



## **ANNUAL REPORT – 2019**

### **SUGARCANE RESEARCH INSTITUTE**

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Hon. Minister  
State Ministry of Development of Minor Export Crops  
including Sugarcane, Maize, Cashew, Pepper,  
Cinnamon, Cloves, Beetle related  
Industries and Export Promotion,  
16<sup>th</sup> Floor, Suhurupaya,  
Battaramulla.

Hon. Minister

**Annual Report of the Sugarcane Research Institute for the period from 01.01.2019 to 31.12.2019**

I am submitting herewith the Annual report of the Sugarcane Research Institute for the period from 01.01.2019 to 31.12.2019, including its progress, financial statements and Auditor General's report.

Yours faithfully,

**SUGARCANE RESEARCH INSTITUTE**



Dr. N C Kumarasinghe  
Chairman  
Board of Governors

31<sup>st</sup> March 2020

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## **VISION**

To be the centre of excellence in sugarcane technologies and the leader in sugarcane industry development in Sri Lanka

## **MISSION**

Development and transfer of appropriate sugarcane technologies to enhance competitiveness of, and to contribute to expand and develop the local sugarcane industry in a sustainable manner

## BOARD OF GOVERNORS

- |                         |   |   |
|-------------------------|---|---|
| Mr. K Premaratne        | - | Appointed Member (Chairman) up to 30.01.2019  |
| Mr. K A F Karunasena    | - | Appointed member (Chairman) from 31.01.2019   |
| Mr. N V T A Weragoda    | - | Appointed member  |
| Prof. A L T Perera      | - | Appointed member  |
| Mr. M R V R Meepura     | - | Nominated member of the Ministry of Finance and Mass Media (up to 07 February 2019) |
| Ms. Hemantha Pubudusiri | - | Nominated member of the Ministry of Finance and Mass Media (from 08 February 2019)  |
| Ms. S N Attanayake      | - | Nominated member of the Ministry of Plantation Industries                           |
| Dr. A P Keerthipala     | - | <i>Ex-Officio</i> member (up to 13 July 2019)                                       |

## CHAIRMAN'S REVIEW

The Sugarcane Research Institute allocated Rs 406.5 million; Rs 336.5 million from the consolidated fund and Rs 70 million from the institute-generated funds, for its recurrent expenditures and capital development activities for the year 2019. The total allocation for recurrent expenditure was Rs 280 million; Rs 260 from the consolidated fund and Rs 20 million from the institute-generated funds. For the capital expenditure, the total allocation was Rs 126.5 million; Rs 76.5 million from the consolidated fund and Rs 50 million out of the institute-generated funds. However, during the year 2019, the institute received only Rs 268.257 million from the Treasury. It consisted of Rs 238.957 for recurrent expenditures and Rs 37.3 million for capital expenditures. Thus, Rs 68.243 million allocated from the consolidated fund was not received. Though nearly 91.9% of the funds allocated for recurrent expenditure was received, only 48.8% of the allocation for capital work was received. This significantly affected the performance of the institute, particularly the institute development activities.

The significant achievements of the research and development activities undertaken by the institute include identifying promising varieties based on high cane and sugar yields and disease resistance; 22 from SL 2008 series, 24 from SL 2007 series, 23 from 2006 series, 25 from 2005 series, 54 from 2004 series, 14 from 2003 series and 26 from 2002 series., identifying the varieties of SL 86 13 and SL 92 5588 as the suitable varieties for cultivation in WLD-prone environment, identification of effective new herbicides, Glufosinate ammonium 280 g/L SL to control weeds in sugarcane at post-emergent stage, identifying Green gram (*Vignaradiata*) and Sunhemp (*Crotalaria juncea*) as a good green manure species to improve sugarcane grown soils and providing recommendation on direct soil application of vinnase and filter mud for sugarcane growing soils at Sevanagala and completing establishment of jaggery processing unit at Anavillunthan by supplying utensils and providing technical support to established 15 acre sugarcane plantations in 45 farmer's fields at Anavillunthan, Kilinochchi.

For the dissemination of knowledge, a total of 1,130 farmers and 376 field officers were trained on new sugarcane technologies by conducting 40 training programmes/field demonstrations for farmers and 13 training programmes for field officers in addition to distribution of advisory pamphlets and information sheets on different aspects of sugarcane cultivation and establishment and maintenance of 88 field demonstration sites in sugar mill areas. Establishment of nurseries and training farmers were continued for developing small-scale sugarcane industry in Badulla, Kilinochchi and Nuwara Eliya districts. The program initiated to replace the existing disease-infected sugarcane nurseries in Sevanagala, Pelwatte and Hingurana in collaboration with the respective sugar companies was also continued. Further, SRI was able to obtain approval for purchasing 31,815 L of Glyphosate to distribute among sugar industries under WLD control program.

Acquisition of an Office premises at Thaladena area for SRI fulfilled the long term need of functioning Colombo Office in a permanent and convenient place. The institute also continued the development of infrastructure required for research and development activities and for providing facilities for the staff at Uda Walawe main station, pathology farm at Siyambalanda, quarantine station at Hantane, hybridisation station at Enselwatte and sub-station at Kantale. To strengthen the staff, a Deputy Director (R & TT), a Deputy Director (Administration), two Research Officers, one Development Officer, three Technical Officers, one Management Assistant (Accounts) and three General Workers were recruited. The process of revision of cadre of the institute was also continued to increase the staff required for research, technical and support functions. For capacity building of the staff, both long-term and short-term training opportunities were provided to the relevant staff. They include, in addition to continuation of the postgraduate degrees of the previously-released two Research Officers, another one Research Officer was released for pursuing doctoral degree. Work superintendent and

Accountant were trained overseas in the subjects relevant to their work at the institute. Different categories of staff were also trained locally in the areas of their job.

Furthermore, the work on the amendment of the Sugarcane Research Institute Act initiated last year was continued.

For international collaboration, arrangements were continued for collaboration with the Sugarcane Research Institute in Pakistan and Yunnan Agricultural Science Academy in China.

The major bottlenecks for the performance of the institute were non-receipt of the finances in time, lack of trained staff, particularly for scientific and higher managerial positions and difficulty of recruiting and retaining staff with high calibre.

*K. A. F. Karunasena*

**K. A. F. Karunasena**  
**Chairman**

## DIRECTOR'S REVIEW

The Sugarcane Research Institute continued its functions in the year 2019 to contribute to developing the sugarcane industry of Sri Lanka by conducting research for generating new knowledge/technologies on sugarcane, disseminating the technical know-how to sugar companies, farmers and other relevant stakeholders, producing and supplying foundation seedcane and expanding sugarcane cultivation for small-scale processing industries. A long-term research program consisting of sugarcane crop improvement, crop and resource management, crop nutrition, crop protection, farm mechanisation and processing and product development was continued aiming at developing technical know-how to cater to the needs of the development of the sugarcane industry in the country. A technology transfer programs was carried out to disseminate the knowledge/technologies generated by the research program to sugar companies, farmers and other relevant stakeholders. A development program consisting of production of foundation seedcane of the new sugarcane varieties recommended by the institute and expansion of sugarcane cultivation for small-scale processing industries in the areas where sugar mills are not available and a program for controlling sugarcane white leaf disease was also continued.

Though new sugarcane varieties were not released during the year 2019 for commercial cultivation, promising varieties were identified; 22 from SL 2008 series, 24 from SL 2007 series, 23 from 2006 series, 25 from 2005 series, 54 from 2004 series, 14 from 2003 series and 26 from 2002 series. 29 imported sugarcane varieties (20 Vietnam varieties and 9 Chinese varieties) were quarantined. The varieties of SL 86 13 and SL 92 5588 were identified as the suitable varieties for cultivation in WLD-prone environment. During 2019 crossing season, 1,238 crosses were made. Sugarcane streak mosaic virus isolates related to the Indian and Iran strains were identified from locally collected sugarcane accessions and sequence data was submitted to the Gene Bank as SRI-SL1.

Under the sugarcane crop and resource management, Glufosinate ammonium 280 g/L SL was identified of effective as new herbicides to control weeds in sugarcane at early post-emergent stage. Tembotrione was identified as effective new herbicide to control weeds in sugarcane at pre-emergent stage. The variation in Pol % cane in varieties Co 775, SL 71 30, SL 83 06, SL 88 116, SL 90 6237, SL 92 4918, SL 96 128 and SL 96 328 versus crop age was identified in collaboration with Lanka Sugar Company Pvt (Ltd) Sevanagala. Green gram (*Vigna radiata*) and Sunhemp (*Crotalaria juncea*) were identified as good green manure species to improve sugarcane grown soils. The costs and returns of sugarcane cultivation and those of the competing crops in sugarcane growing areas were also updated.

Recommendations were given on direct soil application of vinnase and filter mud for sugarcane growing soils at Sevanagala. In addition, detailed analyses for revising fertiliser recommendations for Sevanagala and Pelwatte areas were continued.

Under sugarcane crop protection, the highest priority was given to control white leaf disease (WLD) and sugarcane borers. The institute also regularly monitored the disease and pest situations in commercial sugarcane plantations, and the relevant officials of the sugar companies were made aware of the prevailing situations to enable them to take timely action to contain the spread of diseases and pests. Furthermore, regular awareness and training programmes were conducted for farmers and field-level

officers to improve and update their knowledge on the management of sugarcane diseases and pests. Some 335 cocoons of *Cotesia flavipes* (Cameron) (Hymenoptera: Braconidae); a larval parasitoid of sugarcane shoot and stalk borers, which were collected from sugarcane fields, were released to the seedcane nursery at Galmaduwa in Hingurana to control borers without harming the environment by applying pesticides. Reconfirmation of Sugarcane white leaf disease *Phytoplasma* belongs to 16 Sr XI group and identification of that it belongs to B sub group in 16 Sr XI group.

The sugarcane farm mechanisation program was also conducted to support disease control by evaluating the performance of seedcane cold-water soaking and hot-water treatment plants (HWTP) at Kantale and adjusting the treatment capacity and designing a HWTP with the capacity of 01 tonne/hour for Ethimale plantations (Pvt) Ltd.

The processing and product development program was continued for the diversification of sugarcane-based products by processing sugarcane and its by-products and differentiation of jaggery and for increasing efficiency of sugarcane processing. The deviation of main juice quality parameters (pol % juice, brix % juice, purity % juice, POCS % and weight losses) of SL 96 128, Co 775 and SL 98 2524 varieties were quantified under specific post-harvest staling time period.

Promotion of application of the research findings was continued by conducting a technology transfer program. The emphasis was placed on the promotion of SRI-developed sugarcane varieties, Tyne cultivator, furrow opener and disc moulder, spaced planting method and intercropping with sugarcane. Programmes were also conducted to improve the knowledge of the farmers and field officers of the sugar companies on soil fertility management and disease and pest management. Some selected farmers were also trained on the improvement of their entrepreneurship skills. A total of 1,130 farmers and 376 field officers were trained on new sugarcane technologies by conducting 40 training programmes/field demonstrations for farmers and 13 training programs for field officers. The following activities were also carried out to improve the knowledge of field officers, farmers and other stakeholders:

- i. Establishing and maintaining 88 field demonstration sites in sugar mill areas.
- ii. Publishing information sheet on seedcane production and SRI newsletter- "*Puwath Hasuna*", volume 09 No 01.
- iii. Producing advisory videos on on ratoon management (12 min) and intercropping (12 min) and filming and editing advisory video on seed cane production (15 min) and uploading a video on cane quality improvement (24 min) into SRI web page/YouTube.
- iv. Printing 4000 copies of information sheets and newsletters (seedcane production and SRI newsletter- "*Puwath Hasuna*", volume 09 No 01.).
- v. Distributing 2,350 copies of a farmer manual and advisory publications on agronomic practices, farm machinery and pest and disease control among farmers/officers in sugar companies..
- vi. Running exhibition stalls on sugarcane research and development at Rajarata University – "Krushu Mela" 2019 at Anuradhapura and "SilpaSena 2019" at BMICH.
- vii. Launching SRI TTD *e-SMS* service for transfer extension messages between researchers, extension officers and farmers in the sugarcane sector.

The following activities were also carried out to contribute to develop the sugar industry:

- i. Establishing and monitoring 40.5 ha primary nursery fields at Uda Walawe, Sevanagala, Pelwatte, Kantale and Hingurana and providing 475 tonnes of seedcane to sugar companies.
- ii. Carrying activities in collaboration with the District Secretariat, Kilinochchi and the Civil Security Department for expanding sugarcane cultivation and establishing jaggery processing unit in the Northern Province.
- iii. Distributing seedcane and conducting training programmes for promoting sugarcane cultivation at home-garden level for jaggery production in Nuwara Eliya district.
- iv. Establishing and maintaining nurseries for producing disease-free seedcane to replace the existing disease infected nurseries at Sevanagala, Pelwatte and Hingurana.

During the year under review, twelve vacancies; a Deputy Director (R & TT), a Deputy Director (Administration), two Research Officers, one Development Officer, three Technical Officers, one Management Assistant (Accounts) and three General Workers were filled to strengthen the manpower requirements of the institute. The Principal Research Officer/Technology Transfer Officer vacancies could not be filled due to non-availability of qualified candidates. The process of revising the cadre was also continued to increase the staff requirements in scientific and technical and administrative support staff to carry out the expanded research and development functions of the institute. Capacity building of staff was continued by providing long-term and short term training opportunities. One Research Officer was granted study leave for pursuing studies leading to PhD, in addition to continuation of the previously-released two Research Officers of their postgraduate studies. Accountant and Farm Superintendent were trained overseas in the subjects relevant to their work at the institute. Furthermore, research, technical, accounting, and administrative staff was provided with opportunities for attending short training courses relevant to their work.

To provide the infrastructure requirements for research and development activities and for providing congenial working and living environment for the staff, the following activities were continued:

- i. Acquisition of an Office premises at Thaladena area for SRI Colombo Office.
- ii. Improvement of crop improvement, crop and resource management, crop nutrition and biotechnology laboratories and conference room, renovation of the old office building for an auditorium and rehabilitation of the perimeter fence and completion of construction of a deep well for domestic water supply at Uda Walawe.
- iii. Construction of buildings in hybridisation station at Enselwatte. iv. Procurement of important laboratory instruments/office and household equipment and furniture.
- v. Development of facilities of the breeding station at Deniyaya.

The institute also provided training services to students from schools, technical colleges, agriculture schools and universities. In addition, necessary information was provided to interested parties for the involvement in sugarcane industry development in the country.

The process initiated for collaboration with the Sugarcane Research Institute in Faisalabad, Pakistan for exchanging germplasm was continued.

The work on amendment of the Sugarcane Research Institute Act to broaden its scope and authority according to the current as well as future needs of the development of the sugarcane industry in the country was continued.

The main limiting factor for fulfilling the mandate of the institute was shortage of trained and experienced manpower and the non-availability of finance in time. Recruiting and retaining staff at scientific, technical and managerial grades has to be given high priority for the sustenance of the institute to fulfil its mandated functions.

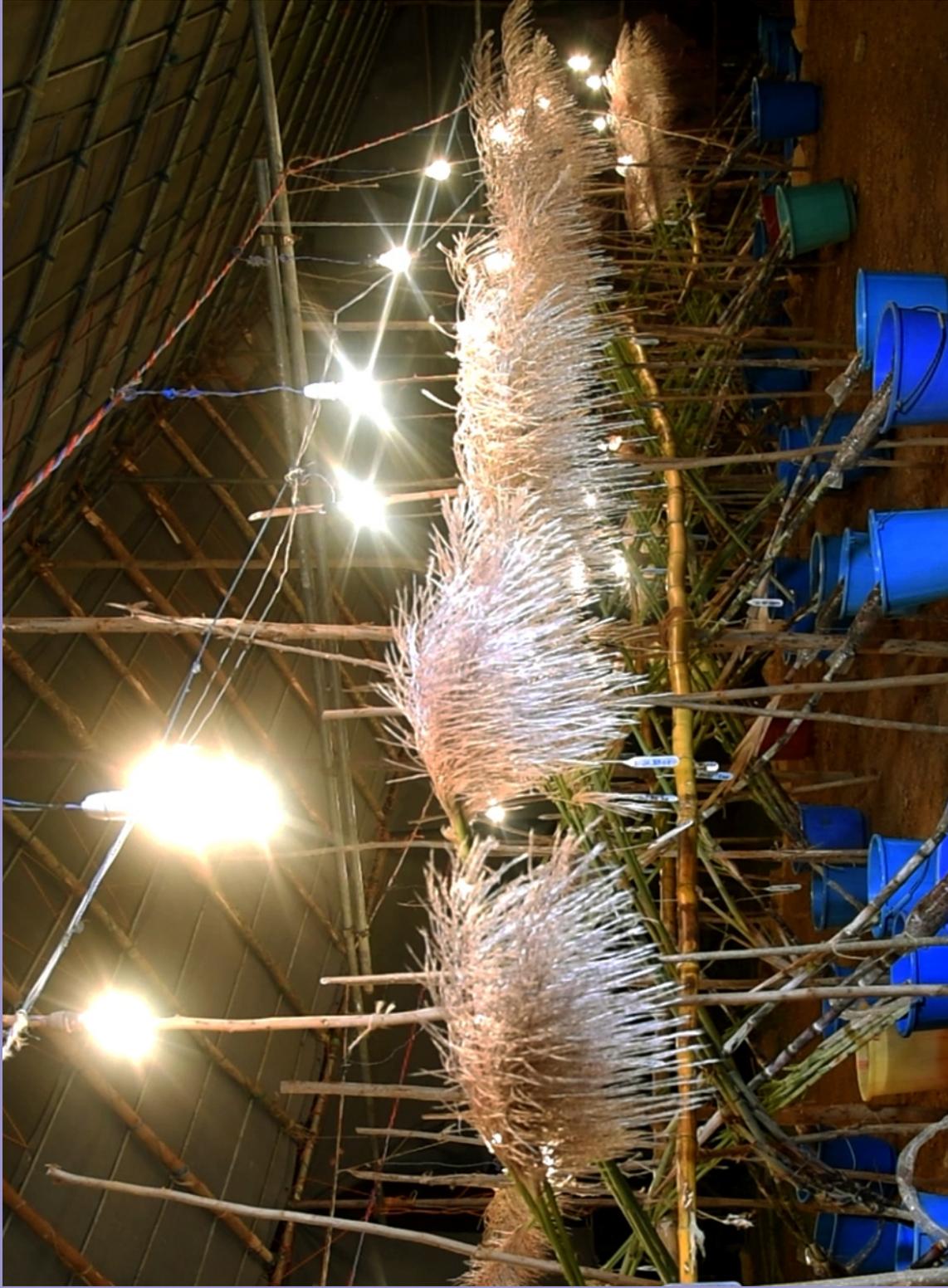


**Dr. Aruna Wijesuriya**  
**Director/Chief Executive Officer**



# DIVISIONAL REPORTS





**CROP IMPROVEMENT DIVISION**



## CROP IMPROVEMENT DIVISION

### Staff

Dr A Wijesuriya BSc (Agric.), M Phil, PhD	-	Principal Research Officer and Head {appointed as DD(R & TT)}
Ms A M M S Perera BSc, MSc	-	Senior Research Officer
Dr (Ms) D Manel BSc (Agric.), MSc, PhD	-	Research Officer (Resigned on March 2019)
Mr K P Wickramasinghe BSc (Agric.), M Phil	-	Research Officer
Ms A L C Kumari	-	Senior Technical Officer
Mr R A Premachandra	-	Senior Technical Officer
Mr D Weerasinghe	-	Senior Technical Officer
Mr B Witharana	-	Works Supervisor
Mr S H Karunarathne	-	Lab/Field Attendant
Mr R G S L Premarathne	-	Lab/Field Attendant
Mr M B Rohan	-	Lab/Field Attendant

### Achievements

#### Research

- Quarantine of 29 imported sugarcane varieties (20 Vietnam varieties and 9 Chinese varieties) and 2500 seedlings generated from 25 crosses imported from China.
- *Ex-situ* conservation of 1,650 sugarcane accessions in duplicate plots at Sugarcane Breeding Sub-station at Enselwatte, Deniyaya, and maintaining the breeder's seed garden with 45 commercial and near-commercial varieties at the Sugarcane Research Institute, Uda Walawe.
- Adding of 77 *Saccharum officinarum* and 3 *Saccharum spontaneum* accessions to the existing *Saccharum* germplasm collection (Figure 1). These accessions were collected during the germplasm expedition undertaken in Nuwara-Eliya district.



**Figure 1.** Sugarcane accessions collected during the germplasm expedition in 2019

- Perform of 1,238 crosses using field lanterns and solution crossing techniques. These crosses involved commercial crosses, crosses for “nobilisation” and crosses for population improvement of *Saccharum officinarum*. Processing of true seeds of these crosses was completed.
- Selection of varieties with desirable features from stage 1 of SL 2017 series (26,241 clones), stage 1 of SL 2016 series (33,792 clones), stage 2 of SL 2016 series (364 clones), stage 2 of SL 2015 series (3,000 clones) and

stage 3 of SL 2015 series (20 varieties) and stage 3 of SL 2014 series (362 varieties) for further evaluation in subsequent stages.

- Identification of 400 sugarcane varieties with desirable traits such as high cane and sugar yield, drought tolerance, disease resistance and etc.; 177 from SL 2013 series, 81 from 2012 series, 66 from 2010 series, 30 from 2010/2011 series, 24 from 2009 series and 22 from 2008 series and their multiplication.
- Identification of promising varieties based on high cane and sugar yields and disease resistance; 22 from SL 2008 series, 24 from SL 2007 series, 23 from 2006 series, 25 from 2005 series, 54 from 2004 series, 14 from 2003 series and 26 from 2002 series.
- The varieties of SL 86 13 and SL 92 5588 were identified as the suitable varieties for cultivation in WLD-prone environment.
- The varieties of SL 86 13, SL 92 5588 and the promising varieties of SL 99 3384, SL 89 309 and SL 95 4225 were identified as the suitable parents for hybridization program due to their low incidences of WLD.
- Identification of sugarcane streak mosaic virus isolates related to the Indian and Iran strains from locally collected sugarcane accessions and sequence data submitted to the GenBank as SRI-SL1 (GenBank accession no: MK994186.1).
- Evaluation of 1000 germplasm accessions for their breeding values for use as parents for directional breeding for sugar and cane yields and 500 accessions for breeding sugarcane varieties for resistance to smut, leaf scald and white leaf diseases.
- Developing an *in-vitro* culture protocol for elimination of sugarcane White Leaf Disease (WLD) from infected sugarcane.

## **Development**

- Establishment of foundation seedcane nursery; 8 Acres plant crop and 7 Acres Ratoon crop at Kantale provision of 98.9 tonnes of treated seedcane to the Uda Walawe and 38 Acres plant crop and 5.4 Acres ratoon crop at Uda Walawe provision of 26.8 tonnes of treated seedcane to Kilinochchi.

## **Training Trainees**

- Supervising the study titled “Identification of sugarcane streak mosaic virus infection in *Saccharum* germplasm and varieties in sugarcane quarantine station in Sri Lanka” carried out by Ms. H.A.C.S. Hirunika Jayasinghe, an undergraduate student of the University of Jaffna, for her BSc (Agric) degree.



**CROP AND RESOURCE MANAGEMENT DIVISION**



## CROP AND RESOURCE MANAGEMENT DIVISION

### Staff

Mr A L C De Silva BSc (Agric), MPhil	-	Senior Research Officer and Head
Mr L M J R Wijayawardhana BSc (Agric) MPhil	-	Research Officer
Mr G A A Chaturanga BSc (Agric.), MSc	-	Research Officer
Mr P R B Chandrasena BSc (Agric), MSc	-	Farm Superintendent
Mr W G Nimal	-	Senior Technical Officer
Mr I P Manawadu HND (Electronic Engineering)	-	Technical Officer
Mr D M G H Chathuranga Dip (Agric)	-	Technical Officer

### Achievements

#### Research

- Identification of Green gram (*Vigna radiata*) and Sunhemp (*Crotalaria juncea*) as a good green manure species to improve sugarcane grown soils.
- Identification of effective new herbicides, Glufosinate ammonium 280 g/L SL to control weeds in sugarcane at post-emergent stage.
- Identification of effective new herbicides, Tembotrione to control weeds in sugarcane at pre-emergent stage.
- Identification of variation in Pol % cane in varieties Co 775, SL 71 30, SL 83 06, SL 88 116, SL 90 6237, SL 92 4918, SL 96 128 and SL 96 328 versus crop age in collaboration with Lanka Sugar Company Pvt (Ltd) Sevanagala.
- Collecting and computerizing agro-meteorological data at Uda Walawe and finding that there was a well-distributed total rainfall of 1595.5 mm in the year 2019 with 7.8 mm in the driest month January and the maximum of 346.0 mm in October.

#### Development

- Providing technical support to established 15 acre sugarcane plantations in 45 farmer's fields at Anavillunthan, Kilinochchi.
- Completion of supplying utensils (Sugarcane crusher with engine, jaggery pans, jaggery moulds and spoons) for jaggery processing unit at Anavillunthan.
- Maintaining 2.0 ha nursery at Vannerikulum, Kilinochchi to provide seedcane to farmers in Anavillunthan, Kilinochchi.
- Maintaining new sugarcane plantation of about 2.0 ha in Vishvamadu, Bharathipuram farm in collaboration with the Civil Security Department.
- Construction a new security hut at Kilinochchi substation

#### Services

- Land preparation of 30 ha in D3, D4 and D5 area for seedcane nursery and research trial establishment
- Establishment and maintenance of 10 ha seedcane nursery at D4 and D5 area
- Supplying 114 t of factory cane from the trials established for research purposes
- Providing 15 t of hot water treated seedcane for expansion of sugarcane cultivation in Kilinochchi area.
- Construction of 2 pump houses near Walawe River and fixing a water pump for one pump house.
- Making necessary arrangements to reduce wild boar and porcupines damages to sugarcane crops

#### Training Trainees

- Supervising the study titled "Detailed characterization of photosynthetic light and CO<sub>2</sub> response parameters in selected sugarcane (*Saccharum* spp. hybrid) varieties in low country dry zone in Sri Lanka" conducted by Ms H M M Buddhika, student of University of Peradeniya for BSc (Agric) degree program.





**CROP NUTRITION DIVISION**



## CROP NUTRITION DIVISION

### Staff

Mr B R Kulasekera BSc (Agric.)	-	Research Officer-In-charge
Mr H A S Weerasinghe BSc, MPhil, MSc (NRM), MI Biol.	-	Research Officer
Mr U W L M Kumarasiri BSc (Agric.)	-	Research Officer
Mr G S Udawatte	-	Technical Officer
Ms W A S Wijesuriya Dip (Agric.)	-	Technical Officer
Ms A W A D Sandaruwani Dip (Agric.)	-	Technical Officer (up to 18.01.2019)
Ms M A T Tharika Dip (Agric.)	-	Technical Officer (from 01.10.2019)
Mr J Gunasiri	-	Lab/Field Attendant
Mr P W D Kulatunga	-	Lab/Field Attendant

### Research Highlights

- Identification of average Cation Exchange Capacity of Low Humic Gley Soil was 7.89 cmol (+)/kg of soil and it was significantly lower compared to the Reddish Brown Earth soil which had a value of 9.53 cmol (+)/kg) in Sevanagala sugarcane-growing area.
- Identifying that Reddish Brown Earth (RBE) soils under rain-fed and irrigated conditions and Low Humic Gley (LHG) soils under irrigated conditions have a pH around 6.5 at Sevanagala which is favorable for sugarcane cultivation and LHG soils under rain-fed conditions exhibit a trend towards alkalinity with an upper pH limit around 9.
- Finding that the plant available phosphorous and exchangeable potassium in Sevanagala sugarcane-growing soils exhibited a wide variation spatially.
- Identification of organic matter percentage of sugarcane-growing soils at Pelwatte Nucleus estate sector range from 0.2% to 1.0% and it minimise plant nutrient availability in the soil.
- Finding that the average surface soil pH (0-30 cm depth) in Pelwatte settler estate sugarcane-growing soils range from 6.0 to 9.0 and identified that there are some remarkable patches which are out from the favourable soil pH range (5.5 to 8.5) of sugarcane.
- Finding that application of High-grade Eppawala Rock Phosphate (HERP) and Eppawala Rock Phosphate (ERP) with vinasse (40 m<sup>3</sup>/ha) in field-level increases the soil available Phosphorous content in ratoon crop comparative to the plant crop.
- Completion of preliminary development of Organo-mineral fertilizer pellets using compost made out of the sugarcane industry by-products and synthetic mineral fertilizers.

### Analytical Services / Other

- Cane samples analysis:  
Analysis of 2310 cane, samples for brix, pol, fibre, purity, POCS and reducing sugar contents for the other divisional research programmes of the institute and industry needs. (1704 for Crop Improvement, 248 for Crop and Resource Management, 196 samples for Crop Protection, 80 samples for Processing Technology, 90 samples for Mechanization Technology)
- Providing analytical services for soil and plant samples analysis of Crop and Resource Management, Crop Protection and Processing Technology divisions.

- Providing analytical services to determine the nutrient constitution in 2 farmer fields and one nursery site in Hingurana.
- Testing of the suitability of Octa-Pol chemical for cane juice analysis as a substitute for Lead Acetate chemical.
- Providing information on fertiliser usage in sugarcane to the National Fertilizer Secretariat of Sri Lanka.
- Providing active participation for the testing of Pol % cane in variety SL 96 128 versus crop age, collaboration with Lanka Sugar Company Pvt (Ltd) Sevanagala.
- Providing information regarding “Imported chemicals and farmer tools used in sugarcane industry in Sri Lanka” to the Ministry of Plantation Industries on request of Ministry of Defence.
- Submitting a report on “Sustainable nitrogen management in sugarcane plantations in Sri Lanka” to the Ministry of Plantation Industries on request of Ministry of Mahaweli Development and Environment.
- Participating international conference and exhibition on First Nitro- Innovation as part of United Nation Nitrogen Campaign Launch at BMICH Colombo.
- Submitting a report on “Use of Chemicals in Sugarcane Industry in Sri Lanka” to the Ministry of Plantation Industries.
- Providing information on Predicted Fertilizer requirement of Sugarcane Sector for year 2020 to the Ministry of Plantation Industries.
- Initiating a collaboration project with CIC Agribusiness (Pvt) Ltd for a testing of new compound fertiliser for sugarcane.

### **Recommendations**

- Providing recommendation on direct soil application of vinnase and filter mud for sugarcane growing soils at Sevanagala



**CROP PROTECTION DIVISION**



## CROP PROTECTION DIVISION

### Staff

Ms V K A S M Wanasinghe BSc (Sp), MSc	-	Research Officer In-Charge (up to 01.10.2019)
Ms A N W S Thushari BSc (Sp)	-	Research Officer-In-Charge (from 02.10.2019)
Ms K M G Chanchala BSc (Agric.), MSc	-	Research Officer
Mr Y A P K Dayasena BSc (Agric.), MSc	-	Research Officer
Mr A L C Kodagoda (Dip in Agric)	-	Technical Officer
Ms K P Harshani (Dip in Agric)	-	Technical Officer (from 01.10.2019)
Ms R K P Jeewanthi (Dip in Food Technology)	-	Technical Officer (From 03.10.2019)
Mr M R Premalal	-	Lab/Field Attendant
Mr J K U Madushanka	-	Lab/Field Attendant

### Achievements

#### Research

- Identification of 344 resistant sugarcane accessions for sugarcane smut disease under Sri Lankan condition from the available sugarcane germplasm for the directional breeding for sugarcane smut.
- Identification of 155 resistant sugarcane accessions for sugarcane leaf scald disease (LSD) under Sri Lankan condition from the available sugarcane germplasm for the directional breeding for sugarcane LSD.
- Optimization of a q PCR program to quantify the available amount of WLD Phytoplasma in sugarcane.
- Molecular confirmation of Salicylic acid, Streptomycin and tetracycline are effective for elimination of WLD Phytoplasma in sugarcane and qPCR analysis revealed that, Salicylic acid, Streptomycin and tetracycline can reduce the available amount of WLD Phytoplasma by 98%, 84 % and 83% respectively.
- Molecular confirmation of that exciting HWT recommendation is not effective for total elimination of Phytoplasma in seedcane and qPCR analysis revealed that, exciting HWT recommendation can reduce the initial available amount of Phytoplasma in seed cane only by 70%.
- Sequence data analysis of PCR products of ITS region and bE mating types of Smut pathogen revealed that no genomic variation among sugarcane pathogen collected from different locations from 2015-2019 in Sri Lanka.
- Studying the sequence of the 16S rRNA gene of the SCWL phytoplasma in all sugarcane growing areas of the Sri Lanka revealed that the phytoplasma belonged to 16SrXI-B subgroup that is the main phytoplasma subgroup caused for SCWL/SCGS in Asian countries.
- Use of sweep net is the best population monitoring technique for *Deltocephalus menoni* (Homoptera: Cicadellidae); the insect vector of Sugarcane White Leaf Disease Phytoplasma.
- Maximum flight distances of *D menoni* is 75 m (0.08% of the total release) and mean dispersal distance of *D. menoni* is 2.3 m/day, this finding could be effectively utilized in deciding distance between commercial plantations and nurseries in order to minimise the secondary transmission of WLD to nurseries.
- Identification of Earwig species (Order: Dermaptera) and Rover beetle species (Order: Coleoptera) as nymphal and adult predators of (Figure 01) *D menoni*



Figure 01: A Rover beetle predated of nymph of *Deltocephalus menoni*

- Identification of behavioural characteristics of *D. menoni* vector for WLD incidence as, higher rate of aggregation, amount of feeding, adult longevity.
- Identification of higher number of leaves, leaf angle and distance between leaves as physiomorphic characters associated with high WLD incidence.
- Sugarcane leaves with higher red and green colour composition, higher level of epicuticle wax, shorter trichomes and thin stomata, leaf fibro vascular bundle with less number of thin vascular bundles, thick phloem fibre layer, and higher distance from epidermis to vascular bundle positively associate with *D. menoni* resistance in WLD transmission.
- Avoiding outbreaks of diseases and pests by monitoring their status regularly and making the managers of sugar companies aware of the situations and educating them on control measures if required *i.e.*
  - High infestation of sugarcane spider mite in Sevanagala and Ethimale
  - High infestation of Fall Army Worm (*Spodoptera frugiperda*) in Pelwatte (Kukurampola) and Kanthale
  - High infestation of Internode Borer (*Chilo sacchariphagus*) in Pelwatte and Hingurana
  - High infestation of *Pyrilla perpusilla* in a sugarcane field at Govindupura, Hingurana



**Figure 02:** Fall Army Worm larvae on damaged sugarcane plants, a: Young larva, b: Grown-up larva in Kukurampola seed cane nursery of Lanka Sugar Company (Pvt) Ltd, Pelwatte, c: Grown-up larvae of Fall Army Worm and d: sugarcane field with high infestation of sugarcane spider mite

- Introducing field-collected 335 cocoons of *Cotesia flavipes* (Cameron) (Hymenoptera: Braconidae); a larval parasitoid of sugarcane shoot and stalk borers to the seedcane nursery at Galmaduwa at Hingurana.

### Trainings and Supervisions of Students

- Training Ms. K.P. Dinelka, a student of the National Apprenticeship and Industrial Training Authority, Ratnapura, for six months from 1<sup>st</sup> January to 30<sup>th</sup> June 2019 on entomological and pathological researches.
- Training Ms. C.P. Gajanayake and Ms. J.Y. Sanjeevani students of Advanced Technological Institute, Naiwala, Weyangoda, for six months from 2<sup>nd</sup> May to 2<sup>nd</sup> November 2019 on entomological and pathological researches.
- Supervision of Ms. H.M.A.S. Jayathilake, a final year student of Sabaragamuwa university of Sri Lanka for her final year project on "Determination of most appropriate population monitoring technique for *Deltocephalus menoni*; (Hemiptera: Cicadallidae), the vector of sugarcane White Leaf Disease in Sri Lanka"
- Supervision of Ms. A.M.L.C.M. Chandrasekara, a final year student of Sabaragamuwa university of Sri Lanka for his final year project on "Estimating of the flying distance of *Deltocephalus menoni*; (Hemiptera:Cicadellidae) the vector of sugarcane White leaf disease in Sri Lanka"
- Supervision of Ms. M.O.N. Nawarathna, an undergraduate from Faculty of Agriculture, University of Peradeniya on "Development of DNA Probe for Detection of White Leaf Disease in Sugarcane".
- Supervision of Ms. N.G.H.M. Dharmasena, an undergraduate from Faculty of Agriculture, University of Peradeniya "Identification and Determination of genetic variation of the Causal Agent of Sugarcane White Leaf Disease in Sri Lanka".
- Supervision of Ms. B.M.N.J. Basnayake, an undergraduate from Faculty of Agriculture, University of Peradeniya, "Detection and Quantification of Sugarcane White Leaf Disease causing Phytoplasma in Fertiliser-treated Sugarcane Plants".
- Supervision of Ms. R.N.N.K. Rathnayake, an undergraduate from Faculty of Agriculture, University of Peradeniya, "Potential of using Endophytes of Sugarcane for Biological control of Sugarcane Smut".



**MECHANISATION TECHNOLOGY DIVISION**



## MECHANISATION TECHNOLOGY DIVISION

### Staff

Mr K H D Abeyratne BSc (Agric.)	-	Research Officer-In-Charge
Mr K T Ariyawansa BSc (Agric.), MSc	-	Research Officer (on study leave from 04.06.2018)
Mr A S M A Fernando NDT	-	Senior Technical Officer
Mr W M Anurapala	-	Technical Officer
Mr V Abeygunawardane	-	Welder
Mr G Ariyaratne	-	Fitter
Mr W A Premachandra	-	Blacksmith
Mr D M L Weerasiri	-	Mechanic
Mr D M Weerasiri	-	Lab/Field Attendant

### Achievements

#### Research

- Evaluating the performance of seedcane cold-water soaking and hot-water treatment plant (HWTP) at Kantale and adjust the treatment capacity.
- Designing a hot-water treatment plant (HWTP) with the capacity of 01 tonne/hour for Ethimale plantations (Pvt) Ltd.
- Installing cold-water pumping system and new electrical panel board for hot-water system renovation of HWTP at SRI, Uda Walawe.

#### Services

- Providing technical instructions for installing the furners and other accessories for Jaggery factory located at Anawilundun, Kilinochchi.
- Making 04 numbers of stainless steel pans with the capacity 160L, juice collecting tank with the capacity 700L, spoons and scrapers for the Jaggery factory at Anawilundun Kilinochchi and it was tested the function of furners system after installing the all accessories.
- Renovation of Solar operated Elephant fence around the 200 Ac nursery area in Kantale
- Completing designing and construction of 60'x40' iron structured yard for the main stores of SRI.
- Developing and landscaping the areas near the Bodhi tree
- Provision of machinery services required for research.
- Maintenance and repair of vehicles and farm equipment of SRI





# PROCESSING TECHNOLOGY DIVISION



## PROCESSING TECHNOLOGY DIVISION

### Staff

Ms S M T A Maralanda BSc (Agric), MSc	-	Research Officer-In-Charge
Ms M G G N Sewwandi BSc (Eng)	-	Research Officer
Ms M A R I Perera Dip. (Agric)	-	Technical Officer
Mr W K D S Karunarathna Dip. (Agric)	-	Technical Officer

### Achievements

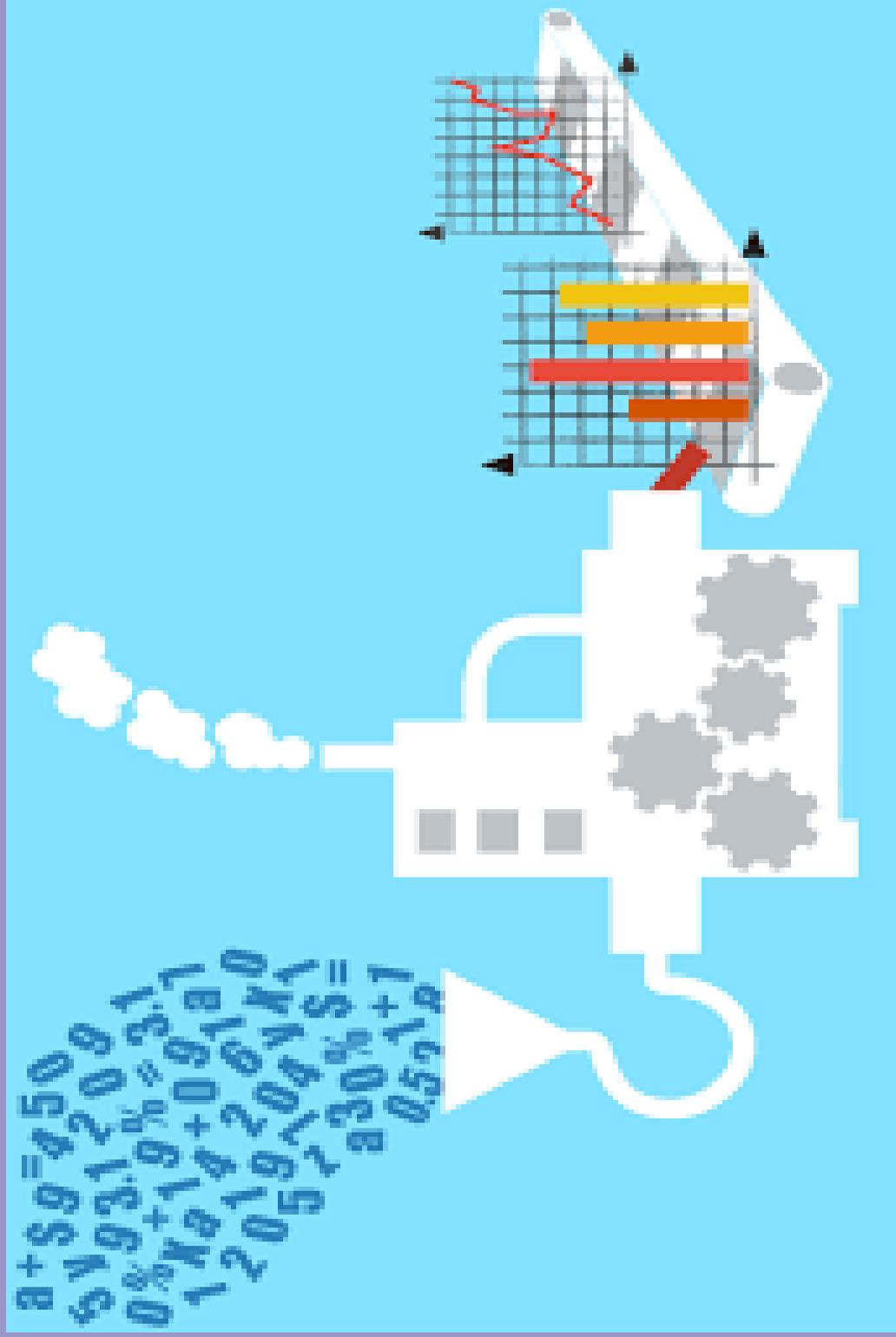
#### Research

- Establishing field trial at Uda Walawe with the variety SL 96 128 to identify the effectiveness of phosphate-solubilising micro-organisms incorporated bio fertiliser in field condition.
- Analysing the nutrient content of sugarcane jaggery
- Designing the jaggery mould for producing jaggery with rectangular shape.
- Analysing Pol % cane in SL 96 128 and Co 775 under rain-fed and irrigated condition at different crop ages (10 month, 11 month, 12 month, 13 month and 14 month) at Sevenagala fields.
- Quantify the deviation of main juice quality parameters (pol % juice, brix % juice, purity % juice, POCS % and weight losses) of SL 96 128, Co 775 and SL 98 2524 varieties under specific post-harvest storing time period.
- Conducting pot experiment trial to minimise post-harvest sucrose losses by foliar applications and divalent cations soil treatment.

#### Services

- Conducting a training programme on sugarcane processing and by-products to students of post graduate institute of agriculture, Ruhuna, Sri Jayawardenapura and Wayamba Universities, Vocational Training College, Ratmalana and National Institute of Plantation Management.
- Taking total plate count for the micro-organisms in the field trial on studying the effect of mustard integration to WLD vector population in the research conducted by the Crop Protection Division.
- Producing 4,871 kg of jaggery from the cane harvested from field trials.
- Designing of jaggery pans and jaggery moulds for Kilinochchi jaggery project.
- Producing different shape of jaggery ,different flavoured jaggery ,sugarcane juice beverage and sugarcane syrup for exhibition purpose





**ECONOMICS BIOMETRY AND INFORMATION TECHNOLOGY DIVISION**



## **ECONOMICS, BIOMETRY AND INFORMATION TECHNOLOGY DIVISION**

### **Staff**

Mr K A D Kodituwakku BSc (Agric.), MAGR	-	Senior Research Officer and Head
Ms B D S K Ariyawansa BSc (Agric.), MPhil	-	Senior Research Officer
Mr. K G S U R Bandara BSc, HNDIT, CCNA	-	Technical Officer

### **Achievements**

#### **Research**

- Updating the costs and returns of sugarcane cultivation based on the prices of the year 2019. The average cost per hectare of cane cultivated was Rs.359,002, Rs.251,275, Rs.189,537 and Rs.243,214 for Sevanagala irrigated and rain-fed sectors, Pelwatte and Hingurana respectively. The average net income from one hectare of sugarcane per year at Sevanagala was Rs 236,373 and 128,225 under irrigation and rain-fed respectively. At Pelwatte under rain-fed, the net income was Rs 103,338/ha/year and that at Hingurana under irrigation was Rs.141,786/ha/year.
- Estimating the commercial value of a tonne of sugarcane at Sevanagala, Pelwatte and Gal-oya sugar industries during the year 2018 as Rs. 17,770, Rs.16,698 and 14310 respectively. Accordingly, the commercial value of sugarcane produced from one hectare of land in the irrigated sector Sevanagala, rain-fed sector Pelwatte and Gal-Oya 2018 were Rs. million 1.2, 0.76 million and 0.34 million respectively, and it was much higher than the income of competitive crops.
- Estimating the quantity and the value of sugar imports during year 2019 was 556,000 tonne and Rs. 35.7 billion respectively.
- Estimating the hot-water treated seedcane production cost at hot-water plant at Kantale seedcane nursery of the Sugarcane Research Institute as treatment cost was Rs. 8675/tonne and total production cost was Rs. 16694/= per tonne.

#### **Services**

- Re-designing the web site of SRI hosted under URL of [www.sugarres.lk/](http://www.sugarres.lk/) and updating it as and when required.
- Collect articles and send to referees for corrections to publish the 4<sup>th</sup> issue of the "Sugarcane Sri Lanka" journal.
- Providing the following services to other divisions of SRI:
  - Designing field experiments conducted by the Crop Improvement, Crop Nutrition and Procession Technology Divisions.
  - Implementation of IT activities within the institute.
- Preparing the INFORM database of SRI for the year 2018 for the Sri Lanka Council for Agricultural Research Policy.
- Training five students from National Apprentice and Industrial Training Authority (NAITA) on the use of computer software packages for a period of six months.





**TECHNOLOGY TRANSFER AND DEVELOPMENT DIVISION**



## TECHNOLOGY TRANSFER AND DEVELOPMENT DIVISION

### Staff

Dr M S Perera BSc (Agric.), MPhil, PhD	-	Principal Research Officer and Head
Mr D P W Pottawela BSc (Agric.), PG. Dip. (BA)	-	Technology Transfer Officer
Mr R A P A Ranatunga Dip. (Agric.)	-	Development Officer
Mr W G M S Weragoda BSc (Agric.), MSc	-	Development Officer
Mr M K P C Gunawardene BSc (Agric.), MSc	-	Development Officer
Mr A P Karunathilake BSc (Agric.)	-	Development Officer
Mr A N M B R Prabath BSc (Agric.)	-	Development Officer (from 04.10.2019)
Mr A P J Mohotti	-	Senior Technical Officer
Mr. B P G S Sandanayake	-	Senior Technical Officer
Mr G Somaweera	-	Management Assistant

### Achievements

#### Technology Transfer Activities

- Training a total of 1,130 farmers and 376 field officers on new sugarcane technologies by conducting 40 training programs/field demonstrations for farmers, and 13 training programs for field officers. A total of 240 visits were made to farmers' fields and 287 students of universities NIPM, National Youth Council and technical colleges were also trained on sugarcane technologies.
- Establishing and maintaining 88 field demonstration sites in sugar mill areas.
- Publishing an information sheet on seedcane production and SRI newsletter- "*Puwath Hasuna*", volume 09 No 01
- Producing advisory videos on ratoon management (12min) and intercropping (12min) and filming and editing advisory video on seed cane production (15min) and uploading a video on cane quality improvement (24min) into SRI web page/YouTube.
- Printing 4000 copies of information sheets and newsletters (seedcane production and SRI newsletter- "*Puwath Hasuna*", volume 09 No 01.)
- Distributing 2,350 copies of a farmer manual and advisory publications on agronomic practices, farm machinery and pest and disease control among farmers/officers in sugar companies.
- Launching SRI TTD eSMS service for transfer extension messages between researchers, extension officers and farmers in the sugarcane sector.
- Running exhibition stalls on sugarcane research and development at Rajarata University – "Krushu Mela" 2019 at Anuradhapura and "Silpa Sena 2019" at BMICH.

#### In the training programs/demonstrations for farmers, field officers and students, the prioritized technological aspects/subject areas covered were;

- **Promotion of new sugarcane varieties; SL 83 06, SLI 121, SL 89 1673, SL 90 6237, SL 92 4918, SL 92 4997, SL 92 5588, SL 95 4033, SL 95 4430, SL 95 4443, SL 96 128 and SL 96 328, SL 98 2524, SL 00 95, SL 00 354, SL 00 603, SL 00 652 and SL 00 624 among cane growers**
  - Establishment of a demonstration site of SRI recommended varieties on the research farm at Uda Walawe.

- Coordinating the establishment of 3 demonstration sites of new varieties: SL 00 603 and SL 96 128 at Pelwatte, Siyambalanduwa and Hingurana
  - Conducting 3 demonstration programs and 10 training sessions for 288 farmers at Pelwatte, Siyambalanduwa, Hanguranketha and Hingurana.
  - Conducting 07 training sessions on new varieties for 134 field officers at Siyambalanduwa, Pelwatte, Higurana, Ethimalae and Kanthale.
  - Conducting 42 field visits at Buttala, Siyambalanduwa and Hingurana.
- **Promotion of mechanisation technology for sugarcane cultivation**
    - Conducting 08 training sessions on mechanisation technology for 275 farmers at Pelwatte and Hingurana.
    - Conducting 02 training programs on the use of machinery for 70 field officers at Udawalawe.
    - Conducting 02 demonstration program on small scale machineries at Hingurana
    - Distributing 330 copies of advisory leaflets on small-scale farm equipment among farmers and field officers.
- **Promotion of intercropping cucumber, ground nut, cowpea, water melon and chilies with sugarcane**
    - Establishing and monitoring 67 demonstration fields (intercropped with ground nut, and cowpea) at Pelwatte, Siyambalanduwa and Hingurana.
    - Establishing a demonstration site at SRI Udawalawe
    - Conducting 4 demonstrations and 21 training sessions for 630 farmers at Sevanagala, Pelwatte, Siyambalanduwa and Hingurana.
    - Conducting 12 training sessions for 317 field officers at Siyambalanduwa, Pelwatte, Higurana, Ethimalae and Kanthale.
    - Providing 220 kg of ground nut, 30.5kg of cowpea, 9kg of mung bean, 7kg of black gram and small amount of water melon and cucumber to farmers to establish demonstration fields at Pelwatte, Hingurana and Siyambalanduwa.
    - Distributing 250 copies of advisory leaflet on intercropping with sugarcane among farmers and field officers.
    - Producing an advisory video on intercropping.
- **Promotion of soil fertility management among farmers**
    - Establishing 17 demonstration fields (1ha each) on improving the fertility of soil at Pelwatte.
    - Conducting 19 training sessions on soil fertility management for 513 farmers at Pelwatte, Ethimale, Siyambalanduwa and Hingurana.
    - Conducting 03 training sessions on soil fertility management for 77 Field Officers at Siyambalanduwa, Pelwatte and Higurana.
    - Conducting 42 farmer field visits on fertilizer application and soil fertility management at Hingurana.
- **Promotion of recommended planting techniques of sugarcane cultivation**
    - Conducting two method demonstrations for farmers at Hingurana
    - Conducting 11 training sessions on planting techniques for 335 farmers at Siyambalanduwa, Hingurana and Pelwatte.
    - Conducting 2 training sessions on planting techniques for 70 field officers at Udawalawe.
    - Editing of advisory video on planting techniques.

- **Improvement of cane quality by increasing farmer knowledge and adoption of best management practices**
  - Conducting 15 training sessions for 451 farmers on improving cane quality by adopting best management practices at Siyambalanduwa, Pelwatte and Hingurana.
  - Conducting 08 training sessions for 129 field officers at Pelwatte and Higurana.
  - Distributing 480 copies of information sheet on cane quality improvement among sugarcane farmers and field officers.
  - Uploading a video on cane quality improvement (24min) into SRI web page/you tube.
  
- **Improvement of adoption of agronomic practices of sugarcane**
  - Conducting 15 training/demonstration sessions for 796 farmers at Pelwatte, Siyambalanduwa and Higurana.
  - Conducting 10 training sessions for 269 field officers at Siyambalanduwa, Pelwatte, Higurana, and Ethimale.
  - Editing of an advisory video on ratoon management and seed cane production.
  - Printing an information sheet on nursery management.
  - Distributing 280 copies of farmer manual on sugarcane growing, 950 copies of the leaflets, information sheets and 400 copies of the newsletter among sugarcane farmers and field officers.
  
- **Improvement of knowledge and adoption of disease and pest management**
  - Conducting 16 training sessions for 618 farmers on disease and pest management at Pelwatte, Siyambalanduwa, Hanguranketha and Hingurana.
  - Conducting 01 training/demonstration session on pest and disease management for field officers at Sevanagala.
  - Conducting 13 training/demonstration sessions on disease and pest management for 371 field officers at Siyambalanduwa, Pelwatte, Ethimale and Hingurana.
  - Conducting 160 field visits on woolly aphid, WLD and smut at Pelwatte, Siyambalanduwa and Hingurana.
  - Distributing 1,100 copies of advisory leaflets on WLD control, smut control, wholly aphid control and shoot borer control among farmers and field officers.
  
- **Improving sugarcane farmers' knowledge and skills on entrepreneurship**
  - Conducting 05 two-day training programmes for 140 farmers/youths on entrepreneurship at Pelwatte, Siyambalanduwa and Hali Ela.
  
- **Providing training/services at the requests of the sugar companies/other institutions and conducting exhibitions**
  - Preparing printing draft of Annual Report, SRI, 2017.
  - Running 02 exhibition stalls on sugarcane industry at BMICH and Rajarata University.
  - Conducting 4 days training programmes on sugarcane cultivation for 18 farmers at Killinochchi.
  - Conducting 1 day training programmes on jaggery production for 24 participants from Sevanagala DS office at Udawalawe.
  - Publishing SRI News Letter (Puwath Hasuna) Vol 09 (1).
  - Coordinating 3 training programmes for 190 students of universities of Ruhuna, Colombo (Hambantota unit) and Peradeniya

- Coordinating 6 training programme for 97 students of National Youth Council , Technical college at Monaragala and 03 training programmes for school students at Monaragala, Sevanagala and Kolambegeera
- Conducting practical component (sugarcane) of national diploma in plantation extension management of NIPM at SRI Udawalawe
- Conducting a 5day training programme on sugarcane module of national diploma in plantation extension management of NIPM at SRI Udawalawe
- Making contribution to prepare national competency standards, curriculum and lesson plans of National Diploma courses in Plantation Extension Management at NIPM
- Attending to divisional coordinating committee meetings at Buttala and District Agriculture committee meetings at Monaragala
- Conducting lectures on Introduction to Sugarcane Industry and crop management for students at NIPM and Aquinas collage.

## **Development**

- **Sugarcane Industry Development Program**

### **Badulla and Nuwara Eliya Districts**

- Monitoring and harvesting 0.5 acre nursery/multiplication field at Hanguranketha.
- Distributing seed cane among 320 farm families to establish homestead sugarcane fields at Hanguranketha
- Conducting an awareness programs for 80field officers at Hanguranketha
- Conducting a two-day training program on sugarcane cultivation and jaggery production for daily -paid assistants at SRI, Udawalawe
- Conducting 14 awareness programs for 694 farmers at Hanguranketha and Kothmale.
- Conducting 05demonstration programs on jaggery production for 140 farmers at Hanguranketha
- Preparing a program for the sugarcane expanding program
- Attending to District Agriculture committee meetings at Badulla

- **Control of sugarcane white leaf disease in Sevanagala, Pelwatte and Hingurana (2017-2020)**

- Establishing and monitoring 40.5 ha primary nursery fields at Uda Walawe, Sevanagala, Pelwatte, Kanthale and Hingurana.
- Producing 475t of treated seed cane.
- Conducting 18 training programs for farmers/officers.
- Obtaining approval for purchasing 31,815L of Glyphosate by SRI to distribute among sugar industries

## PUBLICATIONS AND AWARDS

### Publications

- Chanchala, K.M.G., Wanasinghe, V.K.A.S.M., Hemachandra, K.S., Nugaliyadde, L., and Witharama, W.R.G. (2019). Effect of Epicuticular Wax Level Lamina on the Behaviour of leaf hopper *Deltocephalus menon* (Hemiptera: Cicadellidae): A vector of Sugarcane White Leaf Disease. Proceedings of 31<sup>st</sup> Annual congress of the Postgraduate Institute of Agriculture, University of Peradeniya. Pg: 32
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- Wanasinghe, V.K.A.S.M., Chanchala, K.M.G., Weragoda, W.G.M.S., and Nugaliyadde, L. (2019). Evaluation of the necessity of insecticides and the potential in establishing the larval parasitoid; *Cotesia flavipes* (Hymenoptera: Braconidae) for management of sugarcane shoot borers in Ampara district, Sri Lanka. Proceedings of the Seventh Symposium on Plantation Crop Research- “Towards Achieving Sustainable Development Goals in the Plantation Sector”. Dr. VHL Rodrigo, Dr. BW Wijesuriya, Dr. DG Edirisinghe, Dr. NMC Nayanakantha (Eds). Rubber Research Institute of Sri Lanka, Dartonfield, Agalawatta, 12200, Sri Lanka. Pp. 145-152
- Chanchala K.M.G., Dayasena Y.A.P.K., Wanasinghe, V.K.A.S.M., Hemachandra, K.S., Nugaliyadde, L., and Witharama, W.R.G. (2019). Viruliferous nature of the Sugarcane White Leaf Disease Vector *Deltocephalus menon* (Hemiptera: Cicadellidae). Proceedings of the Seventh Symposium on Plantation Crop Research- “Towards Achieving Sustainable Development Goals in the Plantation Sector”. Dr. VHL Rodrigo, Dr. BW Wijesuriya, Dr. DG Edirisinghe, Dr. NMC Nayanakantha (Eds). Rubber Research Institute of Sri Lanka, Dartonfield, Agalawatta, 12200, Sri Lanka. Pp. 153-162
- Wanasinghe, V.K.A.S.M., Chanchala, K.M.G., Karunathilake, A.P., Nikpay, A., and Nugaliyadde, L. (2019). First report of Fall Army Worm; *Spodoptera frugiperda* (Lepidoptera: Noctuidae) in sugarcane in Sri Lanka. Proceedings of the international sugar and sugarcane conference in Dusit Thani Hotel, Pattaya, Chonburi, Thailand from 31<sup>st</sup> July to 2<sup>nd</sup> August 2019. Page 39.
- Chanchala, K.M.G., Kiriella, S.H., Wanasinghe, V.K.A.S.M., Hemachandra, K.S., Nugaliyadde, L., and Witharama, W.R.G. (2019). Does leaf lamina colour affect the behavioural characteristics of *Deltocephalus menon* (Hemiptera: Cicadellidae); a vector of Sugarcane White Leaf Disease? Proceedings of the international sugar and sugarcane conference in Dusit Thani Hotel, Pattaya, Chonburi, Thailand from 31<sup>st</sup> July to 2<sup>nd</sup> August 2019. Page 27.
- Wanasinghe, V.K.A.S.M., Chanchala, K.M.G., Gunawardena, M.K.P.C., and Wijesuriya, A. (2019). Control of Sugarcane Leaf Hopper, *Pyrilla perpusilla* by *Fulgoraecia (Epiricania) melanoleuca* Fletcher (Lepidoptera: Epipyropidae) in the seed cane nursery at Kantale, Sri Lanka. Proceeding of International Conference Sugarcon 2019 at ICAR-Indian Institute of Sugarcane Research, Lucknow, and Uttar Pradesh, India from February 16-19, 2019. Page 119.

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- Thushari A N W S and Ariyawansa B D S K (2019). Evaluation of Selected Sugarcane (*Saccharum* spp. Hybrid) Varieties for Smut Disease Reaction and its Effect on Cane and Sugar- Yield Components, Proceedings of the Seventh Symposium on Plantation Crop Research- "Towards Achieving Sustainable Development Goals in the Plantation Sector". Dr. VHL Rodrigo, Dr. BW Wijesuriya, Dr. DG Edirisinghe, Dr. NMC Nayanakantha(Eds). Rubber Research Institute of Sri Lanka, Darton field, Agalawatta, 12200, Sri Lanka. Pp. 163-169
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- Dharmasena N.G.H.M., Thushari A.N.W.S. and De Costa D.M. (2019). Identification and Determination of genetic variation of the Causal Agent of Sugarcane White Leaf Disease in Sri Lanka. *Proceedings of the 5<sup>th</sup> Faculty of Agriculture Undergraduate Research Symposium*, Faculty of Agriculture, University of Peradeniya, 21<sup>st</sup> February 2019, 111
- Rathnayake R.M.M.K., Thushari A.N.W.S. and De Costa D.M. (2019). Potential of using Endophytes of Sugarcane for Biological control of Sugarcane Smut. *Proceedings of the 5<sup>th</sup> Faculty of Agriculture Undergraduate Research Symposium*, Faculty of Agriculture, University of Peradeniya, 21<sup>st</sup> February 2019, 121
- Basnayake B.M.N.J., Thushari A.N.W.S. and De Costa D.M. (2019). Detection and Quantification of Sugarcane White Leaf Disease causing Phytoplasma in Fertiliser-treated Sugarcane Plants. *Proceedings of the 5<sup>th</sup> Faculty of Agriculture Undergraduate Research Symposium*, Faculty of Agriculture, University of Peradeniya, 21<sup>st</sup> February 2019, 88
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- Jayasinghe, H.A.C.S.H., Perera, A.M.M.S. and Thirukkumaran, G., "Screening of sugarcane germplasm and quarantine station for Sugarcane Streak Mosaic Virus in Sri Lanka"(2019). Proceeding of

5<sup>th</sup> International Conference on Dry Zone Agriculture (ICDA 2019), Faculty of Agriculture, University of Jaffna, Sri Lanka. (pp. 76).

- Wickramasinghe, K. P., Wijesuriya, A., Ariyawansa, B.D.S.K., Perera A. M. M. S., Chanchala, K.M.G., Manel, D. and Chandana, R.A.M. “Performance of Sugarcane Varieties in a White Leaf Disease (WLD)-Prone Environment at Pelwatte” (2019). Proceedings of Seventh Symposium on Plantation Crop Research, Marino Beach Hotel, Colombo, Sri Lanka. (pp. 19-31).
- Perera A. M. M. S., Attanayaka D. P. S. T. G. and Wijesuriya A., “Identification of Parental Combinations and Progenies of *Saccharum officinarum* and *Saccharum spontaneum* for Construction of Mapping Populations using SSR Markers” (2019). Wayamba University Research Congress – 2019. Wayamba University of Sri Lanka, Makandura, Gonawila, Sri Lanka. (pp 15-16).
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- Wijayawardhana, L.M.J.R., De Silva, A.L.C., Kulasekara, B.R., Witharama, W. R. G. and Bandara, H.M.G.N.S.C. (2019). Relationship between cane yield and landscape’s hydro-geomorphic parameters in sugarcane plantation in Hingurana, Sri Lanka. In: Proceedings of the 7<sup>th</sup> symposium on plantation crop research “Towards achieving sustainable development goals in the plantation sector” Dr. V. H. L. Rodrigo, Dr B. W. Wijesuriya, Dr. D. G. Edirisinghe, Dr. N. M. C. Nayanakantha (Eds). Rubber Research Institute, Dartonfield, Agalawatta, Sri Lanka. pp 59-66
- Ariyawansa B.D.S.K., Abeynayake, N.R. Sivananthaverl, T. (2019) Unobserved Components Model for Forecasting Sugarcane Production in Sri Lanka, Tropical Agricultural Research, Proceedings of 31<sup>st</sup> Annual congress of the Postgraduate Institute of Agriculture, University of Peradeniya.

## Awards

1. VKASM Wanasinghe won the second prize for the oral presentation on Control of Sugarcane Leaf Hopper, *Pyrrilla perpusilla* by *Fulgoraecia* (Epiricania) *melanoleuca* Fletcher (Lepidoptera: Epipyropidae) in the seed cane nursery at Kantale, Sri Lanka at International Conference Sugarcon 2019 at ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh, India from February 16-19, 2019.
2. KMG Chanchala won the first prize for the poster presentation on “Determining the best application time of insecticides for controlling *Deltocephalus menoni* (Hemiptera: Cicadellidae), a vector of Sugarcane White Leaf Disease in Sri Lanka” at ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh, India from February 16-19, 2019
3. Mr. ALC de Silva, Senior Research Officer was awarded of excellence for outstand contribution to sugar crops and industry at the international conference of sugarcon-2019, green technologies for sustainable development of sugar and integrated industries held at ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh, India 16-19 February 2019.
4. Mr. ALC de Silva, Senior Research Officer was awarded as the lead paper and the prestigious speaker of the concurrent session B-III of stressed-ecosystem and improved crop production for better farm return at the international conference of sugarcon-2019, held under the theme of green technologies for sustainable development of sugar and integrated industries held at ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh, India 16-19 February 2019.
5. The best overall paper of the 7<sup>th</sup> Symposium on Plantation Crop Research was awarded for the paper titled “Performance of Sugarcane Varieties in a White Leaf Disease (WLD)-Prone Environment at Pelwatte” in year 2019. The paper was authored by Wickramasinghe, K. P., Wijesuriya, A., Ariyawansa, B.D.S.K., Perera A. M. M. S., Chanchala, K.M.G., Manel, D. and Chandana, R.A.M.
6. An award was received for the best presentation in sugar sector for Mr. K.P. Wickramasinghe for the paper titled “Performance of Sugarcane Varieties in a White Leaf Disease (WLD)-Prone Environment at Pelwatte” in the 7<sup>th</sup> Symposium on Plantation Crop Research in year 2019. The paper was authored by Wickramasinghe, K. P., Wijesuriya, A., Ariyawansa, B.D.S.K., Perera A. M. M. S., Chanchala, K.M.G., Manel, D. and Chandana, R.A.M.
7. An award was received for the best research paper in sugar sector for the paper titled “Evaluation of Selected Sugarcane (*Saccharum* spp. Hybrid) Varieties for Smut Disease Reaction and its Effect on Cane and Sugar- Yield Components.” in the 7<sup>th</sup> symposium on Plantation Crop Research in year 2019. The paper was authored by Thushari A N W S and Ariyawansa B D S K.

# FINANCE MANAGEMENT



ADMINISTRATION AND FINANCE DIVISION



## ADMINISTRATION AND FINANCE DIVISION

### Staff

Dr A P Keerthipala BSc (Agriculture), MPhil, PhD	-	Director/Chief Executive Officer (Up to 13.07.2019)
Dr A Wijuriya BSc (Agriculture), MPhil, PhD	-	Director (Actg.) Deputy Director (Research & Technology Transfer)
Ms. M.K.A.A. Amali SLAS-III BA (Geo.Sp), Dip. (Pub Ad), Dip. (Diplomacy & World Affairs)	-	Deputy Director (Administration) (Up to 15.05.2019)
Ms A N P Perera	-	Deputy Director (Administration)

### Administration Section

Mr P K N Priyadarshana BSc (Adm), CBA	-	Assistant Director (Administration)
Dr C Eritawala PhD (Moscow)	-	Administrative Officer
Ms T A D M G Jayathilaka	-	Snr. Management Assistant (Clerical & Typing)
Ms J K Chandralatha	-	Snr. Management Assistant (Clerical & Typing)
Ms T M K Senadeera	-	Snr. Management Assistant (Clerical & Typing)
Ms M M I M K Manikkadawara	-	Management Assistant (Clerical & Typing)
Ms M A R Samarasekera	-	Management Assistant (Clerical & Typing)
Ms O U Subasinghe	-	Management Assistant (Clerical & Typing)
Mr W A SameeraMadhusanka	-	Management Assistant (Clerical & Typing)
Ms A K Rathnayake	-	Telephone Operator/Receptionist
Mr I Austin Perera	-	Driver
Mr S L Peiris	-	Driver
Mr H A U S Pamarathna	-	Driver
Mr J P S P Karunathilaka	-	Driver
Mr T P K Jayarathna	-	Driver
Mr S Ekanayake	-	Driver
Mr H S A Susantha Kumara	-	Driver
Mr G W M P S Manawadu	-	Driver
Mr A M Wijayarathna Banda	-	Driver
Mr W M A K Priyashantha	-	Driver
Mr K D ManjulaAbeyisiri	-	Driver
Mr.H.M.A.S.K. Herath	-	Driver

### Maintenance Unit

Mr G S K Dahanayake BSc	-	Works Superintendent
Ms D H S Wijesinghe	-	Inspector of Works
Mr G Gamage	-	Electrician
Mr R Palamure	-	Electrician
Mr D W S Chinthana	-	Carpenter
Mr R P Kulathunga	-	Carpenter
Mr D H Dharmadasa	-	Water Pump Operator
Mr H P Chandrawansa	-	Water Pump Operator
Mr K H Weerarathne	-	Water Pump Operator

## Accounts Section

Ms D M J N Dissanayake BCom, MBS	-	Accountant
Mr I B Kodagoda BCom	-	Accounting Officer
Mr T M L S Thennakoon	-	Book Keeper (Up to 15.10.2019)
Mr G M S Nandadeva	-	Senior Management Assistant (Accounts)
Ms A K Amarakoon	-	Senior Management Assistant (Accounts)
Mr D M P Nickson	-	Senior Management Assistant (Accounts)
Ms G D N M Anuruddhika	-	Management Assistant (Accounts)
Ms S S Chathurani	-	Management Assistant (Accounts)

## Procurement Unit

Mr L S Dayananda	-	Senior Management Assistant (Accounts)
Mr A G U S De Silva	-	Management Assistant (Accounts)
Ms T S Weerasinghe	-	Management Assistant (Accounts)

## Store

Mr R G S Niroshana	-	Store Keeper
Mr T Ranjith Peiris	-	Management Assistant (Accounts)

## Internal Audit Unit

Mr S P Y Muneendra ICA (intermediate) MAAT	-	Internal Auditor
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## Summary of the activities carried out during the year 2019

- Filling twelve vacancies; a Deputy Director (R & TT), a Deputy Director (Administration), two Research Officer, one Development Officer, three Technical Officers, one Management Assistant (Accounts) and three General Workers.
- Obtaining security services from the Civil Security Service Department for the period from 1<sup>st</sup> August 2019.
- Preparation of budget, annual accounts and progress reports.
- Carrying out day-to-day administration, personnel management, maintenance and welfare activities and staff training according to the requirements of the research and development activities of the Institute.

## STAFF STRENGTHENING AND MOTIVATION

### Staff turnover during the year 2019

#### Staff Recruitments

Dr A. Wijesuriya	-	Deputy Director (R& TT)	12.04.2019
Ms A N P Perera	-	Deputy Director (Admin.)	17.06.2019
Mr AJMCM Siriwardhana	-	Research Officer	01.10.2019
Ms R D R R Ranathunga	-	Research Officer	02.10.2019
Mr.A.N.M.B.R. Prabhath	-	Development Officer	04.10.2019
Ms K P Harshani	-	Technical Officer	01.10.2019

Ms M A T Tharika	-	Technical Officer	01.10.2019
Ms R K P J Gunawardene	-	Technical Officer	03.10.2019
Ms J K A Madhushani	-	Management Assistant (Accounts)	01.10.2019
Ms D H W Lakmali	-	General Worker	26.08.2019
Mr D R P Bandara	-	General Worker	26.08.2019
Mr D M Kalapuge	-	General Worker	26.08.2019

### Retirements

Dr A P Keerthipala	-	Director/Chief Executive Officer	13.07.2019
Mr S D Sarath	-	General Worker (Office)	20.02.2019
Mr W Sirisena	-	General Worker	19.01.2019
Ms B G Sumanawathie	-	General Worker	09.03.2019
Mr I M Senarathna	-	General Worker	12.11.2019
Mr W Sumanarathne	-	General Worker	26.12.2019

### Resignations

Ms M K A Anjala Amali (Secondary basis)	-	Deputy Director (Admin.)	15.05.2019
Dr D Manel	-	Research Officer	25.03.2019
Mr T M L S Thennakoon	-	Book Keeper	15.10.2019
Ms A W A D Sandaruwani	-	Technical Officer	18.01.2019
Mr A S Jayalath	-	General Worker	09.08.2019

### Staff Training and Visits (Foreign)

- i. Dr A.P. Keerthipala, Director/Chief Executive Officer, Mr. A.L.C. De Silva, Senior Research Officer, Mrs. V.K.A.S.M. Wanasinghe, Mrs. K.M.G. Chanchala, Research Officer attended a conference on Sugarcon 2019 on Green Technologies for sustainable Development of Sugarcane and Integrated Industries at Indian Institute of Sugarcane Research in India from 16<sup>th</sup> February 2019 to 19<sup>th</sup> February 2019
- ii. Mr. G.S.K. Dahanayake, Work Superintendent participated a training program on Organizational Performance through Experience Learning Methodology with Peace of Mind conducted by Skill Development Fund Ltd in Bangalore and Mysore, India from 22<sup>nd</sup> June to 28<sup>th</sup> June 2019.
- iii. Mr. K.A.F. Karunasena, Chairman and Dr. Aruna Wijesuriya, Actg. Deputy Director (R & TT) visited Vasantdada Sugar Institute (VSI) India from 6<sup>th</sup> May 2019 to 9<sup>th</sup> May 2019.
- iv. Mrs. V.K.A.S.M. Wanasinghe, Mrs. A.N.W.S.Thushari and Mrs. K.M.G. Chanchala, Research Officers attended the International Sugar and Sugarcane Conference in Thailand from 31<sup>st</sup> July 2019 to 2<sup>nd</sup> August 2019.
- v. Mrs. D.M.J.N. Dissanayake, Accountant attended training on Innovative Public Administration and Governance conducted by Skill Development Fund Ltd in Thailand from 28<sup>th</sup> July 2019 to 3<sup>rd</sup> August 2019.

### Long-Term Training (Foreign)

- i. Mr. K.T. Ariyawansa (Research Officer in Mechanization Technology Division), continued his postgraduate studies leading to PhD. at the University of Tshukuba, Japan.

## Training Programs/Workshops/Seminars Attended (Local)

- i. Mr. S.P.Y. Muneendra, Internal Auditor participated a training program at PRAG Institute.
- ii. Ms. A.M.M.S. Perera, Ms. A.N.W.S. Thushari, Mr. Y.A.P.K. Dayasena, Research Officers participated two workshop on Gene editing in plants, animal and human is there a future in Sri Lanka and Gene Expression at Agricultural Biotechnology Centre in University of Peradeniya on 26<sup>th</sup> March 2019 and on 1<sup>st</sup> to 5<sup>th</sup> April 2019.
- iii. Mr. A.G.U.S. De Silva, Management Assistant (Accounts) participated the English course at The Institute of Western Language Studies (Pvt) Ltd.
- iv. Mr. S.P.Y. Muneendra, Internal Auditor participated a two day workshop on Effective Internal Auditing at Skill Development Fund Ltd on 23<sup>rd</sup> and 24<sup>th</sup> May 2019.
- v. Ms. M.M.I.M.K. Manikkadawara, Management Assistant (Clerical & Typing) participated a workshop on Modern Office System and Office Management at Skill Development Fund Ltd on 30<sup>th</sup> and 31<sup>st</sup> May 2019.
- vi. Mr. R.G.S. Niroshana, Store Keeper, Mr. T.M.L.S. Thennakoon, Book Keeper and Mr. W.A.S. Madhushanka, Management Assistant, started a four month Certificate Course in English Language at Skill Development Fund Ltd from 29<sup>th</sup> June 2019.
- vii. Mr. T.R. Peiris, Management Assistant (Accounts) started 12 days Stores Management Course at Institute of Stores and Material Management from 23<sup>rd</sup> June 2019.
- viii. Ms. D.M.J.N. Dissanayake, Accountant participated a two day training program on Business Writing for Professionals at Skill Development Fund Ltd from 23<sup>rd</sup> and 24<sup>th</sup> May 2019.
- ix. Ms. S.S. Chathurani, Management Assistant (Accounts) participated a workshop on Preparation and Maintain of the Fixed Asset Register at Skill Development Fund Ltd on 11<sup>th</sup> July 2019.
- x. Mr. G.S.K. Dahanayake, Work Superintendent and Mr. P.R.B. Chandrasena, Farm Superintendent participated a training program on Use of Heavy Machine and Productivity at Construction Equipment Training Centre on 31<sup>st</sup> July and 1<sup>st</sup> August 2019.
- xi. Conducted a two day training program on Leadership and Teamwork for Executive Staff on 6<sup>th</sup> and 7<sup>th</sup> August 2019 at Sugarcane Research Institute.
- xii. Mr. K.H.D. Abeyrathna, Research Officer participated one day workshop on Safety scientifically use of vehicles at Construction Equipment Training Centre on 31<sup>st</sup> August 2019.
- xiii. Ms. M.A. Ranjani Samarasekara, Management Assistant participated a training program on Labor Management – Law and Regulations at Prag Service (Pvt) Ltd on 26<sup>th</sup> September 2019.
- xiv. Ms. M.G.G.N. Sewwandi, Research Officer and Ms. M.A.R.I. Perera, Technical Officer participated a training program at NIBM on 22.10.2019.
- xv. Conducted a Tamil program on Immersion Language Course conducted by National Institute of Language Education Training at Divisional Secretariat, Embilipitiya.
- xvi. 13 officers of SRI were given training on Advanced Excel at ESOF, Embilipitiya.
- xvii. Mr. P.R.B. Chandrasena, Farm Superintendent participated a training program on Labor Management and Labor Law at Construction Equipment Training Centre on 24<sup>th</sup> September 2019.

- xviii. Arrange a training program on Scientific Writing conducted by Faculty of Agriculture at SRI on 19<sup>th</sup> and 20<sup>th</sup> September 2019.
- xix. Arrange a training program on Increasing Productivity and Efficiency in the Government Sector on 16<sup>th</sup> August 2019 conducted by Dr. Piyavi Wijewardena.
- xx. Mr. L.M.J.R. Wijayawardhana, Research Officer participated a training program at National Cleaner Production Centre on 13.11.2019.

**Long-Term Training (Local)**

- i. Mr. L.M.J.R. Wijayardhana continued his postgraduate studies at University of Ruhuna.
- ii Mrs. V.K.A.S.M. Wanasinghe started her postgraduate studies leading to PhD at the University of Peradeniya.

## **Audit and Management Committee Report**

Four Audit and Management Committee meetings were held during the year 2019. The progress of the institute's research, technology transfer and development activities as well as progress and issues of the administrative and financial matters were taken up at the above meetings for discussion.

Internal audit queries that have been issued by the internal audit unit from time to time were discussed at the above meetings. The summarized reports and decisions taken on the audit matters at the committee meetings were referred to Board of Governors of the institute for further discussion and to take decisions on the relevant matters. The institute was able to minimize queries raised by the Government auditors by discussing them at the Audit and Management Committee, and rectifying any faults.

In addition, activities of the institute were streamlined according to the circulars issued by the government from time to time and administrative set up of the institute. Necessary information as provided to the Board of Governors to take decisions, and thus, the institute's Audit and Management Committee was able to fulfill its obligations without any deficiencies during the year 2019.



**SPY Muneendra**

**Internal auditor**

30 March 2020

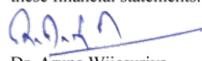
# **Audited Financial Statetments**



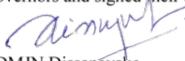
## STATEMENT OF FINANCIAL POSITION

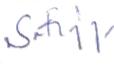
Rs.	Notes	2019	2018
<b>ASSETS</b>			
<b>Non - current assets</b>			
Property, Plant and Equipment	1	258,116,964.06	264,315,934.90
	-	258,116,964.06	264,315,934.90
<b>Current assets</b>			
Consumables stock	-	28,387,753.73	20,390,660.46
Livestock	-	-	-
Advance payment for opening Letters of Credit	-	-	-
Work in progress	-	-	-
Trade and other receivables	2	51,441,293.06	50,175,436.54
Investment ( S / T )	3	73,155,188.12	124,055,689.47
Prepayments & other deposits	4	1,083,900.74	1,083,900.74
Cash and cash equivalents	5	16,752,596.05	7,662,481.69
	-	170,820,731.70	203,368,168.90
<b>Total assets</b>		<u>428,937,695.76</u>	<u>467,684,103.80</u>
<b>LIABILITIES</b>			
<b>Current liabilities</b>			
Payable	6	9,268,482.99	6,053,385.07
Accrued expenses	7	7,777,249.62	7,936,706.79
Suspense	-	-	-393.46
Creditor control acc	-	-	-
	-	17,045,732.61	13,989,698.40
<b>Non - current liabilities</b>			
Differed income	-	-	-
Provision for medical (Schedule 09)	-	6,067,490.00	5,709,736.90
Provision for audit fee	-	850,000.00	750,000.00
Provision for gratuity (Schedule 10)	8	77,449,015.50	69,633,685.00
Provision for Doubtful Debts	-	489,066.77	227,888.72
Provision for contingent liability	-	-	850,000.00
	-	84,855,572.27	77,171,310.62
<b>Total liabilities</b>		<u>101,901,304.88</u>	<u>91,161,009.02</u>
<b>Total Net Assets</b>		327,036,390.88	376,523,094.78
Net surplus / (Deficit)	-	-41,630,865.10	-
Reserve -Retain Earnings		233,338,146.67	241,193,985.47
Revaluation reserve		135,329,109.31	135,329,109.31
<b>Total Net Assets/Equity</b>		327,036,390.88	376,523,094.78

The governing body of the entity is responsible for the preparation and presentation of financial statements and which should also contain a statement of responsibility. The accounting policies on pages 2 to 5 and notes on pages 12 to 15 from and integral part of these financial statements. The board of Governors is responsible for the preparation and presentation of these financial statements. These financial statements were approved by the board of Governors and signed their behalf.

  
Dr. Aruna Wijesuriya  
Director/ Chief Executive Officer

  
Dr. Nimal Kumarasinghe  
Chairman to the Board

  
DMJN Dissanayake  
Accountant

  
Sureka N. Attanayake  
Member of the Board

## STATEMENT OF FINANCIAL PERFORMANCE

	Note	2019	2018
<b>Operating Revenue</b>			
Cess on sugar imports			
Treasury Fund			
Capital	-	37,300,000.00	43,600,000.00
Recurrent	-	230,957,000.00	243,250,000.00
Treasury Grant for Ministry Project	-	-	8,544,000.00
Cess on local sugar production (Additional Note 1.2)	-	20,232,185.00	3,418,795.00
Other income	9	18,268,720.88	27,967,756.75
	-	<u>306,757,905.88</u>	<u>326,780,551.75</u>
<b>Operating Expenses</b>			
Personnel emoluments	10	195,808,529.77	203,866,397.85
Travelling & subsistence	-	3,217,509.65	2,751,833.83
Foreign visits	-	3,157,418.76	7,176,414.48
Supplies and consumables	11	4,885,844.18	5,649,256.50
Maintenance	12	23,736,652.60	29,729,822.50
Contractual services	13	43,578,214.77	43,908,918.67
Research & development	14	14,663,373.20	14,275,217.82
Depreciation and amortization expenses	-	55,424,675.92	66,994,288.47
Other operating expenses	15	3,608,607.02	27,216,761.69
Doubtful Debts	-	261,178.05	-
Total operating expenses	-	<u>348,342,003.92</u>	<u>401,568,911.81</u>
Surplus / (Deficit ) from operating activities	-	-41,584,098.04	74,788,360.06
Finance cost	-	46,767.06	64,002.00
Total non-operating revenue (expenses )	-	<u>-41,630,865.10</u>	<u>74,852,362.06</u>
Net surplus / ( Deficit )before extraordinary items	-	-	-
Net surplus / (Deficit ) for the period	-	<u>-41,630,865.10</u>	<u>74,852,362.06</u>

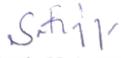
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The accounting policies on pages 2 to 5 and notes on pages 12 to15 from and integral part of these financial statements. The board of Governors is responsible for the preparation and presentation of these financial statements. These financial statements were approved by the board of Governors and signed their behalf.

  
Dr. Aruna Wijesuriya  
Director/ Chief Executive Officer

  
DMJN Dissanayake  
Accountant

  
Dr. Nimal Kumarasinghe  
Chairman to the Board

  
Sureka N. Attanayake  
Member of the Board

**Sugarcane Research Institute**

**STATEMENT OF CHANGES IN EQUITY IN NET ASSETS FOR THE YEAR  
ENDED 31<sup>ST</sup> DECEMBER 2019**

<b>Description</b>	<b>Accumulated Fund</b>	<b>Revaluation Reserve</b>	<b>Retained earnings/(Translation Reserve)</b>	<b>Total ( Rs.)</b>
Balance as at 1 <sup>st</sup> January 2019	-	135,329,109.31	241,193,985.47	376,523,094.78
Prior-year adjustment (Additional Note 1.1)	-	-	(7,855,838.80)	(7,855,838.80)
Surplus / ( deficit ) for the period	-	-	(41,630,865.10)	(41,630,865.10)
<b>Balance as at 31<sup>st</sup> December 2019</b>	<b>-</b>	<b>135,329,109.31</b>	<b>191,707,281.57</b>	<b>327,036,390.88</b>

## Sugarcane Research Institute

### CASH FLOW STATEMENT FOR THE YEAR ENDED 31 ST DECEMBER 2019

Description	2019	2018 (Rs)
Surplus /( deficit ) from ordinary activities	(41,630,865.10)	(74,852,362.06)
Non - cash movements		
Depreciation	55,424,675.92	66,994,288.47
Provision for gratuity	12,676,181.24	9,126,991.00
Provision for medicals	357,753.10	2,601,392.00
Provision for Audit fee	100,000.00	450,000.00
Written off of provision for contingent liabilities	(850,000.00)	850,000.00
Prior - year adjustment	(7,855,838.80)	28,471,411.98
Live -stock written off	-	77,125.00
Provision of doubtful debt	261,178.05	(139,951.09)
Differed income	-	(9.13)
Operating profit / ( Loss ) before working capital changes	18,483,084.41	33,578,886.17
Increase / Decrease in trade and other receivables (With staff loan & advance and prepayments)	(1,265,856.52)	(880,022.61)
Increase / Decrease in sundry stock	(7,997,093.27)	2,508,858.90
Increase / Decrease in working progress	-	250,000.00
Increase/ Decrease advance payment for opening Letters of Credit	-	4,221,623.09
Increase / Decrease in advance and prepayments	-	(200,000.00)
Increase / Decrease in staff loan	-	(4,908,024.32)
Increase / Decrease in creditors & other payables	3,215,097.92	(10,379,288.59)
Payment for gratuity	(4,825,476.09)	(3,126,871.00)
Payment for medicals (From the provision)	(397,309.34)	(92,135.00)
Cash generated from operating activities before income tax	<b>(11,270,637.30)</b>	<b>(12,605,859.53)</b>
Cash flows from / ( used ) in investing activities		
Purchase of property, plant & equipment	(49,523,236.70)	(60,200,273.44)
Net cash flow from / ( used ) in investing activities	<b>(49,523,236.70)</b>	<b>(60,200,273.44)</b>
Net increase / decrease in cash and cash equivalents	(42,310,789.59)	(39,227,246.80)
Cash and cash equivalents at the beginning of the year	131,718,573.76	170,945,821.00
Cash and cash equivalents at the end of the year	<b><u>89,407,784.17</u></b>	<b><u>131,718,574.20</u></b>
Analysis of the balance cash & cash equivalents shown in the balance sheet		
Bank balance	16,752,596.05	7,662,484.29
Treasury bill deposit	5,043,305.27	62,450,878.09
Fixed deposits	67,611,882.85	61,605,211.38
Total	<b>89,407,784.17</b>	<b>131,718,573.76</b>

**Sugarcane Research Institute**

**NOTES TO STATEMENT OF FINANCIAL POSITION**

	Note	2019	2018
<b>02 Trade and other receivables</b>			
2540 - Staff Loan:Book Loan (Schedule 05)		3,750.00	6,000.00
2541 - Advance:Fuel Advance		20,000.00	100,471.05
2542 - Advance:Local Purchase Advance		800,930.00	348,533.31
2543 - Advance:Research Advance		162,641.00	87,793.45
2544 - Advance:Special Advance		2,081,824.92	
2545 - Advance:Sundry Advance		379,548.00	7,811.09
2546 - Advance:Travelling Advance		15,000.00	205,860.20
2548 - Advance payments for suppliers & other institu			14,871.88
2572 - Receivable:Amendment Charges		191,961.00	191,961.00
2573 - Receivable:Fixed Deposit Interest		3,359,279.76	2,261,929.11
2574 - Receivable:Project Fund/ Treasury Grant			7,544,000.00
2575 - Receivable:Treasury Bill Interest Recei.		358,594.73	949,085.18
2576 - Sundry Debtors : Lanka Sugar company (pvt) -		2,988,025.40	
2578 - Staff Loan:Distress Loan (Schedule 03)		24,724,841.38	26,581,949.10
2579 - Staff Loan:Festival Advance (Schedule 04)		7,500.00	7,500.00
2580 - Staff Loan:Housing Loan (Schedule 02)		6,254,581.86	4,157,394.54
2581 - Staff Loan:Motor Cycle Loan (Schedule 06)		3,294,405.01	3,152,502.10
2582 - Staff Loan:Push Cycle Loan (Schedule 07)		5,100.00	
2585 - Sundry Debtors:Galoya Plantation (Pvt) Ltd		952,265.00	
2586 - Sundry Debtors:Kanthale Suagr Indusrty (Pvt)		1,000,000.00	1,000,000.00
2587 - Sundry Debtors : Lanka Sugar company (pvt) -		4,363,190.00	3,557,774.53
2588 - Sundry Debtors:M.G. Sugars Lanka (Pvt) Ltd		477,855.00	
<b>Trade and other receivables</b>	-	51,441,293.06	50,175,436.54
		<u>=====</u>	<u>=====</u>
<b>03 Investment</b>			
2401 - Gratuity Investment		67,611,882.85	61,105,211.38
2520 - Scholarship Fund		500,000.00	500,000.00
2521 - Treasury Bill Deposit		5,043,305.27	62,450,478.09
<b>Investment</b>	-	73,155,188.12	124,055,689.47
		<u>=====</u>	<u>=====</u>
<b>04 Premaiments and Other Deposits</b>			
2558 - Deposit : A.G.Perera		90,000.00	90,000.00
2559 - Deposit : D.Ajith		150,000.00	150,000.00
2560 - Deposit:C.B.Ellepola		2,500.00	2,500.00
2561 - Deposit:Ceylon Oxygen Ltd		144,000.00	144,000.00
2562 - Deposit:Electricity Board		350,100.00	350,100.00
2563 - Deposit:Embillipitiya M.P.C.S.Ltd		155,000.00	155,000.00
2564 - Deposit:For Gas Cylinder		118,375.00	118,375.00
2565 - Deposit:Kanthale Multi-Purpose Co-Opera		90,000.00	90,000.00
2566 - Deposit:M.T.N.Net Work		2,500.00	2,500.00
2568 - Deposit:Sofilogic Information		1,500.00	1,500.00
2570 - Prepayment:Repair & maint of Office Equip.		6,160.00	6,160.00
2571 - Prepayment:W.H.T. Receivable		-26,234.26	-26,234.26
<b>Premaiments and Other Deposits</b>	-	1,083,900.74	1,083,900.74
		<u>=====</u>	<u>=====</u>
2643 - Bank of Ceylon -Kantale		101,194.00	100,000.00
2644 - Bank of Ceylon -Kilinochchi		100,000.00	100,000.00
2502 - Peoples Bank-Savings- Battaram		621,999.48	598,842.91
2503 - Peoples Bank-Savings-Udawalawe		5,564,535.70	4,833,172.63
2507 - Petty Cash Control A/C-Hanathana			2,000.00

<b>05 Cash and cash equivalents</b>	Note	2019	2018
2508 - Petty Cash Control A/C-Hingurana			2,000.00
2511 - Bank Of Ceylon - Baththaramulla		50,700.76	722,353.72
2514 - Peoples Bank - Baththaramulla		1,291,161.04	1,152,311.75
2515 - Peoples Bank - Udawalawe		8,753,416.12	89,686.99
2516 - People's Bank-Loan A/C - Udawalawe		209,588.95	62,113.69
2517 - Petty cash control A/C-Procurement		60,000.00	
<b>Cash and cash equivalents</b>	-	<u>16,752,596.05</u>	<u>7,662,481.69</u>
<b>06 Payable</b>			105,570.00
2650 - Creditor: Sigiri Samurdhi steel furniture			
2651 - Bid bond		64,000.00	
2600-01 - Creditor: Lakwin Enterprises		153,964.80	
2600-02 - Creditor: U & H Wheel Service (Pvt) Ltd		4,190.40	
2600-03 - Creditor: Hi-Tech Stainless steel fabricators		189,000.00	
2600-04 - Creditor: Assidua Technologies (Pvt) Ltd		8,000.00	
2600-05 - Creditor: Sandaru Curtains		312,705.00	
2600-06 - Creditor: Sarathchandra Pharmacy & Grocery		7,983.00	
2600-07 - Creditor: Pathirana Hardware		9,070.00	
2600-09 - Creditor: Auto Windscreen House		1,850.00	
2600-10 - Creditor: Toyota Lanka (Pvt) Ltd		9,575.14	
2600-11 - Creditor: Islandwide Scientific (Pvt) Ltd		305,000.00	
2600-12 - Creditor: Chaturanga Electricals		13,090.00	
2600-13 - Creditor: Sam Associates		348,691.50	
2600-14 - Creditor: CIC Croup Guard (Pvt) Ltd		444,000.00	
2600-15 - Creditor: Sarathchandra Home Centre		63,354.04	
2600-16 - Creditor: Nihal Ref & Electricals		26,000.00	
2600-17 - Creditor: Cameralk (Pvt) Ltd		1,500.00	
2600-18 - Creditor: Silakmo Advertising Service		22,680.00	
2600-19 - Creditor: Abans Electricals PLC		9,301.11	
2600-20 - Creditor: Kolonna Korale MPCs Ltd		78,900.00	
2600-21 - Creditor: P.M.L.Construction		395,572.20	
2600-22 - Creditor: Rathnaweera Auto Care		7,520.62	
2602 - Creditor: Analytical Instrument (Pvt) Ltd		200,383.75	
2605 - Creditor: Avon Pharmo Chem(Pvt)Ltd		484,781.34	37,335.02
2610 - Creditor: Director General, Civil Securit		2,496,800.00	2,741,099.80
2614 - Creditor: Libra Agency		60,375.00	
2617 - Creditor: R.S.Global Traders		20,460.40	15,190.00
2618 - Creditor: Refundable Tender Deposit (Schedule		390,000.00	455,000.00
2619 - Creditor: Retention (Schedule 09)		1,633,576.07	2,647,756.92
2620 - Creditor: Sarathchandra & Com		73,930.00	53,100.00
2623 - Creditor: State Timber Ceylon		937,914.29	
2625 - Creditor: U.G.Stores		66,925.00	
2627 - Creditor: W.G.Nimal		-616.67	-616.67
2628 - Creditor: Wasantha Auto Electrician		-1,050.00	-1,050.00
2629 - Creditor: Wickrama Hardware Stores		429,056.00	
<b>Payable</b>	-	<u>9,268,482.99</u>	<u>6,053,385.07</u>
<b>07 Accrued Expenses</b>			
2632 - Accrued Account		7,752,324.62	7,936,706.79
2638-1 - Stamp Duty		21,525.00	
2638-2 - Withholding Tax		3,400.00	
<b>Accrued Expenses</b>	-	<u>7,777,249.62</u>	<u>7,936,706.79</u>
<b>08 Provision For Gratuity</b>			
2634 - Provision for Gratuity (Schedule 11)		77,449,015.50	69,633,685.00
<b>Provision For Gratuity</b>		<u>77,449,015.50</u>	<u>69,633,685.00</u>

## Sugarcane Research Institute

### NOTES TO STATEMENT OF FINANCIAL PERFORMANCE

	Note	2019 Rs	2018 Rs
<b>9. Other Incomes</b>			
Interest Income on staff loans		1,474,737.65	1,518,315.21
Interest Income on treasury bills		3,570,986.41	5,282,671.63
Interest Income on fixed deposits		6,796,808.51	6,526,316.90
Interest on savings A/Cs		140,320.40	134,243.31
Sale of seed cane/factory cane		1,260,936.60	1,491,876.00
Sale of Sugarcane			669,300.00
Sundry income		1,427,675.67	5,882,172.61
Over Provision Bad Debts			139,951.09
Vehicle Disposal Item			6,322,910.00
PHD Bond		3,119,882.67	
Fine		256,257.97	
Sale of Jaggery		221,115.00	
		<b>18,268,720.88</b>	<b>27,967,756.75</b>
<b>Total other income</b>			
<b>10. Personnel Emoluments</b>			
Salaries, Wages & Holiday Payment		128,579,952.60	147,938,216.21
Contribution to Employees' Provident Fund & Contribution of Employees' Trust Fund		36,047,779.15	26,060,711.89
Overtime		14,734,637.37	13,606,703.54
Welfare Program		15,239,610.65	15,274,896.21
Other Allowances		1,206,550.00	985,870.00
<b>Total personnel emoluments</b>		<b>195,808,529.77</b>	<b>203,866,397.85</b>
<b>11. Supplies and consumables</b>			
Printing & Translation		2,343,506.50	3,086,746.80
Stationery		1,928,444.44	1,802,948.22
Medical Supplies		326,551.28	9,131.40
Other (Supplies)		287,341.96	750,430.08
<b>Total Supplies and consumable used</b>		<b>4,885,844.18</b>	<b>5,649,256.50</b>
<b>12. Maintenance</b>			
License insurance & fitness certificates		1,599,256.24	402,143.58
Repair & maintenance of vehicles		8,559,016.93	9,422,581.70
Repair & maintenance of buildings		2,619,887.49	8,475,805.25
Repair & maintenance of machinery & lab equipment		775,385.03	2,163,759.77
Fuel & lubricants		10,183,106.91	9,265,532.20
<b>Total maintenance</b>		<b>23,736,652.60</b>	<b>29,729,822.50</b>

	<b>2019</b>	<b>2018</b>
	<b>Rs</b>	<b>Rs</b>
<b>13. Contractual services</b>		
Postage & Telecommunication	2,987,598.35	3,036,258.07
Rent rates & taxes	2,165,009.91	1,893,544.38
Legal Fee & Charges	370,368.57	12,732.00
Electricity & Water	7,604,844.64	7,328,490.83
Security charges	15,641,195.64	14,552,883.96
Retirement Benefits	12,676,181.24	12,253,862.00
Workmen's compensation	215,972.94	235,166.13
Cooperate Social Responsibility	100,000.00	90,000.00
Other Services	109,174.40	1,148,273.93
Diets & Uniforms	460,257.22	832,155.00
Other Transfers	1,247,611.86	2,525,552.37
<b>Total contractual services</b>	<b>43,578,214.77</b>	<b>43,908,918.67</b>
<b>14. Research &amp; Development</b>		
Research materials	9,728,898.01	13,750,859.11
Irrigation & Land Preparation	202,230.50	169,001.10
Sugar sector development	2,005,036.62	-
Research review expenses	64,054.05	14,400.00
Harvesting Expenses	22,880.00	27,300.00
Other Recurrent Expenses	498,057.52	313,657.61
Symposium Expenses	2,142,216.50	
<b>Total research &amp; development</b>	<b>14,663,373.20</b>	<b>14,275,217.82</b>
<b>15. Other operating expenses</b>		
Transport	533,862.51	865,434.84
Scholarship	278,000.00	102,000.00
Board of Governor's Expenses	461,045.02	
Accounts, Audit and board of survey charges	541,205.05	2,228,256.00
Miscellaneous		
Staff Training and Development & Resource per	1,536,404.44	2,638,641.80
Kanthale project expenses	253,290.00	14,025,007.50
Kilinochchi project expenses	4,800.00	44,100.00
WLD Project		6,386,196.55
Write off the Live stock		77,125.00
Contingent Liability Of Legal Expenses		850,000.00
<b>Total Other operating expenses</b>	<b>3,608,607.02</b>	<b>27,216,761.69</b>

## Additional Notes

1.1 Prior-year adjustment -2019	Rs.
The previous year adjustment consists of followings:	
Correction of Advance opening balance	237,387.02
Correction of retention opening balance	127,246.85
Correction of opening balance for Creditor: Director General, Civil Security Department	(0.20)
Correction of opening balance for Petty cash -Hantana	(2,000.00)
Correction of the Treasury bill face value	(1,132,580.42)
Correction of Sales of Factory cane	(2,254,186.20)
Correction of Treasury bills interest	331,717.15
Adjustment of Office equipment & Furniture fittings cost for year of 2019	(4,254,749.00)
Adjustment of Workshop equipment & other equipment cost for year of 2019	(951,259.00)
Correction of Bicycle Depreciation of 2018 year	42,585.00
<b>Total</b>	<b>(7,855,838.80)</b>

- 1.2 Cess on local sugar production has been added to 2019 final accounts on Accrual basis. The receivable amounts from the local sugar production as at 31/12/2019 are as follows: Rs.

Description	Pelwatte	Sevanagala	Gal Oya
Balance as at 1/1/19	7,417,390.00	1,479,900.00	7,217,360.00
Amount to be received on the production in 2019	2,516,190.00	1,601,345.00	Production data not received
	<u>9,933,580.00</u>	<u>3,081,245.00</u>	<u>7,217,360.00</u>
Cash received in 2019	5,570,390.00	1,479,900.00	6,382,545.00
Balance as at 31/12/19	4,363,190.00	1,601,345.00	834,815.00

Production details were requested from respective sugar companies to calculate cess on local sugar production for the year 2019, and full details were not received from Gal Oya plantations Pvt (ltd).

- 1.3 The receipt of the loan to Kantale sugar industries Ltd. Rs; 1,000,000.00 is doubtful.
- 1.4 The year of purchase is not considered the calculating of the depreciation.
- 1.5 Fixed deposit stated at their cost value and Treasury bills are stating at their net realizable value.
- 1.6 Income analysis from Treasury and Ministry

	Rs. Mn		
Source	Approved	Received	To be received
Recurrent	260	230.957	29.043
Capital	90	37.3	52.7
Total	350	268.257	81.743

Schedule: 1  
Property, Plant and Equipment

Description	Cost (Rs.)		Depreciation (Rs.)				N.D.V * (Rs.) 31.12.2019
	Balance as at 01.01.2019	Addition / Removal	Balance As at 31.12.2019	Balance as at 01.01.2019	Depreciation for the year	Balance as at 31.12.2019	
Office equipment	18,133,947.05	(1,699,960.06)	16,433,986.99	5,125,262.61	2,436,046.98	7,561,309.58	8,872,677.41
Furniture fittings	15,505,635.18	(2,554,788.94)	12,950,846.24	5,739,873.19	2,449,219.79	8,189,092.98	4,761,753.26
Computer equipment	9,411,074.80	1,427,017.00	10,838,091.80	4,315,037.86	2,040,996.52	6,356,034.38	4,482,057.42
Laboratory equipment	107,522,356.98	1,773,439.15	109,295,796.13	37,788,911.10	16,185,655.73	53,974,566.83	55,321,229.30
Agricultural equipment	25,460,836.51	405,480.00	25,866,316.51	9,101,794.40	3,823,974.26	12,925,768.66	12,940,547.85
Field equipment	13,480,395.55	3,378,576.21	16,858,971.76	4,800,124.80	2,536,239.45	7,336,364.25	9,522,607.51
Workshop equipment	16,238,686.09	(30,500.00)	16,208,186.09	5,382,413.34	2,431,227.91	7,813,641.25	8,394,544.84
Other equipment	9,478,759.52	(920,759.00)	8,558,000.52	3,193,759.20	1,283,240.52	4,476,999.72	4,081,000.80
Bicycle	96,700.00	-	96,700.00	50,235.00	14,505.00	64,740.00	31,960.00
Motor vehicles	118,873,548.00	-	118,873,548.00	102,394,309.13	16,479,238.87	118,873,548.00	-
Computer software	2,377,763.92	-	2,377,763.92	275,997.20	237,776.39	513,773.59	1,863,990.33
Lands - Hantana	65,000.00	-	65,000.00	-	-	-	65,000.00
Buildings	49,451,258.63	40,051,970.44	89,503,229.07	4,516,365.27	2,467,385.63	6,983,750.90	82,519,478.17
Library books	128,620.66	-	128,620.66	48,232.75	12,862.07	61,094.81	67,525.85
Infrastructure development	66,444,759.67	7,692,761.90	74,137,521.57	5,918,623.44	3,026,306.81	8,944,930.25	65,192,591.32
<b>TOTAL</b>	<b>452,669,342.56</b>	<b>49,523,236.70</b>	<b>502,192,579.26</b>	<b>188,650,939.28</b>	<b>55,424,675.92</b>	<b>244,075,615.20</b>	<b>258,116,964.06</b>

# **Auditor General's Report**





**Auditors report as per section 12 of the National Audit Act No. 19 of 2018 regarding the Financial Statements, Other statutory and regulation requirements for the year ended 31 December 2018 of Sugarcane Research Institute.**

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**1. Financial Statement**

**1.1 Opinion for the Audit**

Statement of financial position as at 31 December 2018, Statement of Financial Performance report, Statement of Change of equity for the year ended 31 December 2018 and Cash flow Statement and notes to the financial Statements including summarized important accounting policies were audited under my purview in accordance with the section 38 of the National Audit Act No. 1971 read with section 19 of the act no. 2018 and Article 154(1) of constitution of Democratic Socialistic Republic of Sri Lanka. As per the article 154(6) of Constitution, my report will be tabled in the Parliament in the due course.

Except the Effects arise from the factors explained in the section based for the audited opinion in my report, My opinion is that the financial position as at 31 December 2018 and financial performance and cash flow statement for the year ended has disclosed the true and fair view of the institution in accordance to the government accounting standards.

**1.2 Base for the auditing**

**(a) Exit from Government Accounting standards.**

- As per para no. 47 of the standard no. 07, all the assets, plants and equipments have to be revalued once in three or five years, since, Hantana, Uduwela Land extend of 03 acres and 35 perches purchased for the cost of Rs. 65,000.00 had not been revalued and had not been entered in the accounts till the year under review since the date of purchased.
- As per para no. 47 of the standard no. 07, the assets be depreciated from the date it becomes ready for use, hence, the assets purchased in the year under review for Rs. 16,570,504.00 had not been depreciated (depreciation amount is Rs. 2,501,216)
- As per standard no. 19, hence actuarial valuation method had to be measured periodically for calculating the employee gratuity, without making estimation such as actuarial estimation for gratuity for the period ended 31 December 2018, Rs. 69,633,685.00 had been shown in the financial Statements.

**(b) Accounting deficiencies.**

Following factors had been observed.

- Recurrent fund had been shown excess by rupees 5 million due to entering Rs. 5 million-capital fund received from the treasury during the year under review under the recurrent fund.
- Treasury Bill interest receivable had been shown shortage by Rs. 148,22 as the treasury Bill interest receivable during the year under review was Rs. 1,097,307 and it was mentioned in the financial statement as Rs. 949,085.
- Capital expenditure amounting Rs. 8,080,336 incurred for deep well drinking water pumping plant belongs to Kantale Project, obtaining electricity supply to the hot water treatment unit and constructing elephant fence had not been disclosed as assets in the financial statement during the year under review.

**(c) Lack of evidence for Audit**

Creditors and Debtors balances Rs. 4,557,775 and Rs. 2,952,295 respectively as at 31<sup>st</sup> December 2018 had not been forwarded for approving the balance to the Audit unit.

I had done the audit as per the Sri Lanka Auditing Standard (SLAS). My responsibilities under this Auditing Standards had been explained further under the section for the responsibilities of the auditor of auditing of financial statement. I believe that the evidences I obtained are sufficient and correct for providing a base for my opinion of my audit.

**1.3 Responsibilities of Management and administrative bodies about the financial Statement.**

Preparing and presenting this financial Statement according to the accounting standards of the Sri Lanka government sector and make a decision for an internal control system enabling to prepare a financial statement without sufficient false statements and presenting in the fair manner are the responsibilities of the management.

When preparing financial Statements, ability to make decisions to continue the Institution is one of the responsibility of the management and unless if the management intends to close the firm or if the management works out to stop the firm when an alternative is not available, keeping accounts based on long continuation of the firm and disclosing the relevant factors for continue the firm are responsibilities of the management.

Responsibility relevant to financial reporting activities will be borne by the administrative body.

As per sub section 16 (1) of the audit act no 19 of 2018, should be maintained records on books on income, expenditure, assets and liabilities enabling to prepare annual and periodical financial statement of the firm.

#### **1.4 Responsibility of the auditor regarding the auditing of financial statement.**

My aim is to, as a whole, provide a fair certification without a sufficient false statement accruing due to frauds and false and producing an auditor's report incorporating including my opinion. Hence, fair certification is higher certification, when doing the audit as per the Sri Lanka Auditing Standards; it should not be proved to disclose sufficient understatement. As the Frauds and false as lonely and collectively effect, sufficient under statement may occur and it is expected that this records may influence on the decision which will be taken based on the statement by the economical experts.

As per the Sri Lanka Auditing Standards auditing had been made with professional judgment and professional acuteness, and.

- When Identifying and estimating the risk from the sufficient false statement may appear due to frauds and false in the financial statement, to overcome the risk may appear due frauds and false by planning proper auditing procedure will be based for my opinion. Effect occurring from the fraud statement is greater than the effect occurring from the sufficient false statement and bad incorporation, preparing forge document, missing with intention or missing from the internal control lead to create a fraud.
- Hence, an understanding had been acquired regarding Internal Control of the firm in order to plan a proper audit procedure, which suit to situation, no intention to disclose an opinion about effectiveness of the internal Control.
- Validity of the related disclosures made by the management and used fairness of the accounting policies and accounting estimates had been verified.
- based on the audit evidences obtained in relation to ascertain whether sufficient doubts are available to continue the firm due to the events and situation, in order to run the firm continuously related decision had been taken. If I decide that there was sufficient doubtfulness, my audit report should note serious concern to disclose those in the financial statement and if the disclosures made were not sufficient, my opinion should be reviewed. Anyhow, based on the future events and situations continuation of the firm may be terminated.
- Presentation of financial statement, which consists disclosures, structure and contents, were assessed, transactions, and events for such activities taken as bases had been assessed as those were included in the financial statement.

Important findings, main internal control discrepancies and other factors identified through my audit had been conveyed to the director's body.

## 2. Report on other legal and regulatory requirements.

Special provision had been included regarding the following requirements in the national audit act no 19 of 2018.

- As per the requirements mentioned in the section 12 (a) of national Audit act no 19 of 2018, except the effect from the factors described in the part, the base for the opinion in my report, all the information and disclosures had been obtained by me and as per my observation, I confirm that there had been a proper accounting system in the firm.
- As per the requirement mentioned section 6 (1) © (iii) of the national audit act no 19 of 2018, presented financial statement had been agreed with the previous year.
- As per the requirement mentioned section 6 (1) © (iv) of the national act no 19 of 2018, the recommendation I made for the next year had been included in the financial statements presented.

As per the procedures followed and evidences obtained and within the limitation of the sufficient factors, nothing had been come across to my observation as mentioned below.

- As per the requirement mentioned in the section, 12 (d) of the national audit act no 19 of 2018, as there was a connection apart from the general business of the firm directly or indirectly in regarding to a agreement in connection with the firm by any member of the director board.
- As per the requirement mentioned in the section, 12 (f) of the national audit act no 19 of 2018, except below mentioned observation, firm had been functioned as not per the certain written law or other common or special regulation issued by the director board of the firm.

Rules / orders	Detail
Inland Revenue Act no 24 of 2017 i. section 85 (b) (i)	if the amount paid for the relevant service by the institution from the service charge and contract payments is exceeded than Rs. 50,000, per month, based on the amount paid in full, although 5 percent withholding tax being charged and to be remitted to the Inland Revenue Department, withholding tax amounting to Rs. 214,280.00 for the service charges and contract payments made Rs. 4,285,607.00 in 3 instances for 3 persons had not been deducted and remitted to Inland Revenue Department.
ii. section (i) (a)(i) of 84	Hence, as per the hire charges, 10 percent withholding tax to be charged and be remitted to Inland Revenue Department, withholding tax amounting to Rs. 109,388.00 for the hire charges of Rs. 1,093,875.00 paid in 19

	instances for 04 persons by the institution had not deducted and remitted to the Inland Revenue Department.
(b). Public Finance circular) no. 03 /2015 of 14 <sup>th</sup> July 2015.	Instantaneous advance amount, recent days to the Although the assignment given, advance amount to be given and re settlement of advance amount to be done once the assignment completed, Rs. 2,870,518.00 paid for obtain of goods and services in 09 instances had been lapsed by 58 days to 289 days and Rs. 703,350.00 paid in 30 instances as advance had been lapsed by 38 days to 206 days.
(c) Financial Regulation of Democratic socialistic republic of Sri Lanka (F.R. 103 (f)	Examination had not been held to identify the responsible officer to recover the amount Rs. 6,109,692.00 amount damage incurred to Cab vehicle no. SG-PF- 3067 due to accident and Rs. 2,341,093 had been incurred by the institution for repair works.

- As per the requirement mentioned in the section, 12 (g) of the national audit act no 19 of 2018, institution had functioned not as per the powers, authorities and duties.
- As per the requirement mentioned in the section, 12 (h) of the national audit act no 19 of 2018, institution had not procured and used as per the rules and regulation within the timeline as economically, effectively and productively.

Due to the purchases without identifying the requirements, 75 items amounting to Rs. 1,942,465.00 related to building and machinery repair maintenance equipment had been idle in the store without taken in to use for more than 4 years.

### **03. Other audit observations.**

- (a) Sum of Rs. 1,500,000.00 had been paid to a private company on 21<sup>st</sup> February 2017 for installing computer software page which was purchased for the use of stores, accounts section and administrative section of the firm and hence the installation of the package took place three years ago and observed that the problem arisen from the package when implementing the desired functions.
- (b) Although the treasury approval to be obtained for the amended medical scheme which was in operation for the staff of the firm since 1984 and no steps had been taken such manner and expenses of Rs. 15,239,611 had been incurred on behalf of the settlement of medical bills during the year under review.

- (c) Sum of Rs. 724,799.00 receivable for sugar cane stalks from Sevanagala Sugar Company, sum of Rs. 1,847,000 cess receivable from Pelwatta sugar company and sum of Rs. 1,000,000.00 receivable from Kantale Sugar factory had been outstanding without recovering for more than 5 years and sum of Rs. 1,213,307.00 retained amount payable had not been settled for more than 2 years.
- (d) Cultivation of Sugar crop as commercial purposes through sugar research act no 75 of 1981, implementing the development activities relevant to local sugar industry, regularizing the local sugar industry.
- (e) Without identifying the requirements, building repair and maintenance instruments items of 64 amounting Rs. 4,473,021 purchased during the period of 2007 to 2017 had been idling in the stores.
- (f) Developing high quality commercial sugar seed plant varieties and conducting researches for this purpose is one of the objectives of the Institution for sugar cultivation and the newly introducing sugar varieties should provide higher productivity and higher amount of sugar. But, the sugar varieties introduced in the years of 2012 and 2011 produced a average yield of metric ton 142 to 160 per hectare hence the yield of 5 sugar seed varieties introduced in the year 2017 had a low yield of 70 to 97 metric ton per hectare and observed that the amount incurred for the researches had not been ineffective.
- (g) As per section 18 of sugar research act no 75 of 1981, the institution charges 10 cents per kilo gram of sugar as cess tax from the produced sugar and cess tax has to be remitted to the institution from the Sevenagala, Pelwatta and Galoya sugar factories amounting to Rs. 1,479,900, Rs. 7,417,390 and Rs. 7,217,360 respectively during the year under review.
- (h) Rs. 1,063,131 receivable for sugar cane from Sevanagala sugar factory, Rs. 86,780 receivable for sugar syrup supplied to Lanka Sugar Company and Rs. 1,000,000 receivable from Kantale Sugar Company has been outstanding for more than 5 years and action had not been taken yet to recover this amount until year under review.

Signed by:

**W.P.C. Wicramaratne**  
Auditor General

## FINANCIAL HIGHLIGHTS FROM 2015 TO 2019

### Income

Item	Rs Million				
	2015	2016	2017	2018	2019
Treasury grant	321.78	353.00	222.83	286.85	268.25
Cess on sugar imports/ production	3.24	-	4.48	3.41	20.23
Ministry projects	17.30	12.00	10.00	8.54	-
Interest income and sundry income	12.96	24.47	22.67	27.96	18.26
Sale of sugarcane	0.48	-	-	-	-
<b>Total</b>	<b>355.76</b>	<b>389.47</b>	<b>259.98</b>	<b>326.76</b>	<b>306.74</b>

### Expenditure

Item	Rs Million				
	2015	2016	2017	2018	2019
<b>Recurrent:</b>					
Personnel emoluments	159.20	179.59	179.77	203.86	195.80
Travelling and subsistence	8.24	3.28	9.96	9.92	3.36
Research and development	13.71	27.40	12.07	14.27	14.66
Supplies and consumables	2.04	3.86	5.19	5.64	4.88
Contractual services	36.43	12.47	36.74	43.91	43.58
Maintenance	25.96	17.34	28.99	29.73	23.74
Other operating expenses	53.69	59.49	66.53	94.20	59.29
Finance cost	0.05	-	0.10	0.06	0.04
<b>Total</b>	<b>299.32</b>	<b>303.43</b>	<b>339.35</b>	<b>401.59</b>	<b>348.35</b>
<b>Capital:</b>					
Buildings	-	-	18.09	16.49	40.05
Office/Lab/Field equipment	24.37	33.96	30.01	30.29	3.46
Vehicles	28.68	7.50	0.23	(-3.25)*	-
Land development	5.02	37.07	11.93	10.73	7.7
Library books	-	-	-	0.12	-
Furniture	1.36	2.30	3.64	1.65	(2.55)
Other facilities	0.68	9.55	3.83	4.17	0.87
<b>Total</b>	<b>60.11</b>	<b>90.38</b>	<b>67.73</b>	<b>60.20</b>	<b>49.53</b>
<b>Total</b>	<b>359.43</b>	<b>393.81</b>	<b>407.08</b>	<b>461.79</b>	<b>397.88</b>

Note:\* - Disposal of vehicles