varieties being exploited.

More than 50 years of records of the sugar cane variety development programme were safeguarded through cloud computing. Besides, a climate and crop database were developed as well as reporting tools. This new innovative, versatile and efficient cloud system provides ubiquitous access to information and data analytics through user-friendly business intelligent dashboards.

Two varieties namely *M 64* (*M 1959/03*) and *M 65* (*M 3779/06*) named as per the new nomenclature, received release approval for commercial cultivation by the Cane Release Committee in September 2020.

Variety *M 64* (Figure 14) has an average number of fairly tall semi-erect stalks of medium diameter with a good ratooning ability and low flowering intensity. It produces high cane, sugar and fibre yields at both

middle and late season harvests. Sucrose content increases from fairly high at middle-season to high at late-season harvests, while profitability remains high across environments and harvest periods. The variety is resistant to gumming, smut and leaf scald diseases and is slightly susceptible to yellow spot and brown rust. On account of its generally good performance in the humid and superhumid areas, and its low flowering characteristic. *M 64* has the potential to be exploited in the B and F soils for middle- and late-season harvests, where there is a dearth of varieties. It has the potential to substitute variety *R579* in the superhumid zone, where the variety is not recommended for cultivation in the B and F soils.

Variety *M 65* (Figure 14) has a fairly high number of fairly tall and fairly erect stalks of medium diameter, with fairly low to low flowering intensity. It germinates well and has good ratooning ability. It has an average sugar and fibre content. It is resistant to gumming, smut, brown rust and leaf scald, but slightly susceptible to yellow spot. *M 65* is recommended for B1 soil of the humid and superhumid zones and for P1 and P2 soils for middle season harvest. It has the potential to replace variety *R579* in the B1 soil and varieties *R570*, *M 1176/77* and *M 1400/86* in the P1 and P2 soils.



Fig 14. Newly released varieties in 2020: left: *M 64* (*M 1959/03*), right: *M 65* (*M 3779/06*)

## Field Experimentation

During the year, staff in field experimentation, managed four experimental stations located at Réduit, Ferret, Belle Rive and Union Park and three sub-stations at La Sourdine, Valetta and Trois Îlots and also played a key role in the transfer of technology developed to the corporate sugar cane growers and to the small planters through the Farmers Service Agency. Field experiments comprised breeding plots, nurseries for propagation of cane materials, preliminary and final phase variety trials and research experiments. In 2020, one hundred and thirty-eight (138) trials were implemented on 63.4 ha. A total of 61 final phase trials (13 in the North, 16 in the Centre/East, 24 in the South and 8 in the West) were monitored, data collected in terms of cane yield (TCH), sucrose content (IRSC %), fibre yield (tha<sup>-1</sup>) and sugar yield (TSH) and harvested at different harvest dates during the crop season. Thirteen new final phase trials were planted during the year, five in F soil out of which four at Valetta and one at Belle Rive, six in P soil with three under pivot-irrigation at Sauveterre, two under dragline-irrigation at La Sourdine at Ferret, and one at Trois Îlots, while one trial was planted in B soil at Rose Belle and one in L soil under pivot-irrigation at Amitié.

Newly released varieties, M 64 and M 65 were multiplied in industrial trials at Sauveterre under pivot irrigation and at Rose-Belle under rainfed conditions to supplement information on industrial scale adaptation of the two varieties and for the provision of planting material for multiplication. Five large observation plots with varieties *M 216/02*, *M 1256/04*, *M 64* and *M 65* were established at Sauveterre and Rose Belle while promising clones *M 3818/06*, *M 821/07*, *M 1959/07* and *M 1669/08* were also followed in trials in terms of TCH and TSH productivity in observation plots located in the different agro-climatic zones.

With the release of the two new varieties, the total number of varieties recommended since 2013 amounts to 14. The area planted with the recently released varieties progressed in 2020. It was observed that varieties *M 1989/99*, *M 2283/98*, *M 683/99*, *M 2502/99*, *M 1002/02* and *M 915/05* released between 2013 and 2015 occupied a total area of 1965 ha and constituted 97 % of land replanted under new varieties by end 2020, while in the last three years replantation was negligible (37.3 ha).

## Biotechnology

In 2020, some 10,000 plantlets of newly released varieties *M 63*, *M 64* and *M 65* (Figure 15) were produced in the laboratory for clean seed production in the field. During the confinement period about 10,000 tissue culture plantlets were lost, as sub-culturing could not be attended to over several weeks, resulting in a reduced production. Promising variety *M 3869/06* was also micropropagated in vitro and some disease-free cultures were established for further multiplication.

Besides sugar cane micropropagation, some 2500 disease-free banana plantlets were produced on request.

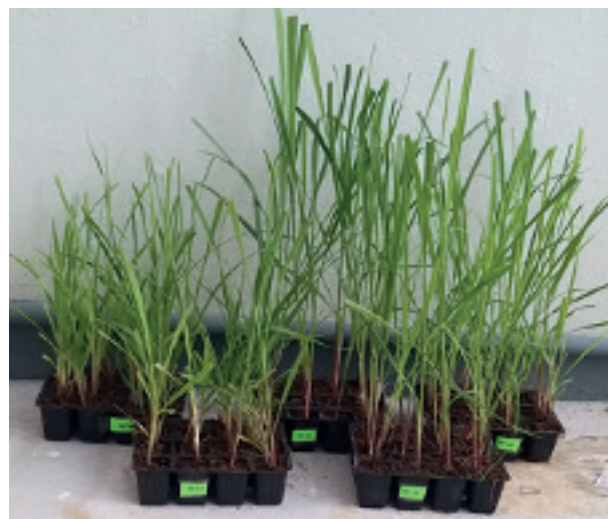
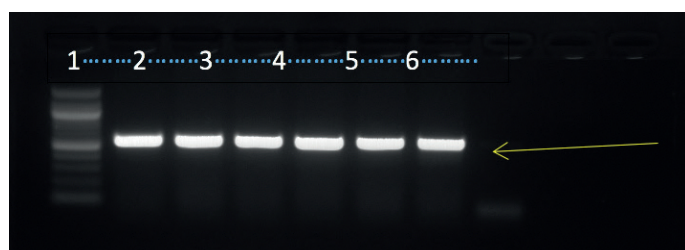


Fig 15. Potted tissue culture plantlets ready for field transfer

Progress was made in the gene editing project, aiming at knocking out flowering genes in sugar cane using CRISPR/Cas9 gene editing tool. Three flowering genes namely; *GIGANTEA*, *LATE ELONGATED HYPOCOTYL* and *FLOWERING TIME LOCUS* were sequenced in order to identify regions for gene editing. Twenty-five CRISPR/Cas9 plasmids were engineered targeting the *GIGANTEA* gene and transformation of sugar cane calluses using *Agrobacterium tumefaciens* as vector was initiated. Progress was also made in cloning plasmids targeting the other two genes.

With regards to the application of marker-assisted selection (MAS) for brown rust disease resistance in sugar cane, five promising varieties were identified following screening for the presence of the Bru1 marker. The five varieties, *M 1739/05*, *M 3485/06*, *M 3818/06*, *M 821/07* and *M 1669/08* that carry the

resistant marker (Figure 16) did not require further field evaluation for disease testing against brown rust. This represents savings in terms of cost and time with respect to field disease testing of the varieties.



**Figure 16.** Agarose gel showing the presence of Bru1 marker (arrow) in sugar cane varieties (lanes 2-6), lane 7: positive control, lane 1: 100 bp markers

Similarly, marker G1, reported to be associated with orange rust disease resistance in Brazil, was evaluated on sugar cane varieties, with known reaction to the disease under our local conditions. It is of note that orange rust, caused by the fungal pathogen *Puccinia kuehnii*, was first reported in Mauritius in 2018. Investigations are underway with a larger sugar cane sample size and more accurate disease scoring approach in order to better understand the marker-trait association in our local context.

Progress was also achieved in putting in place molecular diagnostics for a number of sugar cane diseases. A new primer was evaluated for its ability to detect new strains of *Sugarcane bacilliform virus* (SCBV) in a set 53 local accessions previously screened using conventional primers. The primer failed to detect additional SCBV genotypes, suggesting that new variants were not present among the tested samples. Additionally, two strategies, namely immunocapture-PCR and rolling circle amplification PCR were applied to verify whether samples that tested positive for SCBV in sugarcane were associated with the existence of episomal virus particles. Both techniques confirmed the existence of complete SCBV genome in the sugar cane plant, unlike in banana where fragments of a badnavirus are reported to be integrated in its genome.

The Cercomonad, *Phytocercomonas venanatan*, causal agent of chlorotic disease of sugar cane, was successfully isolated. Cane sap from infected sugar cane stalks of variety *M 52/78*, was used as inoculum for enrichment in liquid medium and the pathogen, a highly motile and bi-flagellate cercozoan was observed under light microscope.

Following screening of ten imported clones in the sugar cane quarantine using a PCR based test, three were found infected with SCBV strain IM, one with *Sugarcane yellow leaf virus* (SCYLV) genotype BRA-PER-HAW and one tested positive for ratoon stunting disease (RSD). Varieties earmarked for export were also screened for a number of diseases and only cuttings issuing from disease free material were selected for export.

During the year, use of DNA barcoding technique enabled the identification of the spotted wing drosophila fruit fly, *Drosophila suzukii* Matsumura, and also *D. immigrans* in Mauritius. The former is known to be a highly polyphagous pest in Americas and Europe causing much damage to summer fruits and tomato. This provided further evidence of the importance of applying DNA barcoding in pest monitoring in the country.

## Diseases

Gumming disease was not observed in commercial fields in 2020 nor in remaining stools of the highly susceptible variety *M 3035/66* found in field borders. Leaf scald was observed as systemic infection and foliar stripes in multiplication nurseries as well as in some varieties in our germplasm collection. Smut disease was insignificant during the year. The disease which is generally observed in the dry sub-humid regions of the North and West is now occasionally observed in the humid region, where whips were detected in the recently released variety *M 1561/01* at Union, in the east and in commercial fields of *M 1176/77* at Mon Trésor, in the south. Mild infection to brown rust was observed in variety *M 1176/77*, cultivated in the humid regions of the east and in commercial fields under irrigation in the southern and northern sectors while infection was negligible in variety *M 2593/92* grown in areas favourable to the disease.

The climatic conditions that prevailed during the early months of 2020 were not conducive for yellow spot infection (Figure 17). Monthly surveys carried out from January to July, except for March and April due to the confinement, on the highly susceptible non-commercial reference variety *B 3337* and cultivated varieties *M 703/89*, *R570* and *R579* at Union Park showed highest infection occurred in May-June with a peak of 38.6% in *B 3337*, 42.8% in *M 703/89*, 30.9% in *R570* and 28.9% in *R579*.

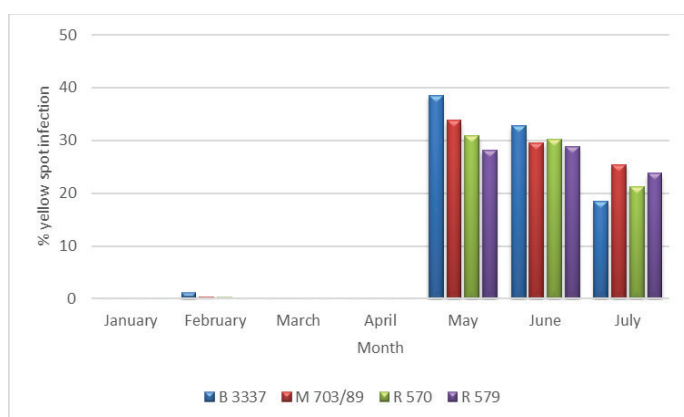


Fig 17. Top: yellow spot symptoms;  
Bottom: Percentage infection observed in varieties *B 3337*, *M 703/89*, *R570* and *R579* for the period January-July 2020 at Union Park

For orange rust, the intensity of infection was more apparent in areas of high humidity with a peak in May. However, infection appeared to be lower than in 2019. As observed in 2018 and 2019, the disease subsided during the cooler months of winter and remained very low in most growing areas till the end of the year.

The assessment of the susceptibility of elite varieties for the major diseases indicated six out of 26 varieties planted at Ferney in 2019, to be slightly susceptible to race 2 of gumming disease, while the remaining varieties were resistant. For leaf scald, the trial implemented at Belle Rive Experimental Station in 2018 with 14 promising varieties was completed during the year. Eight varieties were rated as resistant, four as slightly susceptible and two susceptible to the bacterial disease.

For yellow spot, the resistance trial planted with 31 varieties in 2017 at Union Park indicated only one variety as resistant, 10 as slightly susceptible, 12 as susceptible and 8 as highly susceptible. For smut disease, the resistance trial planted in 2017 at Ferret completed its cycle. Out of 29 varieties evaluated, 14 were resistant to the disease with infection rates below 5%. Among the remaining 15 varieties, eight

were slightly susceptible, three were susceptible and four were highly susceptible.

For orange rust, two trials were established in two contrasting environments at Union Park and Ferret, each with 42 varieties. In both trials, the highly susceptible *M 2705/06* was used both as control and disease spreader. Monthly surveys will be carried out in both trials to assess the evolution of the disease in the different varieties in the two environments.

During the year, 18 varieties were planted in a new N1 nursery at Ferret, located in the sub-humid dry irrigated zone, each variety occupying an area of 0.015 ha. After the review of promising varieties, two varieties namely *M 3818/06* and *M 1952/07* were upgraded to N2 nursery. In addition, varieties *M 1423/02* and *M 1669/08* were promoted from N2 to the N3 nursery.

In the national sugar cane quarantine, four varieties received from CIRAD's VISACANE quarantine facility, France, and three others received from Ecuador in 2018 completed their quarantine cycle and were released for open quarantine for one crop cycle. Ten varieties, imported in 2019 from Australia and South Africa under the quarantine cycle 2018-2020, were harvested at plant cane. No visible disease symptoms were detected. However, molecular disease analyses carried out on leaf samples identified RSD, SCBV and SCBV as reported earlier, showing the importance of applying molecular diagnostic tools in quarantine. All infected varieties were established *in vitro* for regeneration of disease-free tissue culture plantlets.

In the international sugar cane quarantine earmarked for export, 32 varieties comprising of 17 from Mauritius, 7 from Guatemala and 8 from USA were maintained in the facility. In addition, five recently released varieties namely *M 2283/98*, *M 683/99*, *M 2502/99*, *M 591/01* and *M 1698/02* were introduced.

## Microbiological Analysis

During the year, some 300 samples comprising of white refined, raw and special sugars, syrups, factory condensates and water were analysed for spoilage and/or pathogenic bacteria. As for soil samples, 13 were analysed for the bacterial wilt pathogen, *Ralstonia solanacearum*.

## Pests

Damage by the soft scale, *Pulvinaria iceryi*, was reported on an area of 12 ha under varieties *M 2256/88* and *M 2024/88* at Queen Victoria and Littoral. In the same region, an unexpectedly high population of the coccinellid, *Brumus* sp., as well as a high level of larval parasitism were observed in a severely infested field of *R570*. Severe infestations were also recorded over an area of about 5.4 ha under *R579* at Benares and Britannia, and 1.5 ha of *R579* at Riche Bois in August, and 10 ha of the same variety at Hewetson, in October. The coccinellid beetle, *Chilocorus nigritus*, was seen preying upon the pest and 50% of the larval population was parasitized in both localities. Predatory coccinellids, parasitoid species and appropriate recommended cultural practices namely cutting back severely infested areas and trashing effectively controlled the pest in the different localities.

Damage by the sugar cane armyworms occurred in young regrowths of mechanically harvested fields of *R573*, *R579*, *M 1861/89* and *M 1989/99* and *M 2593/92* over an area of about 221 ha at Benares and 191 ha at Britannia. At Mon Trésor, an area of 355.8 ha under varieties *R570*, *R573* and *R579* were also affected. Similarly, at Queen Victoria, an area of 57.5 ha planted with *M 1400/86* and *R579* was affected, while at Mon Loisir, damage was recorded over 4 ha under *M 2256/88*. At the Mount, 14.8 ha under variety *M 1400/86* were also damaged. All damaged fields, except at Mon Loisir, were treated with chemical insecticides. Assessments to determine the impact of armyworm damage on stalk elongation in treated and untreated plots of *M 2593/92* were pursued in the preliminary field trial established in 2019 at Bon Éspoir. Results in June showed that there was no significant difference in mean stalk height between treated and untreated plots.

In the context of the implementation of the White Grub Protocol, soil samplings conducted from July to August and light traps operated in January, November and December did not reveal the presence of the white grub, *Hoplochelus marginalis* in Mauritius. Beetles collected comprised of local white grubs *Heteronychus licas*, *Alissonotum piceum*, *Phyllophaga smithi*, *Adoretus* spp. and *Temnorynchus truncatus*.

An important infestation by the sugar cane stalk borer, *Chilo sacchariphagus*, was reported at Forbach on varieties *M 591/01*, *M 216/02*, and *R573*. With regard

to the armoured scale insect, *Aulacaspis tegalensis*, a severe infestation occurred at Benares in variety *M 683/99*. No important infestation of the yellow sugar cane aphid, *Sipha flava*, was observed in sugar cane during surveys.

Five newly released and promising varieties, *M 64*, *M 65*, *M 3869/06*, *M 1952/07*, and *M 1669/08* were assessed for their reaction to the stalk borer, and the armoured scale insect. At Réduit, *M 64*, *M 1952/07* and *M 1669/08* were slightly affected by *C. sacchariphagus* while *M 64* and *M 1669/08* were found to be severely infested at Belle Vue Ferret. A severe infestation was observed in *M 65*, while moderate infestation was recorded in *M 3869/06* in the same locality. A slight infestation by the scale insect was observed on all the three varieties assessed at Réduit but not at Belle Vue Ferret.

A project on sterile insect technique development in collaboration with South African Sugar Research Institute and the University of Stellenbosch to identify a suitable diet to rear the larva of *C. sacchariphagus* did not give conclusive results. On the positive side, carrageenan gel was found to be a good alternative to agar in the diet, while the incorporation of antimicrobial agents was effective in controlling contamination of the diets.

Attempts were made to correlate population of thrips with the foliar characteristics of some selected varieties in field trials established at Ferret and Réduit. Results confirmed that varietal reaction varied across sites as observed in 2018 and 2019. At Ferret, *R579* was the most infested, as in 2018, followed by *M 683/99* and *M 1400/86* while *M 703/89* and *R570* were the least infested. At Réduit, *M 683/99* and *R570* were found infested with a higher number of thrips, while varieties *R579*, *M 1400/86* and *M 703/89* were least infested. In another laboratory study, aiming to correlate the scale insect population with leaf sheath tightness in some commercial sugar cane varieties, it was observed that a high insect population developed on the internodes in varieties with a tight leaf sheath (Figure 18). On canes without leaf sheath, no significant difference in the scale insect population was recorded between the root band and the internodes.



Fig 18. Assessing scale insect population on cane stalks with different types of leaf sheaths

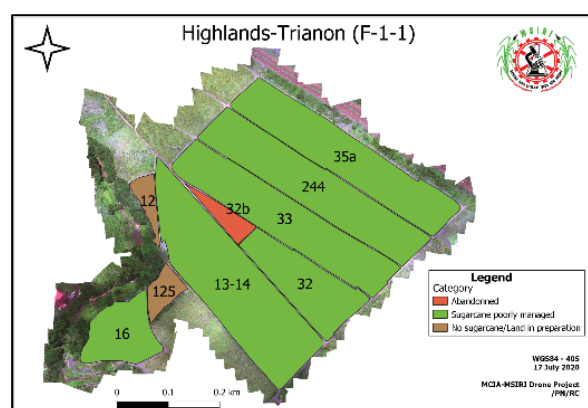
## Agronomic Practices and Mechanization

The agronomic concerns as a result of the partial collection of trash after harvest for its conversion into bioelectricity, were further evaluated at Terra Ltd. and Alteo Ltd. The results so far, indicate that partial trash collection (~ 50%) did not impair cane yield of the next harvest and soil moisture content was not significantly reduced. Weed management was not affected and soil fertility was not impacted significantly, in the short term. Soil compaction, due to additional passes of heavy equipment in the field for baling and transport, could be minimized with the adoption of controlled traffic in a dual row cropping system. Both companies collected some 14 000 t of trash, paving the way for industrial implementation of adding trash to bagasse for bioelectricity production.

Research in applying drone technology focused on

the development of algorithms/rulesets to better correlate the imagery acquired with the agronomic characteristics. The application of selective herbicides with a 'drone sprayer' on localized weed infestations in sugarcane fields where access for tractors is limited, was also pursued to identify the optimal spraying efficacy.

An application is being developed to classify sugar cane fields based on their agronomic status, in collaboration with the SIFB for their pre-registration purposes. Rulesets were developed to classify the sugar cane fields into five categories (Figure 19) and ground truthing by SIFB field inspectors has showed that the overall accuracy using this method was above 85%.



Summary of Highlands - Trianon (F-1-1) (Surveyed on 19 Feb 2020)								
Classification after Object Based Image Analysis								
Section	Field Number	Under Sugarcane Properly managed	Under Sugarcane Poorly managed	No sugarcane/ Land in preparation	Neglected	Abandoned/ Land Use Change	Total Area (ha)	Area (ha) SIFB
Trianon F-1-01	12			✓			0.061	0.210
	13-14		✓				5.066	2.713
	16		✓				1.404	1.725
	32		✓				1.734	2.710
	32a					✓	0.068	
	33a		✓				3.573	4.814
	35a		✓				3.653	7.007
	125			✓			0.089	1.062
	244a		✓				3.720	4.420
							<b>19.367</b>	<b>24.661</b>

Fig 19. Classified Map of Trianon site (top and summary of classification data (bottom))

The Drone Technology/Remote Sensing was also tested for the estimation of gaps (greater than 0.80 m between two consecutive stools along a sugar cane row) and was shown to have high accuracy. Point Clouds or collections of individual points, plotted in 3D space generated from drone imagery, were successfully used to measure sugarcane height, elongation and the possibility of estimating sugarcane biomass is being investigated.

Non-chemical means to minimize weed infestations were investigated by using companion leguminous crops (*Plantes de Service* – PdS), namely *Canavalia ensiformis* or *Lablab purpureus* cv. Highworth in sugar cane interrows. The companion crops provide a partial supply of organic nitrogen to sugar cane through atmospheric fixation.

A machine was developed locally to sow the companion crops through cane trash under our local conditions. Four-disc coulters and four chisel shanks (Figure 20) were mounted on a tool bar; the coulters opening a slit into the trash blanket before sowing of the leguminous crop. A seed distributing system *Polydoseur 2* ordered from SEPEBA, France, was fitted, this accessory having the advantage of being able to cater for a wider range of seeds sizes and varying planting densities.



Fig 20. Coulters and shank for opening of trash (top), Polydoseur for seed distribution (middle) and sowing machine in operation (bottom)

## Weed Management

Since 2015, there have been increasing reports on the inefficacy of glyphosate to control the grass weed *Eleusine indica*, commonly known as ‘Chiendent patte poule’ (Figure 21). A trial established at Alteo Ltd in 2016 indicated that the recommended rate of glyphosate at 1.0 kg a.e. ha<sup>-1</sup> for controlling general

weeds did not kill the grass. The herbicide was still not effective even after increasing the rate by four times, thus indicating a possibility of herbicide resistance in this specie and greenhouse trials are now being pursued.



Fig 21. Resistant *Eleusine indica* (“*Chiendent patte poule*”) species observed following application of herbicide glyphosate

A project was initiated in 2017 to assist Omnicane in complying with the pesticides limit fixed for certification by Bonsucro, i.e. a total permissible amount of 5.0 Kg active ingredients/ha/annum. Omnicane received its certification from Bonsucro in 2019 and in the same year, a similar project was also undertaken at Alteo with promising results. In 2020, MSIRI validated the efficacies of a few new tank-mixes containing lower amounts of active ingredients, and assisted Alteo in their recommendation of herbicide tank-mixes for the various agro-climatic conditions.

## Fertilizer Management

In recent crop seasons, it has become more common to fertilize sugar cane using a combination of inorganic fertilizers and some organic forms of amendments in view of reducing fertilizer costs and eliminating a pollution risk. Since most organic amendments cannot meet crop nutrient requirements on their own, they must be applied together with complementary nutrient sources. Three organic amendments were considered: poultry litter, bagasse ash and concentrated molasses stillage (CMS). Based on average total and available nutrient content of each amendment, general recommendations for dosages are made, even though it is preferable to determine the actual nutritional composition of the organic material applied. Soil tests for available P and K were taken into consideration to fine-tune the general recommendations, the effectiveness of which should be monitored through foliar diagnosis.

Two trials were initiated and harvested on small planters' fields to assess the effectiveness of a combination of three bio-fertilizers. The trials were conducted at Saint Julien and Mont Ida, using a combination of products of microbial origin designed to increase the availability of N, P and K to the crop. Although it appeared that the application of the biofertilizer has had a positive effect on nutrient uptake at Saint Julien, the harvest results at both sites did not show any significant difference in terms of cane or sugar yields. The trials have therefore not been able to demonstrate any significant yield advantage in the use of the biofertilizers at the recommended rates at either site.

In the same context, use of biofertilizers containing nitrogen-fixing, phosphorus-solubilising and potassium-mobilising bacteria as a means of improving soil NPK use efficiency to enhance sugar cane production was evaluated under glasshouse conditions. Biofertilizers Azofort, Phosphort and K-active, were applied 6 weeks after plantation and thereafter, rhizospheric soil was sampled after 2 and 5 weeks following application of the use of biofertilizers to determine whether N-fixing, P-solubilising and K-mobilising bacteria were present. Preliminary results indicated that the highest population of N-fixing, P-solubilising and K-mobilising bacteria was found in the soil sampled 2 weeks after biofertilizer application at 150% recommended dose. On the other hand, good results were obtained with biofertilizers applied at 50% and 100% after 5 weeks.

## Irrigation

During the year, a complete audit was conducted on five centre pivots. It was recommended that all five units should undergo maintenance work. The tests also showed the importance of regular checks comprising nozzle placement and removal for cleaning at the end of the season to reduce clogging. Due consideration must also be given to the operating pressure.

## Analytical Services

As in previous years, the Agricultural Chemistry laboratory continued to provide analytical services to small and medium planters and sugar estates for soil and plant testing, followed by recommendations on fertilization doses. A total of 460 soil samples were analysed as well as 51 sugarcane leaf samples from Permanent Sampling Units (PSUs), the latter to assess the nutritional status of the sugarcane crop.

It is worth noting that the COVID 19 confinement has negatively impacted on the number of samples that were sent by stakeholders for analysis. In addition to the routine soil and plant testing, non-routine analytical services were provided upon request from stakeholders in the sugarcane industry as well as from other organizations. Some 490 samples comprising of a wide range of matrices including liquid and granular fertilizer, sugar, molasses and water were analysed.

## Accreditation of MSIRI Laboratories

The Agricultural Chemistry, Plant Pathology and Biotechnology Laboratories are committed to provide analytical services of high quality, in conformance with the ISO/IEC 17025 standards, to the agricultural, food and environmental sectors. Following a re-assessment performed by the Mauritius Accreditation Service (MAURITAS) on 10 and 11 March 2020, accreditation for the 4<sup>th</sup> Accreditation Cycle 2020 to 2024 was renewed and the laboratories transitioned to the new ISO/IEC 17025: 2017 standards in August 2020. The MSIRI Quality Manual, quality procedures, technical procedures and other related documents were amended to align with the quality system requirements of the ISO/IEC 17025: 2017 standards. Additional assessments were also performed by MAURITAS for approval of new technical signatories for the Chemical, Environmental and Biological scopes. Accreditation tests currently include seven tests for the chemical scope for the analysis of waters, sugar, molasses, soil and plant samples, nine tests for the biological scope for analysis of sugars and intermediate products and DNA fingerprinting, and one test for the environmental scope for pesticide residue analysis in water and sugar samples. In order to further increase our scope in accredited tests, three protocols for determination of *Bacillus cereus*, *Staphylococcus aureus* and Enterococci in sugars, received ISO/IEC 17025: 2017 accreditation from MAURITAS.

## Sugar Technology

At the sugar factories, the mill juice collected for laboratory tests are subject to a deterioration process while increased health and environmental concerns associated with the use of toxic mercuric iodide prompted to seek for alternative preservation methods for the Mauritian sugar industry. Investigations were initiated by the MSIRI to evaluate alternative methods, namely spot sampling and freezing and use of biocides followed by freezing. Results indicated

that in terms of Brix, Pol and sucrose, juice samples can be satisfactorily preserved with biocides mixed with sodium dimethyldithiocarbamate (mDTC) at -25°C. This biocide applied at 1000 ppm followed by juice freezing, is expected to preserve sugarcane juice samples for a period of 24 h for analytical purposes.

During crop 2020, audits were conducted at the sugar milling laboratories of Alteo, Terra, and Omnicane as well as at their respective CAD laboratories. Verification of laboratory equipment such as refractometers, polarimeters, pH meters, and analytical balances was carried out using Certified Reference Materials and known standards.

Ring Tests on mixed juice were carried out during crop 2020 at MSIRI, at sugar factories and CAD laboratories and corrective actions were recommended, where necessary.

In September 2020, following a request from Alteo Milling a training course was delivered on chemical control of sugar factories to enhance both practical skills on routine analysis of sugar factory products by NIR Polarimetric techniques, and chemical control calculations for factory performance monitoring.

## 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.
- (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.

### 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.

### Operations of the Farmers Service Agency

Following a policy decision by the Ministry of Agro-Industry and Food Security, two Farmers Service Centres at Rivière du Rempart and Beau Champ were inaugurated on 4th July, 2020 and 3rd February, 2021 respectively.



Fig 22. Rivière du Rempart FSC



Fig 23. Beau Champ FSC

The Farmers Service Agency provides services to sugar cane planters through its eight FSCs at Saint Felix, Rose Belle, Saint Pierre, Unite, Bon Accueil, Solitude, Riviere du Rempart and Beau Champ. The one-stop service available at these FSCs allows planters to avail of extension services, provision of inputs for their crop, apply for incentive schemes and for land preparation services.

Each member of the 28 front line extension staff operates within a specific sugar cane zone delimited in a factory area, where he plans his extension activities targeting planters in that zone. In spite of Covid-19 lockdown during March/April 2021, arrangements were made to offer a minimum service to planters with regards to supply of cane setts and replanting activities.

### Computerization of Activities of FSCs

Following the successful implementation of the computerization of the Advance Supply of Fertilizers Scheme to small planters in 2019, the FSA has embarked on the development of a Farmers Information Management System (FIMS) in line with the function of the MCIA “to set up a planters’ databank” in February 2020. The system is a cloud-based electronic database management system which is intended to link all FSCs to a single platform to service all activities of the FSA. The heart of the system is the Planters Registration Database of the Sugar Insurance Fund Board and complemented with technical data on soils, agroclimatic conditions as well as previous works such as de-rocking, and mechanization carried out by the MSIRI. The main outputs from this system would be to process applications from planters for the various schemes and projects run by the FSA, to provide data for targeted extension and training, and to share information with departments of the MCIA and other stakeholders in view of improving the productivity of planters.

### Field Visits

For the year 2020/21, 14,615 field visits were carried out of which 46% were targeted towards projects such as replanting and post-replanting operations in the Agricultural Land Management System Cane Replanting Scheme (ALMS-CRS).

Table 41. Field Visits		
Year	Field Visits	
	2019/20	2020/21
ALMS-CRS*	20,587	6,678
Other visits**	7,803	7,937
<b>Total</b>	<b>28,390</b>	<b>14,615</b>

\* Includes visits to former FORIP/SPRP sites

\*\* Includes visits on requests and surveys

### Demonstrations

One hundred demonstrations on various aspects of sugar cane cultivation were established in small planters cane fields. Emphasis was laid on adoption of newly released varieties. Sixty-five of the demonstrations were carried out with sugar cane varieties M 683/99, M 1256/04, M 64 and M 65. Herbicide mix demonstrations were geared towards replacing traditional pre-emergence herbicide with mixtures containing Mesotrione as the main component.

Table 42. Demonstrations		
Year	Demonstrations	
	2019/20	2020/21
Sugar Cane Varieties	41	65
Herbicide Mix	23	35
<b>Total</b>	<b>64</b>	<b>100</b>



Fig 24. Newly released varieties in small planter's field

## Conducted Tours

Thirty-three conducted tours were organized and were attended by 136 growers. The objective of the guided tours was to show them the results of the demonstrations established and to encourage them to adopt the best practices.



Fig 25. Planters visiting newly released variety at Camp Thorel

## Surveys

Surveys were carried during the year on the following:

- (i) status of planters fields post-cyclone and heavy rainfall.
- (ii) cane fire outbreaks.
- (iii) status of unharvested fields.

## Group Meetings

Eighty-two group meetings were organized and attended by some 926 growers. Several topics related to improving productivity of the small planters were discussed.

Table 43. Group Meetings		
TOPIC	2019/20	2020/21
Regrouping/Cane Replantation Scheme	10	11
Productivity Improvement	18	Nil
Cane Fire Mitigation	6	1
Cane Harvest	21	17
Good Management Practice	5	5
Fertilization in Sugar Cane	4	1
Planters Schemes/ Fair Trade	9	13
Nursery Establishment	Nil	32
<b>Total</b>	<b>73</b>	<b>82</b>

Group meetings were limited to small groups of farmers due to the implementation of Covid-19 protocols. Emphasis was laid mostly on establishment of nurseries under new sugar cane varieties.

## Info Sheets

12 information sheets were distributed to 1191 growers. The topics concerned mainly cane fire prevention and management, importance of clean cane and good harvest practices, new sugar cane varieties, new herbicide recommendations and treatment of cane setts at planting against Pineapple disease as well as appropriate fertilizer application rates.

## Soil Sampling

FSA field staff collected a total of 98 soil samples from small planters' fields at land preparation stage, which were sent to the MSIRI Soil Chemistry Laboratory. The recommended fertilizer application rates with or without soil amendments were communicated to planters concerned.

## Visit by planters to FSC

A total of 15,845 planters called at the Farmers Service Centres for technical advice, supply of seed cane, as well as to apply for schemes such as ALMS-CRS, Advance Supply of Fertilizers. In spite of the fact that FSC's were not fully operational during the lockdown period between March 2021 and April 2021, the number of visits was higher as compared to 11,160 in FY 2019/20 due implementation of support schemes and the re-opening of two FSCs.

## Liaison Meetings

Four liaison meetings were held with main stakeholders of the sugar cane sector at FSC level.

## Seed Cane Supply

Seed cane supply remains one of the main activities of the FSA. 5,616 t of planting material of twelve sugar cane varieties were sold to 899 planters in FY 2020/21.

**Table 44. Seed Cane Supply for the Period July 2020 – June 21**

Variety	Seed cane supply (t)		No of beneficiaries
	2019/20 (t)	2020/21 (t)	
R 570	2,779	1,982	399
M 683/99	784	1,354	167
M 1400/86	1,412	949	64
R 579	684	499	99
M 3035/66	551	364	69
M 1989/99	90	185	55
M 1392/00	68	81	6
M 915/05	126	77	17
M 1256/04	24	75	11
M 2283/98	68	44	8
M 1176/77	6		-
M 216/02	1	3	2
M 1698/02		3	2
<b>TOTAL</b>	<b>6,593</b>	<b>5,616</b>	<b>899</b>



**Fig 26. Cane setts of variety M 1400/86**

A decrease of some 15% in the supply of planting materials as compared to FY 2019/20 was observed. This was mainly because replanting activities were adversely affected during the lockdown period.

Whilst the cane varieties R570, R579 and M3035/66 were still popular the tonnage sold under variety M683/99 has increased by 570 t (+72.7%) compared to last year. In general new varieties constituted 32.4% of total seed cane supply to planters compared to 17.8% in FY 2019/20.

## Nurseries Established

During the year 2020/21, the total area under cane nurseries stood at 14.4 ha under ten newly released sugar cane varieties as follows:

Table 45. Nurseries Established		
Varieties	Area (ha)	
	2019/20	2020/21
R 570	7.3	-
M 683/99*	7.5	5.2
M 2283/98*	3.4	0.5
M 1256/04*	0.6	-
M 1392/00*	3.3	4.6
M 915/05*	6.9	2.0
R 579	1.9	-
M 1400/86	5.4	-
M 1959/03*		0.4
M 1989/99*	1.4	0.5
M 1256/04*	-	0.7
M 216/02*	0.2	0.1
M 1698/02*	-	0.1
M 3779/06*	-	0.3
<b>TOTAL</b>	<b>37.9</b>	<b>14.4</b>

\* Varieties Released After 2015

Following phasing out of certain varieties (MSIRI recommendation sheet No. 193 of 2019), nurseries were not established under traditional varieties e.g. R 570 and M3035/66. Planters are being encouraged to adopt new varieties which are adapted in their regions.

## Converted Nurseries

Out of the 5,616 t of setts, 5,321 t were sold from converted nurseries. It is to be noted that the converted nurseries are cane fields replanted under ALMS-LRS Schemes in FY 2019/20.

Table 46. Converted Nurseries	
Variety	Total Extent (ha)
R 570	36.7
M 683/99	20.6
M 1400/86	14.2
R 579	9.4
M 3035/66	8.7
M 1989/99	3.2
M 1256/04	0.7
M 1392/00	1.8
M 2283/98	1.1
M 915/05	2.7
<b>TOTAL</b>	<b>99.1</b>

## Sugar Cane Planters Regrouping Project (SPRP)

All outstanding land preparation and replanting works contracted in FY 2018/19 have been completed in the FY 2020/21.

Table 47. SPRP	
SECTOR	Area Contracted and Completed (ha)
North	54.7
East	151.5
Centre	117.0
South	122.7
<b>Total</b>	<b>445.9</b>

It is to be noted that this project has been discontinued as from FY 2019/20.

## Agricultural Land Management System (ALMS-CRS)

For FY 2020/21, contracts were signed for a total acreage of 570.4 ha concerning 849 planters. Some 73% of cane replanting has been completed (417.7 ha) as at 30 June 2021. Delays in execution of works were due to unfavorable climatic conditions prevailing during period February-April 2021 and Covid-19

pandemic lockdown period between March and April 2021. It is to be noted that 70 planters with abandoned lands on an extent of 52.9 ha representing 12.6% of

total area planted, also benefitted from this Scheme.

### Status of ALMS FY 2020/21

Table 48. Status of ALMS FY 2020/21						
SECTOR	YEAR 2020/21					
	Area contracted (ha)	No. of Planters	Area Completed (ha)	No. of Planters	Abandoned Land rehabilitated (ha)	No of Planters
NORTH	174.6	272	139.3	181	34.3	41
EAST	162.9	247	114.6	201	11.8	18
CENTRE	100.5	102	65.2	78	3.1	5
SOUTH	132.4	242	98.6	174	3.7	6
<b>TOTAL</b>	<b>570.4</b>	<b>863</b>	<b>417.7</b>	<b>634</b>	<b>52.9</b>	<b>70</b>



Fig 27. Fields replanted at Dubreuil

It is also to be noted that contracts signed in FY 2019/20 over an area of some 63 ha were still outstanding for reasons stated above. It is expected that all outstanding works would be completed by June 2022.

### Planters Fund

Upgrading of road infrastructure in small planters' field was pursued to facilitate access in small planters' fields.

During FY 2020/21, some 37.1 km of field access roads were repaired mainly through laying of rough stones followed by compaction. A total of 1,011 planters benefitted from this scheme as follows:

Table 49. Planters benefitted		
Factory Area	Field Access Roads (km)	No. of Planters
Beau Champ	0.7	41
Britannia	3.4	150
Constance	1.2	35
M.T.M.D	9.8	165
Riche En Eau	8.9	360
Rose Belle	9.3	233
Saint Felix	3.8	27
<b>TOTAL</b>	<b>37.1</b>	<b>1,011</b>



**Fig 28. Laying of roughstones and compaction at Britannia**

Apart from compaction, other operations such as clearing and opening of drains and construction of retaining walls were also carried out under the scheme mainly in the South and East.

Table 50. Other operations			
Factory Area	Activity	Length (m)	No of Planters
Riche-en-Eau	Road levelling	1,000	4
Riche-en-Eau	Clearing and opening of drains	854	222
Rose Belle	Construction of dry stone retaining wall	7	15

A total of MUR2,249,380 was spent under this item.

## Planters Harvest Unit

The implementation of the Planters Harvest Unit (PHU) was continued for Crop 2020. Sixteen planters in the regions of Bois Madras, Melrose and Sebastopol agreed for harvesting and transport services to be offered by an SME hired by the MCIA. A total of 3,354 t cane were harvested for the FY 2020/21 as compared to last year where 6,380.62 t were harvested. The shortfall was due to a decrease of 28% in yield as well as replanting of some 20 ha of the project area.



**Fig 29. Mechanical loading in planter's field**

## Advance Supply of Fertilizers

The Government decided to reconduct the Advance Supply of Fertilizers Scheme to planters cultivating up to 100 ha for crop 2021 under the same terms and conditions as in FY 2019/20. Thus, vouchers equivalent to 218,560 fertilizer bags of 25 kg were issued to planters.

The scheme provides for 50% of the cost of fertilizers to be recouped from sugar proceeds of each beneficiary through the Mauritius Sugar Syndicate. A total of 7,513 planters benefitted from this scheme.

## Radio Talks

The following radio talks were broadcasted during year 2020/21:

Table 51. Radio Talks	
Topic	Date
Effecting Spraying of Herbicides	Jul 20
Crop Outlook 2020	Aug 20
Post Harvest Cultural Operations	Sep 20
Safe Handling of Pesticides	Oct 20
Fertilizer Recommendation in Sugarcane	Nov 20
Weed Control in Ratoon Cane	Dec 20
Grande Season Cane Replanting	Jan 21
Sugar Proceeds and Payments for Crop 2020	Feb 21
Varietal Choice: Agro-climate and edaphic factors	Mar 21
Registration procedures for SIFB, CAD, Miller & AMU	Apr 21
Cane Fire Prevention Measures	May 21
Crop Outlook 2021	Jun 21

The Agricultural Radio Programme is of 15-minute duration in Bhojpuri and Creole on the Radio Mauritius (AM) and Cool FM channels respectively. These talks are normally broadcast on the third Wednesday of each month. The participants involved in the preparation and delivery of the radio talks come from the technical cadre of the FSA.

## Events

The following events were held at Rivière du Rempart FSC on 5 December 2021:

- Handing over of Vouchers under the Advance Fertiliser Scheme 2021.
- Launching of new cane varieties M 64 and M 65.

## Human Resource Matters

### Appointment

- (i) Mr Yashwantsingh Ramdharee was appointed Director of the Farmers Service Agency as from 1st June, 2021.
- (ii) Mr. Anil Kumar Awotarowa has been assigned duties of Assistant Director, Farmers Service Agency with effect from 1st June, 2021.
- (iii) Mr. Rameshwar Bhaugeerutty has been assigned duties as Officer-in-Charge of Bon Accueil FSC as from 15th February, 2021.

### Training

The Farmers Service Agency has applied for registration as a Training Institution in compliance with the Mauritius Qualification Authority Act 2001. Training programmes were organized for FSA staff and planters in the following areas:



Fig 30. Training

- (i) Farmers Information Management System (FIMS) in collaboration with IT Department.
- (ii) Quantum Geographic Information System (QGIS) in collaboration with the MSIRI.
- (iii) Advanced Excel and Registry Procedures in collaboration with Civil Service College.
- (iv) Five training sessions were organized for planters on Good Management Practices and 161 planters attended.
- (v) Four training sessions were organized on Fair Trade and 168 planters attended.

### Committees

The FSA represented the MCIA on the following:

Table 52. Committees		
Name	Grade	Committee
Y. Ramdharee	Director	(i) Mount and Beau Plan Planters Fund (ii) National Vulnerability Assessment Committee
A. Awotarowa	Ag. Assistant Director	Standards Committee, Mauritius Qualifications Authority  Sectoral Committee, HRDC

## E. SERVICE TO FARMERS (AGRICULTURAL MECHANISATION)

### Objectives and Functions

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

### Services to the Planting Community

The Agricultural Mechanisation Unit of the Mauritius Cane Industry Authority manages a fleet of agricultural machines and equipment consisting mainly of Crawler Tractors, Pneumatic Tractors, Excavators, Bell Loaders, Roller, as well as various equipment and accessories. Table 53 shows the different types and numbers constituting the fleet.

Table 53. Services to the Planting Community				
SR	DESCRIPTION	TYPE	CAPACITY	QTY
1	Crawler Tractor	'D6'	165 - 185 HP	21
2	Crawler Tractor	'D7'	220 HP	8
3	Crawler Tractor	'D8'	300 HP	2
4	Excavator	PC - 350	35 Tonnes	2
5	Bell Loader	1250 Cane Loader	38 HP	5
6	Roller	3410P	130 HP	1
7	Wheel Tractor	-	90 HP	1
8	Wheel Tractor	-	175-185 HP	12
9	Wheel Tractor	-	250 HP	1

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

1. Land Clearing
2. Derocking
3. Levelling to facilitate mechanisation
4. Furrowing
5. Road tracing
6. Cane Loading

Approximately 80% of the work performed by AMU machines is for sugarcane plantation and approximately 15% is for foodcrop planters.

## Main Categories of Hirers

### 1. Small sugarcane planters

This category of planter consists mainly of small sugarcane planters and constitutes approximately 75% of the AMU's workload. More than 85% of planters found in this category have land of less than 1 ha while more than 65% have less than 0.5 ha. These planters benefit from highly subsidized tractor rates.

### 2. Sugar Estates

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

### 3. Small non-sugar planters

This category consists mainly of food crop growers. The demand for land preparation services is increasing and represents approximately 13% of the total hours work done by AMU's tractors.

## Revenue

Table 54. Revenue		
	July 2020 – June 2021	
	Effective Hours	Revenue (MUR)
Small sugarcane planters	19,859.20	11,513,070.00
Sugar Estates	570.75	753,390.00
Large Planters	684.50	635,880.00
Parastatal	487.25	1,064,821.25
Ministry	32.00	86,400.00
Small non-sugar Planters	3,247.75	4,080,012.50
Others	268.25	247,226.25
Total	25,149.70	18,380,800.00

## F. CANE MILLING ARBITRATION AND CONTROL

### Role and Function

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

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

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

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

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

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

### Powers of the Control and Arbitration Committee

The Control and Arbitration Committee may:-

- (a) summon witnesses and examine them on oath;
- (b) authorise an employee to enter: –
  - (i) any premises other than a private dwelling used in connection with the milling of canes or the manufacture of sugar and co-products; or
  - (ii) on any land used for the cultivation of canes;
- (c) order the production of any document believed to contain any matter relating to the milling of canes or the manufacture of sugar and co-products which it may wish to inspect;
- (d) undertake, or cause to be undertaken by an employee authorised for the purpose, any operation, test or experiment which it thinks necessary;
- (e) require a planter or miller to undertake or to cause his employees to undertake on his land or business premises any operation, test or experiment which it thinks necessary;
- (f) make an order for the payment of the cost of any operation, test or experiment required by it to be undertaken;
- (g) use or cause to be used for the purposes of any operation, test or experiment any implement, plant, laboratory, machinery or apparatus belonging to a planter or miller;
- (h) set up such committees as may be necessary to assist it in the discharge of its functions and exercise of its powers.

## Composition of the Control and Arbitration Committee

The composition of the Control and Arbitration Committee during period 01 July 2020- 30 June 2021 is shown in the Table 55.

Table 55. Composition of the Committee 2020 - 2021	
Chairperson	
Mr. Dheerendra Kumar Dabee, G.O.S.K	
Members	
Mrs.Damyantee Takoory (Jul-Aug) 2020 Mrs Indira Rugjee (Sep 20 – Jun 21)	Representative of the Ministry of Agro-Industry and Food Security
Mr. Jean Li Yuen Fong	Representative of millers
Mr. Soobas Muniah	Representatives of small planters
Mr. Vhinaye Dookhony P.M.S.M	Representatives of large planters
Mr. Amal Kumar Mohabeer Mungur	Representative of the MCIA Board
Vacant	Independent member

During period 1 July 2020-30 June 2021, the Committee held 12 meetings. The attendance of each member is shown in Table 56.

Table 56. Attendance for period 1st July 2020 to 30 June 2021	
Mr. Dheerendra Kumar Dabee, G.O.S.K	12
Mrs.Damyantee Takoory	2
Mrs. Indira Rugjee	10
Mr. Jean Li Yuen Fong	12
Mr. Soobas Muniah	12
Mr. Vhinaye Dookhony P.M.S.M	12
Mr Amal Kumar Mohabeer Mungur	12

## Arbitration of disputes and grievance handling

During period July 2020-June 2021, no formal dispute was reported to the Committee for arbitration. However, eight complaints have been registered and successfully addressed by the management of the CAD during that period. The number of complaints has decreased compared to last year where twenty-one complaints were registered.

## Registration of Cane contracts

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

For crops 2020 and 2021, no one-stop service was offered to planters, due to the pandemic of COVID-19 and lockdown during the month of May. Similarly for Crop 2020, all cane contract agreements were automatically renewed for Crop 2021 and cane contracts were entered between planters and millers only where there were changes in the crop registration data or for new planters.

For Crop 2020, a total of 11,692 cane contracts were registered including 11,165 cane contracts that were automatically renewed and 527 new cane contracts.

## Active Cane Reception Sites

For Crop 2020, three factories were in operation namely Terra, Alteo and Omnicane. Sugarcane growers of each factory area were authorised to deliver their canes either at the Cane Transit Site within their factory area or directly at the factory weighbridge. The active Cane Transit Sites associated with each factory are shown in Table 57. It is noted that only nine Cane Transit Sites were in operation following the closure of Ferney and Reufac weighbridges as from the end of Crop 2019.

Table 57.Cane Reception Sites			
Factory	Cane Transit Sites		
Terra	Beau Plan	Mon Loisir	Medine
Alteo	Beau Champ	Constance	Mon Desert Alma
Omnicane	Britannia	R. en Eau	St Felix

## Start and End of Crop 2020

Cane weighing activities started on 15 June at Alteo factory and ended on 21 December 2020 at Terra. The start and end of cane weighing and milling activities at each sugar factory as well as their number of crushing days are provided in Table 58. It is noted that Alteo factory has the highest number of crushing days (145) as compared to 134 and 128 for Terra and Omnicane respectively.

**Table 58. Start and End of Crop 2020**

Factory	Date receiving estate canes	Date receiving planters' canes	Date start crushing	End of Harvest	Crushing days
Terra	9 July	15 July	15 July	21 Dec	134
Alteo	15 June	15 June	17 June	09 Dec	145
Omnicanne	30 June	30 June	01 July	04 Dec	128

## Canes Milled

During Crop 2020, the three factories received a total of 2,620,874t of canes from sugarcane growers. From that amount, 753t of platform canes were sent from Terra factory to Alteo factory while 1,859t were lost during transportation between the cane transit sites and the receiving mills. The net amount of canes received and milled by the three sugar factories was thus 2,619,015t (see Table 59).

**Table 59 – Canes Received and Milled (t)**

Factory	Cane Received/T	Platform /T	Net Cane /T	Cane Loss /T	Cane Crushed/T
Terra	705,932	753	705,179	550	704,629
Alteo	1,038,297		1,038,297	509	1,037,788
Omnicanne	876,645		876,645	48	876,597
<b>Total</b>	<b>2,620,874</b>		<b>2,620,121</b>	<b>1,106</b>	<b>2,619,015</b>

## Sucrose Content Tests

The Control and Arbitration Department carries out sucrose content tests on the canes of planters at the various CAD Laboratories, namely, Terra, Alteo, Medine and Omnicanne.

As in the previous year, any planter or group of planters having an amount of 300t of canes were allowed to apply for a separate sucrose content test in case they wanted their canes to be assessed separately for Crop 2020. As at the closing date of 15 March, only two applications for new separate tests and one for cancellation were received at the CAD and were approved by the Committee.

For analysis purposes, canes from each region or separate test are randomly selected by a software at the weighbridges and are sampled using diagonal core

samplers. The samples so obtained are analysed for parameters Brix, Pol% and Fibre % at the laboratories by the InfraCana Cane Analysers. Actually, there are two InfraCana Cane Analysers at each laboratory except at Medine where there is only one.

The analysis test results obtained from the InfraCana Cane Analyser are then processed at the Head Office using a dedicated software for the determination of the amount of sugar accruing to each region or separate test. Table 60 shows the amount of canes received at each factory and the number of valid tests performed on those canes.

**Table 60. Number of Valid Tests for Crop**

Laboratory	Canes received (t)	Number of valid tests
Terra	705,932	26,579
Alteo	1,038,297	31,474
Omnicanne	876,645	26,281
<b>Total</b>	<b>2,620,874</b>	<b>84,334</b>

## Sugar Production

For crop 2020, the Terra, Alteo and Omnicanne factories altogether produced 272,347t of sugar at 98.5 degrees Pol as compared to an amount of 333,176t in 2019.

The average sucrose extracted % cane (extraction) for Crop 2020 was 10.26% as compared to 9.64% in 2019. Similarly, sucrose % cane (Richesse) was 12.00% in 2020 in comparison to 11.27% in 2019.

The amount of sugar produced by each factory is provided in Table 61.

**Table 61. Amount of sugar produced by each factory**

Factory	Sugar (Tonnes)		
	Tel Quel	Average Efficiency	At 98.5 Pol
Terra	78,978	80,642	79,712
Alteo	103,874	102,986	103,886
Omnicanne	88,023	88,694	88,749
<b>Total</b>	<b>270,875</b>	<b>272,322</b>	<b>272,347</b>

## Burnt Canes

For Crop 2020, a total of 177,346t of burnt canes were supplied by planters of Terra, Alteo and Omnicane (see Table 62).

The highest amount of burnt canes has been received at Terra factory (104,754t) and represents 14.87% of canes milled by that factory while the lowest percentage of burnt canes has been recorded at Omnicane, (8,229t) representing only 0.94% of canes

milled. On average, total burnt canes milled by all three factories represent 6.77 % of total canes milled. Out of the 177,346t of burnt canes milled, immature burnt canes represent 35.7%, mature burnt canes 58.6% while the remaining 5.7% burnt canes represent burnt canes transferred to Alteo factory from other factories at the start of harvest.

Table 62. Burnt Canes						
Factory	Canes Milled	Burnt Canes(t)				
		Immature	Mature	Transfer	Total	Percentage
Terra	704,629	28,921	75,833		104,754	14.87
Alteo	1,037,788	26,236	28,067	10,060	64,363	6.20
Omnicane	876,597	8,229			8,229	0.94
<b>Total</b>	<b>2,619,014</b>	<b>63,386</b>	<b>103,901</b>	<b>10,060</b>	<b>177,346</b>	<b>6.77</b>

## Final Assessment of Sugar and Molasses

The final assessment of sugar and molasses for crop 2020, was approved by the Control and Arbitration Committee on 9 February 2021. The amount of sugar accruing to planters and millers as well as the Final Assessment of Molasses are shown in Tables 63 and 64 below respectively.

Table 63. Sugar Accruing (kg) Table 63. Sugar Accruing (kg)				
Factor	Planter		Miller	
	Sugar Accruing	Sugar per tonne cane	Sugar Accruing	Sugar per tonne cane
Terra	62,950,085	89.27	16,762,542	23.77
Alteo	80,818,506	77.84	23,067,417	22.22
Omnicane	69,212,617	78.95	19,536,307	22.29
<b>Total</b>	<b>212,981,208</b>	<b>81.29</b>	<b>59,366,266</b>	<b>22.66</b>

Table 64. Final Assessment of Molasses for Crop 2020			
Factory	Brix of molasses	Molasses % Cane	Kg Mol/tonne cane @ 860 Brix
Terra	83.988	3.627	35.426
Alteo	87.696	2.711	27.642
Omnicane	85.562	4.010	39.893

Note: The above determination is based on canes received and includes molasses from platform canes

## Final Assessment of scums

The Final Assessment of Scum for Crops 2020 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 2 June 2020 and is provided in Table 65.

Table 65. Final Assessment of Scums for Crop 2020		
Factory	Moisture % Scums	kg scums/t cane
Terra	67.980	29.710
Alteo	71.700	53.950
Omnicanne	72.460	0.480

Since Omnicanne factory produces a limited amount of scums every year, planters supplying canes to Omnicanne factory obtain 7t of scums per acre during replantation.

## Final Road Rate for Crop 2020

In accordance with section 40 of the MCIA Act, sugarcane growers are entitled to a refund of the transport cost of their canes where the distance over which the canes are transported by them to a factory or a cane transit site is greater than 6.4 kilometers.

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

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

The recommended rates applicable where the transport cost is undertaken by the planter are provided in Table 66.

Table 66. Variable Cost (MUR per tonne per km)		
Crop	2019	2020
Variable Cost	7.04	7.31
Special Variable Cost	7.75	8.04

The fixed and variable costs where the transport cost is undertaken by the miller are provided in Table 67 below.

Table 67. Fixed and Variable Costs		
Crop	2019	2020
Variable Cost (MUR/t/km)	7.04	7.31
Fixed Cost (MUR/t)	25.24	26.20

## Determination of Price of Molasses

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

For crop 2020, a total of 88,660.309t of molasses at 86-degree brix were produced by the three factories out of which 84,184.293t were used for the production of alcohol by the three distilleries namely Grays, Medine and Omnicanne. From the remaining molasses, 3,324t were sold to local breeders while 1152t were taken in kind by sugarcane growers.

Out of the 84,184t of molasses purchased by the distilleries, 65,758t were used to produce alcohol for exportation and the remaining 18,426t for the production of potable alcohol for the domestic market. The price applicable to each category of users and the Final Price of Molasses for Crop 2020 at 86-degree Brix are as follows:

- (1) Sale Price to Livestock Breeders: MUR2,500/t
- (2) Deemed FOB price of molasses to distillers producing alcohol destined for exportation: MUR2,147.18/t
- (3) Price applicable to distillers producing potable alcohol for the domestic market: MUR3,500/t
- (4) Average Blended Price of Molasses: MUR2,441.16/t at 86-degree Brix
- (5) Final Price of Molasses payable to planters: MUR4,248.48/t at 86-degree Brix and inclusive of Distiller/Bottler Contribution.

## Weighbridge Calibrations and Checks

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

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

The number of canes and sugar weighing platforms in operation during Crop 2020 was 29 and a total of 4,045 accuracy checks were performed on those weighbridges as at 30 June 2020 by officers of the CAD as provided in Table 68.

Table 68. Weighbridge calibration and Accuracy checks for Crop 2020	
Type of Checks	Number of checks
Calibration/ Recalibration	45
Taring	74
Daily weighbridge accuracy checks	3,926
<b>Total</b>	<b>4,045</b>

## Value added products

Pursuant to the Section 24 of the MCIA Act, a person may, with the written authorisation of the Control and Arbitration Committee and subject to the approval of the Minister deliver canes to a person engaged in the production of cane juice for direct consumption.

As per the Mauritius Cane Industry Authority (Delivery of Canes for production of Juice) Regulations 2016, a yearly fee is payable by the planter depending on the maximum yearly tonnage of cane supplied to the operator.

During Crop 2020, there were 23 valid permits for the use of a maximum of 266 tonnes of sugarcane for the production of cane juice for direct consumption. The amount of juice so commercialized was equivalent to approximately 27t of sugar. The revenue generated from the annual fee paid by the operators amounted to MUR62,000.

Additionally, St Aubin, Medine and L'Exil distilleries crushed a total 3,233t of canes in their small-scale factories and the juice so extracted were used for the production of Rhum Agricole. The 3,233t of canes amounted to approximately 324t of sugar (Table 69).

Table 69. Production of Agricultural Rum from Sugarcane		
Distillery	Tonnage of Cane	Equivalent Sugar @98.5% Pol (T)
Saint Aubin	1458	146
L'Exil	1753	175
Medine	22	3
<b>Total</b>	<b>3,233</b>	<b>324</b>

During Crop 2020, an amount of 2,137t of mixed juice were diverted from Terra factory to Grays, Labourdonnais and Medine distilleries for the production of Rhum Agricole both for the local and international markets. The equivalent amount of sugar diverted was 306t equal to approximately 3,058t of sugarcane (Table 70).

Table 70. Diversion of Cane Juice			
Mixed Juice to Distillery	Wt of mixed Juice (T)	Equivalent Sugar @98.5° Pol (T)	Estimated Tonnage of Cane
Grays Distillery	288	42	425
Labourdonnais Distillery	1,847	263	2,630
Medine Distillery	2	0.3	3
<b>Total</b>	<b>2,137</b>	<b>306</b>	<b>3,058</b>

Overall, an amount of 6,557t of canes were used for the production of value-added products during Crop 2020, equivalent to approximately 657t of sugar (Table 71).

Table 71. Production of Value-Added Products for Crop 2020		
Distillery	Tonnage of Cane	Equivalent Sugar @98.5 °Pol (T)
Sale of Cane Juice	266	27
Diversion of Mixed Juice	3,058	306
Rhum Agricole from cane	3,233	324
<b>Total</b>	<b>6,557</b>	<b>657</b>

## Closure of weighbridges

In accordance with Section 36 of the MCIA Act and Weighbridge Control Regulation, a miller may apply to the Control and Arbitration Committee for the permanent closure of a weighbridge.

In August 2020, the Committee approved the closing down of the weighbridge located at Ferney Cane Transit Site as from Crop 2020.

## Compensation Payable to Planters for Crop 2020

Following the closure of any weighbridge, planters of that factory area are entitled to a uniform package offered by the miller. The package is as follows:

- 1) The payment of a fee which comprises of 3 components as listed below:

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

- 2) Component **(A)** is a payment of MUR25.00/t of cane payable each year. The component A is indexed to the Consumer Price Index which is determined every year by Statistics Mauritius and should be reviewed accordingly.

- 3) Component **(B)** is calculated as  $S \times RR$ , the factor **S** being the distance between the closed platform and the new proposed platform for the delivery of cane and **RR** being the official road rate determined each year by the Control and Arbitration Committee.
- 4) Component **(C)** is the excess of 6.4 km which is already being paid to planters for the delivery of their canes at the Weighbridges prior to their closures.

For Crop 2020, the inflation rate as determined by Statistics Mauritius is 2.5%. The compensation (A) payable to planters so determined is MUR27.56/t cane (Table 72).

Table 72. Compensation Payable to Planters					
Crop	2016	2017	2018	2019	2020
Compensation (MUR)	25.00	25.93	26.76	26.89	27.56

Table 73. Summary of Crop 2020

Factory	Crushing Period		Crushing days	Canes (tonnes)			Richeesse (Sucrose % Cane)	Extraction (Sucrose Extracted % Cane)	Sugar Produced (tonnes)				Molasses Produced tel quel (tonnes)
	Start	End		Received	Crushed	Loss in Transit			Tel Quel	Pro-duced @ 98.5	Average Efficiency	Diff	
Terra	15-Jul 27-Jul	21-Dec-20 10-Jan-20	134 155	705,179 919,580	704,629 918,923	550 657	13.16 11.85	11.14 10.25	78,978 94,711	79,713 95,589	80,642 96,091	-929 -502	25,615 31,694
Alteo	17-Jun 10-Jul	09-Dec-20 11-Jan-20	145 170	1,038,297 1,319,150	1,037,788 1,318,168	509 982	11.41 10.86	9.86 9.35	103,874 124,953	103,886 125,111	102,986 124,124	900 987	28,146 38,749
Omnicanne	01-Jul 02-Jul	04-Dec-20 16-Jan-20	128 154	876,645 1,166,519	876,597 1,166,219	48 300	11.77 11.27	9.97 9.50	88,023 111,441	88,749 112,476	88,694 112,933	55 -457	35,151 46,664
Total				2,620,121 3,405,250	2,619,015 3,403,310	1,940 1,940	12.00 11.27	10.26 9.64	270,875 331,105	272,347 333,176	272,322 333,148	25 29	88,912 117,107

Note: Figures in italic relate to Crop 2019

## 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.



Fig31. Unloading sugar boxes



Fig32. Storage of Non Originating Sugar (NOS) and Loading of trucks



Fig33. Transport by trucks



Fig34. Grabs filling chute

## 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.



Fig35. 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.

## Delivery of Sugar to Refineries

Plantation White Sugar (PWS) and Non-Originating Sugar (NOS) from shed number one 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.



Fig36. Delivery of sugar from Shed No.1  
Delivery of NOS is also done through the out-loading conveyors and reclaimed at the return bin of the sugar quay.



Fig37. 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 are inspected by a Registered Machinery Inspector.

## Meetings with Staff Associations

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

## Maintenance and Repairs

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

Most of the maintenance and repair works are carried in-house except for big projects which are outsourced. The workshop is equipped with specialized tools and equipment and among others this include a lathe, a milling machine, a hydraulic press, welding equipment both arc and gas, heavy duty drilling machine. Two mobile cranes facilitate transportation of heavy loads, tarring of weighbridges, maintenance of sugar boxes and working at heights with the man-platform attachment.

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

## Sugar Movements

### Plantation White Sugar Delivered received at the Sugar Storage and Handling Unit for Year 2020

Nil

#### Plantation White Sugar Delivered for Year 2020

Table 74. Delivery of Plantation White Sugar for Year 2020 (3.08.20 – 5.08.20)	
	(MT)
Omnicanne Milling Operations Ltd	477.640
Alteo Ltd	NIL
<b>TOTAL</b>	<b>477.640</b>

#### Non Originating Sugar Delivered for Year 2020

Table 75. Delivery of Non Originating Sugar for Year 2020	
	(MT)
Omnicanne Milling Operations Ltd	66,287.620
<b>TOTAL</b>	<b>66,287.620</b>

### **Closing Stock of PWS and NOS as at 30 June 2021 were as follows:**

Plantation White Sugar: NIL

Non-Originating Sugar: 25,675.610 MT

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

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



In the context of the rationalization of the service providing institutions to improve cost effectiveness, quality services and optimal use of human resources, Cabinet, at its meeting on 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 of the receipt, storage and distribution of bagged sugar as follows:

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

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

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

- (a) MCIA Shed No 1
- (b) MCIA Shed No 2
- (c) Caudan

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

Table 76. Weight of sugar								
Crop Year	2013	2014	2015	2016	2017	2018	2019	2020
Sugar Received from Sugar Estates (t)	121,042	126,714	104,172	134,566	87,457	93,990	96,183	104,348

## H. DIRECTORS RESPONSIBILITY STATEMENT

### General

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

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

### Internal Control

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

### Risk Management

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



**Vikraj RAMKELAWON**  
BOARD MEMBER



**Medha GUNPUTH**  
Senior Chief Executive,  
Ministry of Agro-Industry  
and Food Security  
CHAIRPERSON



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



# NATIONAL AUDIT OFFICE

## REPORT OF THE DIRECTOR OF AUDIT TO THE BOARD OF DIRECTORS OF THE MAURITIUS CANE INDUSTRY AUTHORITY

### 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 at 30 June 2021 and the statement of financial performance, statement of changes in net assets/equity, cash flow statement 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 accompanying financial statements give a true and fair view of the financial position of the Mauritius Cane Industry Authority as at 30 June 2021, and of its financial performance and cash flows for the year then ended in accordance with International Public Sector Accounting Standards.

#### Basis for Opinion

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

#### Key Audit Matters

Key Audit Matters are those matters that, in my professional judgment, were of most significance in my audit of the financial statements of the current period. These matters were addressed in the context of my audit of the financial statements as a whole, and in forming my opinion thereon, and I do not provide a separate opinion on these matters. I have determined that there are no key audit matters to communicate in my report.

#### Emphasis of Matter

I draw attention to the following Notes:

- Note 20 B of the financial statements regarding the transfer of Ex-Mauritius Sugar Industry Research Institute Pension Fund assets to SICOM Ltd which was not completed as of 30 June 2021. Assets not yet transferred at that date comprised investments held by a commercial bank custodian valued at Rs 88,192,693 and two plots of land with a book value of Rs 1,524,901.
- Note 22 of the financial statements regarding the accumulated deficit of Rs 1,059,595,443 as of 30 June 2021 as compared to the deficit of Rs 1,038,868,800 as of 30 June 2020.

My opinion is not modified in respect of these matters.

### **Other Information**

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

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

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

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

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

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

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

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

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

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


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

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

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

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

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



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

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

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

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

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

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

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

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

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

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

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

As far as it could be ascertained from my examination of the relevant records:

- (a) the Mauritius Cane Industry Authority has complied with the Statutory Bodies (Accounts and Audit) Act; and
- (b) no direction relating to the accounts has been issued by the responsible Minister to Mauritius Cane Industry Authority.

Based on my examination of the records of Mauritius Cane Industry Authority, nothing has come to my attention that causes me to believe that:

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

***Public Procurement Act***

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



**C. ROMOOAH**  
Director of Audit

National Audit Office  
Level 14,  
Air Mauritius Centre  
PORT LOUIS

28 April 2022



## J. FINANCIAL STATEMENTS



## **Financial Statements**

**Year Ended 30 JUNE 2021**



## THE MAURITIUS CANE INDUSTRY AUTHORITY

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## THE MAURITIUS CANE INDUSTRY AUTHORITY

1

### REPORT OF THE DIRECTORS

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1. The Directors have the pleasure to submit the financial statements of the Mauritius Cane Industry Authority (MCIA) for the year ended 30 June 2021.

2. State of affairs and review of activities

The Statement of financial position as at 30 June 2021 is set on page 2 and the Statement of financial performance for the year then ended on page 3.

The main activity of the Mauritius Cane Industry Authority, is unchanged since 30 June 2020.

3. Statement of Directors

The Directors state that :

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



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

## STATEMENT OF FINANCIAL POSITION

AS AT 30 JUNE 2021

	Notes	30 Jun 2021 MUR	30 Jun 2020 MUR
<b>ASSETS</b>			
<b>Current assets</b>			
Cash and cash equivalents	9	371,535,186	314,809,512
Trade receivable	10	167,745,600	148,361,590
Loans receivable	11	9,509,347	11,101,885
Inventories	12	49,692,969	49,180,611
Prepayments		1,290,817	1,588,000
		<u>599,773,919</u>	<u>525,041,598</u>
<b>Non-current assets</b>			
Trade receivable	10	26,711,082	25,417,957
Loans receivable	11	20,204,646	26,236,224
Investment in financial assets	13	452,250	402,950
Property, plant and equipment	14	2,298,040,609	2,414,806,614
Investment property	15	8,510,000	8,880,000
Intangible assets	16	4,087,841	5,325,531
		<u>2,358,006,428</u>	<u>2,481,069,275</u>
<b>Total assets</b>		<u><u>2,957,780,347</u></u>	<u><u>3,006,110,873</u></u>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Trade payables	17	98,756,628	68,255,730
Short term borrowings	18	1,701,196	1,512,486
Short term employee benefit provisions	19	38,000,000	28,000,000
Other short term provisions	19	500,000	700,000
		<u>138,957,824</u>	<u>98,468,216</u>
<b>Non-current liabilities</b>			
Trade payables	17	2,288,286	4,652,387
Long term borrowings	18	15,937,696	15,657,438
Long term employee benefit provisions	19	168,511,056	160,664,625
Other long term provisions	19	36,273,680	2,519,530
Retirement benefits obligations	20	1,254,772,914	1,232,379,564
		<u>1,477,783,632</u>	<u>1,415,873,544</u>
<b>Total Liabilities</b>		<u><u>1,616,741,456</u></u>	<u><u>1,514,341,761</u></u>
<b>Net Assets</b>		<u><u>1,341,038,891</u></u>	<u><u>1,491,769,113</u></u>
<b>NET ASSETS/EQUITY</b>			
Contributed capital	21	300,000,000	300,000,000
Revaluation reserve		2,100,319,835	2,230,372,713
Fair value reserve		314,500	265,200
Accumulated surplus/(deficit)	22	(1,059,595,443)	(1,038,868,800)
<b>Total Net Assets/Equity</b>		<u><u>1,341,038,891</u></u>	<u><u>1,491,769,113</u></u>

Approved by the MCIA Board of Directors on 19 April 2022.



Mr Medha Gunputh  
Chairperson



Mr Vikraj Ramkelawon  
Board member

The notes on pages 7 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 2021**

		Year ended 30 Jun 2021	Year ended 30 Jun 2020
	Notes	MUR	MUR
<b>Revenue</b>			
<b>Non - Exchange Transactions</b>			
Cess and Grants	24	969,664,976	1,054,650,494
Levy on sale of sugar	25	115,302,789	124,812,491
Other non-exchange income	26	1,545,963	1,138,154
		<u>1,086,513,728</u>	<u>1,180,601,139</u>
<b>Exchange Transactions</b>			
Hire of tractors and trailers	27	19,332,759	35,895,275
Other exchange income	26	38,742,735	31,351,720
		<u>58,075,493</u>	<u>67,246,995</u>
<b>Expenses</b>			
Salaries and salary related expenses	28	(397,498,086)	(486,731,063)
Administrative and general expenses	29	(174,507,740)	(157,912,824)
Ex- dockers pensions	30	(113,672,225)	(114,068,661)
Depreciation of property, plant & equipment	14	(128,373,588)	(131,175,279)
Depreciation of investment property	15	(370,000)	(370,000)
Amortisation of intangible assets	16	(1,309,290)	(1,319,090)
Cane setts and SPRP expenses		(18,923,104)	(51,982,607)
Planters fund expenses		(28,621,016)	(19,376,282)
ALMS expenses		(56,715,862)	(49,840,938)
Sugar cane sustainability expenses	31	(352,580,181)	(570,622,311)
Finance costs		(404,300)	(448,888)
Increase in retirement benefits obligations	20	(24,629,657)	47,972,657
		<u>(1,297,605,050)</u>	<u>(1,535,875,285)</u>
<b>Deficit for the year</b>		<u>(153,015,829)</u>	<u>(288,027,151)</u>

The notes on pages 7 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 2021

	Contributed Capital	Accumulated Surplus/(Deficit)	Fair Value Reserve	Revaluation Reserve	Total
	MUR	MUR	MUR	MUR	MUR
<b>As previously stated at 01 July 2020</b>	300,000,000	(1,038,868,800)	265,200	2,230,372,713	1,491,769,113
Transfers	-	130,052,878	-	(130,052,878)	-
Deficit for the year	-	(153,015,829)	-	-	(153,015,829)
	300,000,000	(1,061,831,751)	265,200	2,100,319,835	1,338,753,284
Actuarial losses on defined benefit pension plans	-	370,814,668	-	-	370,814,668
Increase on investment revaluation	-	-	49,300	-	49,300
Restatement of opening retirement benefit obligations	-	(368,578,360)	-	-	(368,578,360)
<b>As at 30 June 2021</b>	300,000,000	(1,059,595,443)	314,500	2,100,319,835	1,341,038,892

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.

	Contributed Capital	Accumulated Surplus/(Deficit)	Fair Value Reserve	Revaluation Reserve	Total
	MUR	MUR	MUR	MUR	MUR
<b>As previously stated at 01 July 2019</b>	300,000,000	(461,499,479)	410,550	1,949,005,443	1,787,916,514
Transfers	-	132,864,369	-	(132,864,369)	-
Deficit for the year	-	(288,027,150)	-	-	(288,027,150)
	300,000,000	(616,662,260)	410,550	1,816,141,074	1,499,889,364
Actuarial losses on defined benefit pension plans	-	(422,206,540)	-	-	(422,206,540)
Decrease on investment revaluation	-	-	(145,350)	-	(145,350)
Increase on revaluation of non current assets	-	-	-	414,231,639	414,231,639
<b>As at 30 June 2020</b>	300,000,000	(1,038,868,800)	265,200	2,230,372,713	1,491,769,113

The notes on pages 7 to 32 form an integral part of these financial statements.

**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**CASH FLOW STATEMENT**  
**YEAR ENDED 30 JUNE 2021**

	Notes	Year ended 30 Jun 2021	Year ended 30 Jun 2020
		<b>MUR</b>	
<b>Cash flows from operating activities</b>			
Cash absorbed in operations	35.1	59,666,192	(463,405,727)
Interest paid		(277,940)	(269,276)
<b>Net cash used in operating activities</b>		<b>59,388,252</b>	<b>(463,675,003)</b>
<b>Cash flows from investing activities</b>			
Capital expenditure		(15,194,713)	(13,169,903)
Disposal proceeds		5,057,226	576,043
Interest received		1,409,963	1,607,541
Dividend received		-	19,960
<b>Net cash generated from/(used in) investing activities</b>		<b>(8,727,524)</b>	<b>(10,966,359)</b>
<b>Cash flows from financing activities</b>			
Staff loans recovered		15,405,024	13,757,420
Staff loans granted		(7,777,867)	(7,141,053)
Repayment of loans		(1,562,211)	(1,365,616)
<b>Net cash flow generated from financing activities</b>		<b>6,064,946</b>	<b>5,250,751</b>
<b>Net Increase/ (Decrease) in cash and cash equivalents</b>		<b>56,725,674</b>	<b>(469,390,611)</b>
<b>Movement in cash and cash equivalents</b>			
		<b>MUR</b>	<b>MUR</b>
As at 01 July 2020		314,809,512	784,200,123
Increase / (Decrease)		56,725,674	(469,390,611)
<b>As at 30 June 2021</b>	<b>35.3</b>	<b>371,535,186</b>	<b>314,809,512</b>

The notes on pages 7 to 32 form an integral part of these financial statements.

## STATEMENT OF COMPARISON OF BUDGET AND ACTUAL AMOUNTS

YEAR ENDED 30 JUNE 2021

	ORIGINAL BUDGET	ACTUAL RECEIVED/PAID	VARIANCE	AMOUNTS AS PER FINANCIAL STATEMENTS	VARIANCE	REMARKS
	(A)	(B)	(C = A-B)	(D)	(E= D-B)	
	MUR	MUR	MUR	MUR	MUR	
RECURRENT EXPENDITURE						
Salaries,Salary related expenses and Travelling	357,660,270	317,552,388	40,107,882	341,837,605	24,285,217	Savings in overtime, travelling, and sick leave due to lockdown & government restrictions.
Pension and Insurance of employees	57,957,030	61,033,672	(3,076,642)	61,631,140	597,468	Increase in medical insurance premium
MSS Ex- Dockers Pension	122,100,000	111,696,462	10,403,538	113,672,225	1,975,763	COLA paid lower than expected and reduced number of pensioners.
Rent, Rates and Utilities	20,061,600	14,956,380	5,105,220	16,435,920	1,479,540	Rent unpaid at year end.
General Office Expenses	7,801,000	5,815,031	1,985,969	6,916,694	1,101,663	Cost saving.
Maintenance and Insurance	107,341,700	60,219,486	47,122,214	66,418,485	6,198,999	Savings in Vehicle Running expenses due to lockdown.
Welfare and Health & Safety	3,863,000	3,464,619	398,381	3,568,019	103,400	
Finance Cost	400,300	402,697	(2,397)	404,300	1,603	
Mission	300,000	-	300,000	-	-	No mission undertaken.
Field Experimentation	150,000	306,425	(156,425)	306,425	-	
Publication and Advertisement	500,000	176,522	323,478	738,296	561,774	
Training & Support Services	600,000	339,800	260,200	339,800	-	
Security	28,633,000	18,457,520	10,175,480	24,677,569	6,220,049	Payments for April to June 2021 made after year end.
Air Pollution Monitoring Expenses	1,500,000	342,227	1,157,773	347,892	5,665	Over budgeted
Research & Development	11,274,000	10,157,027	1,116,973	9,825,996	(331,031)	
	720,141,900	604,920,256	115,221,644	647,120,366	42,200,110	
CAPITAL EXPENDITURE						
Non Current Assets	97,289,500	15,200,714	82,088,786	15,573,088	372,374	Revised budget allocation.
Repayment of Loans	1,426,600	1,562,211	(135,611)	1,562,211	-	
	98,716,100	16,762,925	81,953,175	17,135,299	372,374	
TOTAL EXPENDITURE	818,858,000	621,683,181	197,174,819	664,255,665	42,572,484	
REVENUE						
MSS-Warehouse for Special Sugars	2,101,300	-	(2,101,300)	-	-	Not received.
Hire of Tractors & Trailers	32,500,000	19,332,759	(13,167,241)	19,332,759	-	Reduction in land preparation works.
Co - financing from Government	531,870,000	391,524,318	(140,345,682)	370,641,150	(20,883,168)	Revised budget allocation.
MSS - Refund of BSSD Expenses	103,110,000	103,110,000	-	103,110,000	-	
Lewy on sale of sugar on local market	131,350,000	98,631,440	(32,718,560)	115,302,789	16,671,349	Significant receipt after year end.
Air Pollution Monitoring Income	4,000,000	2,377,000	(1,623,000)	2,377,000	-	
Others	13,926,700	32,222,947	18,296,247	37,911,698	5,688,751	
	818,858,000	647,198,464	(171,659,536)	648,675,396	1,476,932	

Both the budgeted and the actual figures are prepared on a cash basis.

The notes on pages 7 to 32 form an integral part of these financial statements.

## THE MAURITIUS CANE INDUSTRY AUTHORITY

7

### NOTES TO THE FINANCIAL STATEMENTS

YEAR ENDED 30 JUNE 2021

#### 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 2021 and are presented in accordance with International Public Sector Accounting Standards (IPSASs)

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

#### 3 REPORTING CURRENCY

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

#### 4 MEASUREMENT BASE

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

**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 2020 or later periods but which have not been early adopted. These new standards, amendments and interpretations are either not relevant to the MCIA's operations or are not expected to have a material effect on the accounting policies and disclosures.

**5.2** Below is a list of amendments to IPSASs issued in July 2020 which are mandatorily effective for annual financial statements covering periods beginning on or after 1 January 2021 but which allow early application.

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

**5.3 Use of estimates and judgement**

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

**6 SIGNIFICANT ACCOUNTING POLICIES**

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

**6.1 Basis of preparation**

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

**6.2 Statement of Compliance**

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

**6.3 Property, plant and equipment**

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

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

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

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

## THE MAURITIUS CANE INDUSTRY AUTHORITY

### NOTES TO THE FINANCIAL STATEMENTS

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#### YEAR ENDED 30 JUNE 2021

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 fair value.

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.

## THE MAURITIUS CANE INDUSTRY AUTHORITY

### NOTES TO THE FINANCIAL STATEMENTS

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#### YEAR ENDED 30 JUNE 2021

##### (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.

#### 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 2021

**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 452 250 ( at fair value on 30 June 2021) in equities and no investment in bonds or other securities. Accordingly, it has minimal exposure to price risk.

*(iii) Credit risk*

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

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

*(iv) Liquidity risk*

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

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

	Due within 12 months	Due after 1 year	Total
	MUR	MUR	MUR
<b>At 30 June 2021</b>			
Borrowings	1,701,196	15,937,696	17,638,892
Trade Payables	98,756,628	2,288,286	101,044,914
	<u>100,457,824</u>	<u>18,225,982</u>	<u>118,683,806</u>
<b>At 30 June 2020</b>			
Borrowings	1,512,486	15,657,438	17,169,924
Trade Payables	68,255,730	4,652,387	72,908,117
	<u>69,768,216</u>	<u>20,309,825</u>	<u>90,078,041</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 2020. 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

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YEAR ENDED 30 JUNE 2021

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 2021	30 Jun 2020
	MUR	MUR
- Bank account with SBM Ltd- FORIP Account	57,968,826	81,809,939
- Bank account with Maubank	102	189
- Bank account with SBM Ltd- Main Account	195,083,042	131,688,518
	<u>253,051,970</u>	<u>213,498,647</u>
- Other bank balances	118,310,128	101,161,472
- Cash	173,088	149,393
<b>TOTAL</b>	<u><b>371,535,186</b></u>	<u><b>314,809,512</b></u>

The effective rate of interest on bank overdrafts at the reporting date is 4.75 %.

10 TRADE RECEIVABLE

10.1	30 Jun 2021	30 Jun 2020
	MUR	MUR
Receivables - Exchange transactions	168,785,333	138,303,478
Receivables - Non-exchange transactions	25,671,349	35,476,069
	<u><b>194,456,682</b></u>	<u><b>173,779,547</b></u>
<i>analysed as follows:</i>		
	MUR	MUR
Current		
Exchange transactions	148,074,251	112,885,521
Non-exchange transactions	19,671,349	35,476,069
	<u><b>167,745,600</b></u>	<u><b>148,361,590</b></u>
Non-Current		
Exchange transactions	20,711,082	25,417,957
Non-exchange transactions	6,000,000	-
	<u><b>26,711,082</b></u>	<u><b>25,417,957</b></u>
<b>TOTAL</b>	<u><b>194,456,682</b></u>	<u><b>173,779,547</b></u>

YEAR ENDED 30 JUNE 2021

	30 Jun 2021	30 Jun 2020
	MUR	MUR
<b>10.2</b> Receivables consist of:		
Planters - Hire of tractors	4,381,305	10,759,124
Planters funds	9,000,000	12,000,000
MSS - Levy on sale of sugar	16,671,349	29,476,069
Analytical & Agronomic Services	4,540,502	10,556,648
Air Pollution Monitoring Unit	1,431,500	1,960,500
Rodrigues Assembly	3,147	231,459
MSIRI Support Staff	40,981	326,633
MPA, CEB and Others	468,538	364,401
MCAF - Part refund of cost of Harvester	6,167,921	-
MCAF - Others	112,028	101,444
Blychem	73,200	73,200
Platinum Farms Ltd	228,387	60,000
University of Mauritius & Others - Rentals	74,912	4,521,853
Planters - Fertilizer Scheme - Crop 2019	8,644,972	26,092,528
Planters - Fertilizer Scheme - Crop 2020	2,299,825	38,422,027
Planters - Fertilizer Scheme - Crop 2021	43,778,362	-
MSS - Advance on Crop 2021	84,593,678	-
MSS - Non Originating Sugar	652,350	-
MSS - Royalties	10,084,384	-
SICOM Ltd - Deduction for MSIRI Pensioners	606,865	-
RTC Rentals	600,000	-
Other Rentals	-	362,330
GoM - Fertilizer Scheme - Crop 2020	-	38,388,570
Others	2,476	82,762
	<u>194,456,682</u>	<u>173,779,547</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 2021	30 Jun 2020
	MUR	MUR
<b>11.1</b> Staff loans		
Car loan	28,196,669	35,416,160
Motorcycle loan	1,377,574	1,831,899
Personal loan	139,750	90,050
	<u>29,713,993</u>	<u>37,338,109</u>
<i>analysed as follows:</i>	MUR	MUR
- Current	9,509,347	11,101,884
- Non-current	20,204,646	26,236,224
	<u>29,713,993</u>	<u>37,338,108</u>

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YEAR ENDED 30 JUNE 2021

11.2 Movement in Staff Loans

	Car Loan MUR	Motorcycle Loan MUR	Personal Loan MUR	TOTAL MUR
Opening balance	35,416,160	1,831,899	90,050	37,338,109
New loan	7,057,260	228,607	492,000	7,777,867
Adjustment	-	3,040	-	3,040
Repayment	(14,276,751)	(685,972)	(442,300)	(15,405,023)
Closing balance	<u>28,196,669</u>	<u>1,377,574</u>	<u>139,750</u>	<u>29,713,993</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 consist of both interest free loans and loans bearing interest at 7.5% per annum.

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 4.75%.

12 INVENTORIES

	30 Jun 2021 MUR	30 Jun 2020 MUR
Cost of spare parts and consumables		
SSHU	24,073,516	22,629,984
AMU	25,069,076	26,251,842
MSIRI	550,377	298,785
	<u>49,692,969</u>	<u>49,180,611</u>

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

Net realisable value is estimated to approximate cost of inventories.

The recoverable amount of some items of inventories is estimated to be less than their carrying amount.

Impairment loss is debited to the statement of financial performance.

13 INVESTMENT IN FINANCIAL ASSETS

Investment represents .

- 74,000 shares in Sugar Investment Trust
- 85 000 ordinary shares in SBM Ltd

Fair Value

	30 Jun 2021 MUR	30 Jun 2020 MUR
SIT	74,000	74,000
SBM Ltd	378,250	328,950
	<u>452,250</u>	<u>402,950</u>
Cost		
Available-for-sale financial assets		
At 30 June 2021	<u>222,750</u>	<u>222,750</u>

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**NOTES TO THE FINANCIAL STATEMENTS**  
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**14 PROPERTY, PLANT AND EQUIPMENT**

14.1

	LAND & BUILDINGS	PLANT, MACHINERY & VEHICLES	FFF & OFFICE EQUIPMENT	COMPUTER & ASSOCIATED EQUIPMENT	LABORATORY EQUIPMENT	TOTAL
	MUR	MUR	MUR	MUR	MUR	MUR
<b>COST OR VALUATION</b>						
As at 01 July 2020	2,012,033,000	497,245,553	8,468,038	7,774,156	20,461,147	2,545,981,893
Additions	-	12,014,633	1,573,952	1,350,177	562,726	15,501,486
Disposal	-	(4,235,000)	-	(137,258)	-	(4,372,258)
As at 30 June 2021	2,012,033,000	505,025,185	10,041,990	8,987,075	21,023,872	2,557,111,122
<b>DEPRECIATION</b>						
As at 01 July 2020	69,267,354	53,727,704	1,602,554	2,092,904	4,484,763	131,175,279
Charge for the Year	69,267,354	50,214,063	1,893,994	2,394,234	4,603,944	128,373,588
Disposal	-	(444,041)	-	(34,314)	-	(478,355)
As at 30 June 2021	138,534,707	103,497,727	3,496,548	4,452,823	9,088,707	259,070,512

**NET BOOK VALUE**

As at 30 June 2021	1,873,498,293	401,527,459	6,545,441	4,534,252	11,935,165	2,298,040,609
As at 30 June 2020	1,942,765,646	443,517,848	6,865,484	5,681,252	15,976,384	2,414,806,614

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YEAR ENDED 30 JUNE 2021

- 14.2 Property, plant and equipment, investment property and intangible assets of the Authority have been revalued at 30 June 2019 by Strategos Co. Ltd. Strategos Co. Ltd hired the services of Mr. Vyas S. Ramphul, MRICS, Chartered Valuation Surveyor.
- 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.

On 01 July 2019, the revaluation surplus was credited to revaluation reserve.

15 INVESTMENT PROPERTY

	30 Jun 2021 MUR	30 Jun 2020 MUR
15.1 COST OR VALUATION		
As at 01 July 2020	9,250,000	8,800,000
Revaluation adjustment	-	450,000
Additions	-	-
As at 30 June 2021	9,250,000	9,250,000
DEPRECIATION		
As at 01 July 2020	370,000	1,980,000
Revaluation adjustment	-	(1,980,000)
Charge for the year	370,000	370,000
As at 30 June 2021	740,000	370,000
NET BOOK VALUE		
As at 30 June 2021	8,510,000	8,880,000

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

	30 Jun 2021 MUR	30 Jun 2020 MUR
Rental income	300,000	300,000
Direct operating expenses arising from investment property that generates rental income	4,748	29,887

16 INTANGIBLE ASSETS

	30 Jun 2021 MUR	30 Jun 2020 MUR
Computer software		
COST OR VALUATION		
As at 01 July 2020	6,644,621	6,182,775
Revaluation adjustment	-	(2,185,875)
Additions	71,600	2,647,721
As at 30 June 2021	6,716,221	6,644,621
DEPRECIATION		
As at 01 July 2020	1,319,090	3,875,638
Revaluation adjustment	-	(3,875,638)
Charge for the year	1,309,290	1,319,090
As at 30 June 2021	2,628,380	1,319,090
NET BOOK VALUES		
As at 30 June 2021	4,087,841	5,325,531

## YEAR ENDED 30 JUNE 2021

## 17 TRADE PAYABLES

	30 Jun 2021	30 Jun 2020
	MUR	MUR
17.1 Payables	101,044,914	72,908,117
17.2 analysed as follows:		
	MUR	MUR
- Current	98,756,628	68,255,730
- Non-current	2,288,286	4,652,387
	101,044,914	72,908,117
17.3 Ex-dockers pensioners	7,572,363	5,640,032
Planters - SPRP, ALMS & Cane Setts	33,064,296	11,683,578
Mauritius Revenue Authority	2,133,427	1,669,911
Scomat Ltee	204,143	347,916
University of Mauritius	461,400	722,400
Vivo Energy & Total Ltd	2,603,694	3,325,974
CEB, CWA and MT	1,487,313	1,179,722
MCIA Employees	2,083,895	1,946,307
RSL Security Services	6,220,049	5,992,568
National Audit Office	1,000,000	1,000,000
NVision IT	1,962,407	3,108,868
Ercane	26,149,348	-
Ministry of Agro-Industry - Advanced Fertilizer Scheme	9,633,332	-
MCAF - Harvester Garage	2,282,773	-
MECOM	316,118	-
Rose Belle	-	1,327,580
MSS - Sugar Cane Sustainability Fund	-	19,322,382
ABC Coach	-	865,950
Mauritius Port Authority	-	4,092,000
Strategos Ltd	-	1,012,480
Swan Life Ltd	-	2,556,429
Queensland University of Technology	-	2,683,584
Others	3,870,356	4,430,436
	101,044,914	72,908,117

## 18 BORROWINGS

	30 Jun 2021	30 Jun 2020
	MUR	MUR
Loans		
- EDF loan	17,586,264	17,090,982
- Australian aid loan	52,628	78,942
	17,638,892	17,169,924
Repayable as follows:		
- Within one year	1,701,196	1,512,486
- Within two to five years	6,725,844	5,997,317
- After five years	9,211,852	9,660,121
	17,638,892	17,169,924
analysed as follows:		
- Current	1,701,196	1,512,486
- Non-current	15,937,696	15,657,438
	17,638,892	17,169,924

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 2,031,178 is recognised on translation of the EDF loan.

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 2020	80,273,845	23,625,686	84,765,094	2,519,530	700,000	191,884,155
Transferred	-	-	-	5,419,580	-	5,419,580
Earned	12,518,209	9,979,922	15,063,777	-	-	37,561,908.00
Increased / (Decreased)	1,869,519	(35,687)	(7,678,491)	28,803,592	(304,250)	22,654,683
Paid	(5,240,295)	(3,573,157)	(5,057,367)	(339,022)	(25,750)	(14,235,591)
Balance as at 30 June 2021	89,421,278	29,996,764	87,093,013	36,403,680	370,000	243,284,735

analysed as follows:

	MUR	MUR	MUR	MUR	MUR	MUR
Current	13,000,000	10,000,000	15,000,000	400,000	100,000	38,500,000
Non-Current	76,421,278	19,996,764	72,093,013	36,003,680	270,000	204,784,735
	89,421,278	29,996,764	87,093,013	36,403,680	370,000	243,284,735

Current Liabilities		MUR
Employee benefit provision		38,000,000
Others		500,000
Non-Current Liabilities		
Employee benefit provision		168,511,055
Others		36,273,680
		243,284,735

**20 RETIREMENT BENEFITS OBLIGATIONS****20 A 30 JUNE 2021 - DEFINED BENEFIT PENSION SCHEME**

- 20 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 -SICOM Ltd.

- (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.

**20 A.2 Amount recognised in statement of financial position**

	<u>30 Jun 2021</u> <b>MUR</b>
Defined benefit obligation	1,705,824,908
Fair value of plan assets	(451,051,994)
	<u><u><b>1,254,772,914</b></u></u>

**20 A.3 Amount recognised in statement of financial performance**

<b>Service cost:</b>	
Current service cost	29,070,272
Past service cost	-
Employee contributions	(10,337,815)
Other contributions - redeployed members	-
Fund Expenses	724,285
Net Interest expense/(revenue)	27,560,641
<b>Charge to statement of financial performance (Note 20 A.7)</b>	<u><u><b>47,017,383</b></u></u>

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	MUR
<b>Remeasurement:</b>	
Liability (gain)/loss	517,783,928
Assets (gain)/loss	(5,945,489)
<b>Remeasurement recognised in net assets/equity</b>	<b>511,838,439</b>
<b>Total</b>	<b>558,855,822</b>

20 A.4 Movements in liability recognised in statement of financial position

At start of period	
- As previously reported	861,564,897
- Effect of restatement	-
- As restated	861,564,897
Amount recognised in statement of financial performance	47,017,383
Past service funding	(7,699,701)
Actuarial reserves transferred in	(74,412,443)
Transfer of fund	(61,147,935)
Employer contributions and direct benefits	(22,387,726)
Other contributions - redeployed members	-
Amount recognised in net assets/equity	511,838,439
Effect of curtailment	-
At end of period	<b>1,254,772,914</b>

20 A.5 Reconciliation of the present value of defined benefit obligations

Present value of obligation at start of period	1,195,776,795
Restatement	-
Current service cost	29,070,272
Interest cost	42,450,076
Benefits paid	(79,256,163)
Fund Expenses & Life Insurance	-
Effect of curtailment	-
Expected present value of obligation at end of period	1,188,040,980
Liability (gain)/loss	517,783,928
Actual present value of obligation at end of period	<b>1,705,824,908</b>

20 A.6 Reconciliation of fair value of plan assets

Fair value of plan assets at start of period	334,211,898
Restatement	-
Adjustment in fair value	74,412,443
Expected return on plan assets	14,889,435
Employer contributions	22,387,726
Employee Contributions	10,337,815
Other employer contributions - redeployed members	-
Other employee contributions - redeployed members	-
Transfer of fund	61,147,935
Funds Expenses & Life Insurance	-
Past service funding	7,699,701
Benefits paid + other outgo	(79,980,448)
Expected fair value of plan assets at end of period	445,106,505
Asset gain/(loss)	5,945,489
Actual fair value of plan assets at end of period	<b>451,051,994</b>

## YEAR ENDED 30 JUNE 2021

20 A.7 Amount recognised in the Statement of financial performance regarding retirement benefits obligations is as follows:

	MUR
<i>Included in Salaries and salary related expenses</i>	
Contribution to SICOM - MCIA employees	22,256,206
Contribution to SICOM - Ex MSA employee	39,150
Contribution to SICOM - Cash injection	-
Contribution to SICOM - Redeployed employees	92,370
	<u>22,387,726</u>
<i>Other Increase in net retirement benefits obligations</i>	24,629,657
<i>Total charge to Statement of financial performance</i>	<u><u>47,017,383</u></u>

## 20 B 30 JUNE 2021 - TRANSFER OF MSIRI PENSION FUND ASSETS TO SICOM LTD

The Financial Services Commission approved the transfer of MSIRI Pension Fund to MCIA Pension Fund on 30 December 2020. The transfer of MSIRI Pension Fund assets which include local listed equities, foreign investments, fixed interest bearing securities started in early 2021 but was not completed at 30 June 2021. Untransferred assets at that date comprised of investments held by MCB Custodian valued at MUR 88 192 693.46 and 2 plots of land at Balaclava with a book value of MUR 1 524 901.

## 20 C 30 JUNE 2021 - 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 1,763,454 (MUR 1,904,549 for 2020).

## 20 D 30 JUNE 2020 - DEFINED BENEFIT PENSION SCHEME

## 20 D.1 Amounts recognised in statement of financial position

	MSIRI 30 Jun 2020 MUR	OTHER SPIs 30 Jun 2020 MUR	TOTAL 30 Jun 2020 MUR
Defined benefit obligation	870,927,630	1,195,776,795	2,066,704,425
Fair value of plan assets	(500,112,963)	(334,211,898)	(834,324,861)
	<u>370,814,667</u>	<u>861,564,897</u>	<u>1,232,379,564</u>

## 20 D.2 Amounts recognised in statement of financial performance

<b>Service cost:</b>			
Current service cost	14,377,193	30,752,590	45,129,783
Past service cost	-	-	-
Employee contributions	(3,872,117)	(6,867,917)	(10,740,034)
Other contributions - redeployed members	-	(45,540)	(45,540)
Fund Expenses	1,372,299	485,340	1,857,639
Net Interest expense/(revenue)	6,887,001	25,872,209	32,759,210
<i>Charge to statement of financial performance (Note 20 D.6)</i>	<u>18,764,376</u>	<u>50,196,682</u>	<u>68,961,058</u>
<b>Remeasurement:</b>			
Liability (gain)/loss	255,195,930	184,596,182	439,792,112
Assets (gain)/loss	(398,396)	(17,187,177)	(17,585,573)
<i>Remeasurement recognised in net assets/equity</i>	<u>254,797,534</u>	<u>167,409,005</u>	<u>422,206,539</u>
<b>Total</b>	<u>273,561,910</u>	<u>217,605,687</u>	<u>491,167,597</u>

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20 D.3 Movements in liability recognised in statement of financial position

	MUR	MUR	MUR
At start of period			
- As previously reported	111,112,891	747,032,791	858,145,682
- Effect of restatement	-	-	-
- As restated	111,112,891	747,032,791	858,145,682
Amount recognised in statement of financial performance	18,764,376	50,196,682	68,961,058
Past service funding	-	(87,800,000)	(87,800,000)
Actuarial reserves transferred in	-	-	-
Employer contributions and direct benefits	(13,860,134)	(15,182,429)	(29,042,563)
Other contributions - redeployed members	-	(91,152)	(91,152)
Amount recognised in net assets/equity	254,797,534	167,409,005.00	422,206,539
Effect of curtailment	-	-	-
At end of period	370,814,667	861,564,897	1,232,379,564

20 D.4 Reconciliation of the present value of defined benefit obligations

Present value of obligation at start of period	598,544,102	1,017,337,844	1,615,881,946
Restatement	-	-	-
Current service cost	15,749,492	30,752,590	46,502,082
Interest cost	34,751,755	36,115,494	70,867,249
Benefits paid	(31,941,350)	(73,025,315)	(104,966,665)
Fund Expenses & Life Insurance	(1,372,299)	-	(1,372,299)
Effect of curtailment	-	-	-
Expected present value of obligation at end of period	615,731,700	1,011,180,613	1,626,912,313
Liability (gain)/loss	255,195,930	184,596,182	439,792,112
Actual present value of obligation at end of period	870,927,630	1,195,776,795	2,066,704,425

20 D.5 Reconciliation of fair value of plan assets

Fair value of plan assets at start of period	487,431,211	270,305,053	757,736,264
Restatement	-	-	-
Expected return on plan assets	27,864,754	10,243,285	38,108,039
Employer contributions	17,732,251	15,125,879	32,858,130
Employee Contributions	-	6,867,917	6,867,917
Other employer contributions - redeployed members	-	91,152	91,152
Other employee contributions - redeployed members	-	45,540	45,540
Funds Expenses & Life Insurance	(1,372,299)	-	(1,372,299)
Actuarial Reserves Transferred In	-	87,800,000	87,800,000
Benefits paid + other outgo	(31,941,350)	(73,454,105)	(105,395,455)
Expected fair value of plan assets at end of period	499,714,567	317,024,721	816,739,288
Asset gain/(loss)	398,396	17,187,177	17,585,573
Actual fair value of plan assets at end of period	500,112,963	334,211,898	834,324,861

20 D.6 Amount recognised in the Statement of financial performance regarding retirement benefits obligations is as follows:

	MUR
<i>Included in Salaries and salary related expenses</i>	
Contribution to MSIRI Pension fund	6,047,127
Contribution to SICOM - MCIA employees	22,938,886
Contribution to SICOM - Ex MSA employee	56,550
Contribution to SICOM - Cash injection	87,800,000
Contribution to SICOM - Redeployed employees	91,152
	<b>116,933,715</b>
<i>Other decrease in net retirement benefits obligations</i>	(47,972,657)
<i>Total charge to Statement of financial performance</i>	<b>68,961,058</b>
<i>(note 20 D.2)</i>	

## 21 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
	<b>300,000,000</b>

## 22 RECONCILIATION OF ACCUMULATED SURPLUS OR DEFICIT

	30 Jun 2021 MUR	30 Jun 2020 MUR
<b>22.1 Accumulated Surplus / (Deficit)</b>		
As at 01 July 2020	(1,038,868,800)	(461,499,479)
Transfer of revaluation reserve	130,052,879	132,864,369
Deficit for the year	(153,015,829)	(288,027,150)
Actuarial losses on defined benefit pension plans	(368,578,360)	(422,206,540)
Restatement of opening Retirement Benefit Obligations	370,814,667	-
<b>As at 30 June 2021</b>	<b>(1,059,595,443)</b>	<b>(1,038,868,800)</b>

### 22.2 Car and Motorcycle Loans Interest Fund

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

Car Loan Interest fund of MUR 51,112,351 representing interest earned on car loans to MSIRI officers transferred to Accumulated surplus / (deficit) on 30 June 2017. Henceforth, interests earned on car loans are recognised as income for the year to which they relate.

The fund represents mainly the interest element on car and motorcycle loans to employees.

THE MAURITIUS CANE INDUSTRY AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2021

**23 RECONCILIATION OF NET ASSETS / EQUITY**

	30 Jun 2020 MUR	Movement MUR	30 Jun 2021 MUR
Contributed Capital	300,000,000	-	300,000,000
Accumulated Surplus / (Deficit)	(1,038,868,800)	(20,726,643)	(1,059,595,443)
Fair Value Reserve	265,200	49,300	314,500
Revaluation Reserve	2,230,372,713	(130,052,878)	2,100,319,835
<b>TOTAL</b>	<b>1,491,769,113</b>	<b>(150,730,221)</b>	<b>1,341,038,892</b>

**24 CESS AND GRANTS**

**24.1** 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.

**24.2 Cess on sugar proceeds**

Following the impact of reform in the EU Market, the main export market of the sugar industry, together with the response of the market to surplus supply of sugar, the price of sugar has experienced a substantial decrease. Ex MSS estimated price fell drastically. Ministry of Agro-Industry informed MCIA of the decision to suspend cess for crop year 2017. Grants from the Parent Ministry were received to meet MCIA's operational costs as from January 2018. The decision has been extended to crop year 2020.

**24.3 Grants**

	30 Jun 2021 MUR	30 Jun 2020 MUR
Government of Mauritius - Co-financing	370,641,150	280,833,000
MSS - Refund of BSSD expenses	103,110,000	80,600,000
MOAFS - Sugar Cane Sustainability grant	465,913,826	662,300,029
MOAFS - Harvesting Equipment	-	15,000,000
Medine - Closure grant	-	15,917,465
MOAFS - Fertilizer Scheme	** 108,000,000	-
MOAFS - Agricultural Land Management System grant	30,000,000	-
	<b>1,077,664,976</b>	<b>1,054,650,494</b>
Amount used to clear opening receivable	** (98,366,668)	
Amount to be used in 2021-2022	** (9,633,332)	-
	<b>969,664,976</b>	<b>1,054,650,494</b>

\*\* MUR 108M was received from parent Ministry under Fertilizer Scheme for Crop 2020 and Crop 2021. Government share (50%) for these two crops amounted to MUR 98,366,667.72. The balance will be utilised in 2021-2022.

## YEAR ENDED 30 JUNE 2021

**25 LEVY ON SALE OF SUGAR**

A contribution of MUR 3.70 per kg of sugar is levied on the sale of sugar on the local market to meet pensions payable to ex-dockers from ex-MSTC.

Levy earned during the period:	30 Jun 2021 MUR	30 Jun 2020 MUR
- Received	98,631,440	95,336,422
- Receivable	16,671,349	29,476,069
	<b>115,302,789</b>	<b>124,812,491</b>

**26 OTHER INCOME**

Other income consists of:

	30 Jun 2021 MUR	30 Jun 2020 MUR
<b>Non - Exchange Transactions</b>		
Anchorage dues	218,600	333,728
Berthing dues	560,000	390,000
Stale cheques written back	706,363	346,426
Cane juice application fee	61,000	68,000
	<b>1,545,963</b>	<b>1,138,154</b>

**Exchange Transactions**

MRC grant	2,355,000	1,623,263
Air Pollution Monitoring income	2,377,000	5,647,000
Sale of cane	664,752	3,546,266
Interest on loans	1,409,963	1,607,541
Rent received	9,105,893	10,610,279
Analytical & agronomic services	12,284,561	4,151,449
Sale of varieties	470,623	163,078
Refund of medical expenses	171,758	164,247
SICOM - refund for damages & accidents	25,100	580,600
Loading of non originating sugar	1,925,250	622,150
Accountant General	73,000	45,500
Revenue from recycled oil	2,000	5,050
IAEA grant	282,560	236,054
Profit on disposal of assets	1,163,323	-
MCAF - Part refund of cost of Harvester	6,167,921	-
Exchange gain	-	1,249,235
Auction sale	-	46,342
MOAFS - Engineers training	-	375,202
Sale of VRS land	-	600,000
Interest & dividend received	-	19,960
Others	264,031	58,504
	<b>38,742,735</b>	<b>31,351,720</b>
<b>TOTAL</b>	<b>40,288,698</b>	<b>32,489,874</b>

**27 HIRE OF TRACTORS AND TRAILERS**

	30 Jun 2021 MUR	30 Jun 2020 MUR
Hire of tractors	18,142,529	34,358,810
Hire of trailers	1,190,230	1,536,465
	<b>19,332,759</b>	<b>35,895,275</b>

THE MAURITIUS CANE INDUSTRY AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2021

**28 SALARIES AND SALARY RELATED EXPENSES**

	30 Jun 2021	30 Jun 2020
	MUR	MUR
Salaries and salary related expenses consist of:		
Salaries & wages	261,164,384	261,185,369
Overtime	13,420,449	21,618,952
Travelling	27,735,789	28,130,519
Uniforms	1,599,419	1,597,928
Pension - Ex-MSIRI	496,016	499,162
Pension contribution - SICOM	24,058,810	112,699,985 **
Pension contribution - MSIRI Pension Fund	2,967,222	6,047,127
Insurance of Employees - AMAS	39,745	79,490
National Savings Fund	3,119,035	2,977,799
National Pension Scheme	199,522	1,180,673
Family Protection Scheme	3,432,055	3,562,447
Contribution Sociale Generalisee	10,306,819	-
Civil service FPS	60,372	59,795
HRDC Training Levy	256,750	331,979
Sick leave	12,672,512	13,551,591
Vacation leave & retirement gratuity	15,063,777	5,657,405
Passage benefits	10,055,274	10,419,592
Insurance of employees - GPA & others	5,653,791	8,042,366
Medical expenses	11,041,003	8,945,649
Decrease in provision	(5,844,659)	143,235
	<u>397,498,086</u>	<u>486,731,063</u>

\*\* This includes a cash injection of MUR 87.8M made during the period into the MCIA Pension Fund administered by SICOM Ltd.

YEAR ENDED 30 JUNE 2021

**29 ADMINISTRATIVE AND GENERAL EXPENSES**

	30 Jun 2021	30 Jun 2020
	MUR	MUR
Audit Fees	500,000	550,000
Board & Committee Fees	1,557,916	1,325,840
Consultancy Fees	46,000	1,299,500
Legal & Professional Fees	250,200	526,375
Subscriptions	438,849	422,040
Cleaning	1,675,215	1,451,924
Maintenance and Repairs	10,314,175	7,915,304
Security	24,677,569	19,350,857
Computer Maintenance	669,091	644,739
Remote Connection	31,315	193,200
Computer Supplies	922,462	481,830
Software licences	696,996	1,152,787
Field Experimentation Expenses	306,425	127,981
Other Office Expenses	170,067	149,695
Welfare	954,080	949,781
Advertisement	181,996	202,774
Maintenance of Office Equipment	462,576	310,717
Printing , Photocopy , Postage and Stationery	995,135	763,923
Health & Safety	2,660,689	1,829,963
Publications	559,540	180,670
Rent	2,525,496	8,156,247
Rates	26,134	28,900
Electricity	9,131,479	9,351,320
Water	2,056,952	1,731,072
Telephone , Internet & E-Mails	2,695,859	2,275,712
Research & Development	9,825,996	8,593,973
Running Expenses - Tractors ,Cranes & Other Vehicles	52,584,404	70,279,359
Training	339,800	408,200
Increase In Provision	28,499,342	46,153
Royalties	13,174,039	-
Insurance of Building and Equipment	2,149,027	1,533,326
Other Funds Expenses	2,849,100	3,580,659
Air Pollution Monitoring Unit Expenses	347,892	313,454
Compensation & Car benefits	126,000	-
Loss on Exchange	105,925	-
Assets written off	-	11,601,530
Loss on disposal	-	183,019
	<b>174,507,740</b>	<b>157,912,824</b>

Maintenance and Repairs includes construction of a garage at 'D' epinay for MUR 2,282,773 to house the harvester financed by the Ministry of Agro-Industry and Food Security.

**30 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 sugar on the local market. The number of pensioners as at 31 December 2020 was 1552 (Dec 2019: 1604).
- (ii) Charge to Statement of financial performance is made up of the following:

	30 Jun 2021	30 Jun 2020
	MUR	MUR
Paid during the period	111,696,462	113,494,776
Add Pension due at end	7,572,363	5,640,032
	<b>119,268,825</b>	<b>119,134,808</b>
Less Pension due at start	(5,596,600)	(5,066,147)
	<b>113,672,225</b>	<b>114,068,661</b>

THE MAURITIUS CANE INDUSTRY AUTHORITY

NOTES TO THE FINANCIAL STATEMENTS

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YEAR ENDED 30 JUNE 2021

**31 SUGAR CANE SUSTAINABILITY EXPENSES**

Sugar Cane Sustainability expenses consist of support provided to small planters and are made up of the following:

	30 Jun 2021 MUR	30 Jun 2020 MUR
GoM - Assistance to planters for Crop 2019	-	570,622,311
GoM - Assistance to planters for Crop 2020	352,580,181	-
	<u>352,580,181</u>	<u>570,622,311</u>

**32 FINANCIAL COMMITMENTS**

	30 Jun 2021 MUR	30 Jun 2020 MUR
Financial commitments relating to goods and services already contracted for	<u>24,152,175</u>	<u>13,900,300</u>

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

	30 Jun 2021 MUR	30 Jun 2020 MUR
Remuneration paid during the period to and on behalf of executive and non-executive Directors, including pension contributions.	<u>11,587,051</u>	<u>12,926,250</u>

The aggregate remuneration for key management personnel and the number of individuals receiving remuneration were as follows:

Chairperson of MCIA Board of Directors and Committees	3	3
MCIA Board and Committee Members	22	18
Chief Executive Officer	1	1
Directors	4	4

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

**34 IMPAIRMENT OF ASSETS**

The Authority carries out annual impairment test for its assets. The carrying amount of the assets is compared with its recoverable amount. Any impairment loss is then recognised in the financial statements in accordance with IPSAS 21 *Impairment of Non Cash Generating Assets*.

At 30 June 2021, no impairment loss for the Authority's assets is noted.

**THE MAURITIUS CANE INDUSTRY AUTHORITY**  
**CASH FLOW STATEMENT**  
**YEAR ENDED 30 JUNE 2021**

**35 CASH FLOW STATEMENT**

	Year ended 30 Jun 2021	Year ended 30 Jun 2020
	MUR	MUR
<b>35.1 Cash absorbed in operations</b>		
Deficit for the year	(153,015,829)	(288,027,151)
<i>Adjustments for:</i>		
Depreciation on property, plant and equipment	128,373,588	131,175,279
Depreciation on investment property	370,000	370,000
Amortisation of intangible assets	1,309,290	1,319,090
Loss /(Profit) on disposal	(1,163,323)	183,019
Exchange Loss/(Gain)	1,936,317	1,504,675
Interest paid	277,940	269,276
Interest received	(1,409,963)	(1,607,541)
Dividends received	-	(19,960)
Actuarial loss	24,629,657	(47,972,657)
<b>Operating deficit before working capital changes</b>	<b>1,307,677</b>	<b>(202,805,970)</b>
(Increase) / decrease in accounts receivables (excluding car loans)	(20,585,315)	147,451,920
(Decrease) / increase in accounts payables	33,178,004	(410,574,973)
Increase / (decrease) in provisions	45,981,001	218,863
Decrease / (increase) in inventories	(512,358)	2,619,888
(Increase) / decrease in prepayments	297,183	(315,455)
<b>Cash absorbed in operations</b>	<b>59,666,192</b>	<b>(463,405,727)</b>

**35.2 Non cash transactions**

The principal non cash transactions are the adjustments for depreciation and amortisation, interest received, exchange loss, profit on disposal and actuarial loss.

**35.3 Cash and cash equivalents**

Cash and cash equivalents include the following for the purpose of the statement of cash flows:

	30 Jun 2021	30 Jun 2020
	MUR	MUR
Cash in hand and at bank	371,535,186	314,809,512
Bank overdraft	-	-
	<b>371,535,186</b>	<b>314,809,512</b>

## K. LIST OF ABBREVIATIONS

<b>ALMS</b>	Agricultural Land Management System
<b>AMCO</b>	Alcohol and Molasses Company
<b>AMU</b>	Agricultural Mechanization Unit
<b>BAA</b>	Bel Air Agricultural Ltd.
<b>BSSD</b>	Bagged Sugar Storage and Distribution
<b>CAC</b>	Control and Arbitration Committee
<b>CAD</b>	Control and Arbitration Department
<b>CMS</b>	Concentrated Molasses Solids
<b>COVID-19</b>	Corona Virus disease of 2019
<b>CRS</b>	Cane Replantation Scheme
<b>CEB</b>	Central Electricity Board
<b>CIRAD</b>	<i>Coopération Internationale en Recherche Agronomique pour le Développement</i>
<b>CLG Co Ltd.</b>	<i>Constance La Gaiete Company Ltd.</i>
<b>DNA</b>	Deoxyribonucleic Acid
<b>EDMS</b>	Electronic Data Management System
<b>ERS</b>	Early Retirement Scheme
<b>ETU</b>	Extension and Training Unit
<b>EU</b>	European Union
<b>FOB</b>	Free on Board
<b>FORIP</b>	Field Operations Regrouping and Irrigation Project
<b>FSA</b>	Farmers Service Agency
<b>FSC</b>	Farmers Service Centre
<b>FIMS</b>	Farmers Information Management System
<b>HMU</b>	Heavy Mechanical Unit
<b>HRDC</b>	Human Resources Development Council
<b>ICAC</b>	Independent Commission Against Corruption
<b>IFAD</b>	International Fund for Agriculture Development
<b>IPSAS</b>	International Public Sector Accounting Standards
<b>LCR</b>	Land Conversion Rights
<b>LEI</b>	Landbouw Economist Institute
<b>LOI</b>	Letter of Intent
<b>LM</b>	Landscape Mauritius
<b>LMM</b>	Linear Mixed Models
<b>MAS</b>	Marker Assisted Selection
<b>MAAS</b>	Multi Annual Adaptation Strategy
<b>MCIA</b>	Mauritius Cane Industry Authority



<b>MEPU</b>	Ministry of Energy and Public Utilities
<b>MMCO</b>	Mauritius Molasses Co. Ltd.
<b>MoAIFS</b>	Ministry of Agro Industry and Food Security
<b>MSIRI</b>	Mauritius Sugarcane Industry Research Institute
<b>MSPA</b>	Mauritius Sugar Producers' Association
<b>MSS</b>	Mauritius Sugar Syndicate
<b>MSTC</b>	Mauritius Sugar Terminal Corporation
<b>MSTCEU</b>	Mauritius Sugar Terminal Corporation Employees Union
<b>MSTCSA</b>	Mauritius Sugar Terminal Corporation Staff Association
<b>MUR</b>	Mauritian Rupees
<b>NIR</b>	Near Infrared Spectrometer
<b>NOS</b>	Non Originating Sugar
<b>OMOL</b>	Omnicanne Milling Operations Ltd
<b>PBB</b>	Programme Based Budgeting
<b>PCR</b>	Polymerase Chain Reaction
<b>PDS</b>	Plantes de Service
<b>PHU</b>	Planters Harvest Unit
<b>POC</b>	Phasing out of Camps
<b>PSU</b>	Permanent Sampling Unit
<b>PWS</b>	Plantation White Sugar
<b>QGIS</b>	Quantum Geographical Information System
<b>RFA</b>	Research Focus Areas
<b>R&amp;D</b>	Research and Development
<b>RSD</b>	Ratoon Stunting Disease
<b>SADC</b>	South African Development Community
<b>ScBV</b>	Sugarcane Bacciliform virus
<b>SCYLV</b>	Sugar Cane Yellow Leaf Virus
<b>SIE</b>	Sugar Industry Efficiency
<b>SIFB</b>	Sugar Insurance Fund Board
<b>SPRP</b>	Sugar Planters' Regrouping Project
<b>SSHU</b>	Sugar Storage and Handling Unit
<b>SSHD</b>	Sugar Storage and Handling Department
<b>VRS</b>	Voluntary Retirement Scheme
<b>WAP</b>	Work Access Permit
<b>WB</b>	World Bank







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