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**RUBBER RESEARCH INSTITUTE
OF SRI LANKA**



2019

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Annual Report

Rubber Research Institute of Sri Lanka

Dartonfield, Agalawatta

Vision

The Institute's vision is to emerge as the centre of excellence in providing high quality scientific technologies to the rubber industry.

Mission

The Institute's mission is to revitalize the rubber sector by developing economically and environmentally sustainable innovations and transferring the latest technologies to the stakeholders through training and advisory services.

Objectives

- *Increase productivity of rubber to international standards*
- *Increase national production of Natural Rubber (NR) to meet the increasing demand*
- *Optimal and sustainable utilization of land, labour and other resources*
- *Maximize domestic value addition to natural rubber*
- *Improve the organizational effectiveness by encouraging individual competency and self development of RRISL personnel*

Policies

- *Continuation of the research activities on all aspects of rubber production and processing*
- *Continue to promote environmentally friendly and sustainable rubber industry*
- *Transfer the developed technologies through training and advisory services*

About us

The origin of rubber research in Sri Lanka goes back to 1909, when a group of planters in the Kalutara district got the service of a chemist to study the coagulation of rubber. This was later expanded to form a Rubber Research Scheme in 1913 and then named as the Rubber Research Institute of Ceylon (now Sri Lanka) in 1951 giving the status that the Rubber Research Institute of Sri Lanka (RRISL) is the oldest Research Institute on rubber in the world. It has a proud record of service to the industry, in plant breeding, agro-management practices and the chemistry of raw rubber.

RRISL is the nodal agency in Sri Lanka charged with the statutory responsibility for research and development on all aspects of rubber cultivation and processing for the benefit of the rubber industry. The institute specializes in rubber research, both in the biology of the crop and the chemistry of the natural rubber and the technology of the product. Further, the institute is committed towards technology transfer activities and training of extension personnel and the other stakeholders. Accordingly, it has five biological research departments i.e. Plant Science, Genetics & Plant Breeding, Plant Pathology & Microbiology, Soils & Plant Nutrition and Biochemistry & Plant Physiology and four chemistry departments i.e. Raw Rubber Processing Development & Chemical Engineering, Raw Rubber & Chemical Analysis, Polymer Chemistry and Raw Rubber Technology & Development and the Advisory Services Department for technology transfer together with units for Adaptive Research, Biometry, Agricultural Economics, Audio Visual & Information Technology and Library.



RUBBER RESEARCH BOARD OF SRI LANKA
ANNUAL REPORT 2019

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Cover: Inaugural commencement of rubber tapping in the Northern Province

Director's Report

Rubber Research Institute of Sri Lanka

This review comprises an overview of the local and international scenario of the rubber industry and then the major directions of research and development (R&D) activities in the institute to address the current issues in the industry. Details of research in each division are given in separate sections. Key obstacles for R&D are also mentioned briefly. Further, improvements made in administrative and financial functions of the institute are given.

Rubber industry of Sri Lanka

Rubber production and consumption

The natural rubber (NR) production of the country in the year 2019 has decreased by about 9.5% from the previous year to 74,750 tonnes. This could be attributed to the slow rate of recovery of NR prices at the market and less demand from major consumers in the world. When compared to the values in 2017 and 2018, slightly improved rubber prices with intermittent fluctuations were observed in 2019. However, total NR consumption in the country has estimated as 112,550 tonnes which have been attributed to a 16.6% decline against the previous year. The rubber industry will face severe drawbacks in the supply side which may finally result in a drastic effect on the flourishing rubber products manufacturing industry in the country.

Rubber extent

The total extent of rubber lands in the country at the end of 2019 has been recorded as 137.6 thousand hectares with about 75-80% under tapping. Accordingly, there has been a slight increase in rubber extent from the previous year. This could particularly be attributed to new planting in Monaragala and Ampara districts.

NR exports and imports

Sri Lanka has exported around 13,003 tonnes of natural raw rubber in the year 2019 against the year 2018, which was 13,981 tonnes of exports. Weak demand for the raw rubber at the international market would have attributed to this slight reduction.

Rubber manufacturing sector

Earnings through raw rubber exports were Rs.4.3 billion in the year 2019 against Rs.5.1 billion in the year 2018. Export earnings from finished products were recorded as Rs. 154 billion in 2019, showing an increase of about 9% against the previous year. Export earnings from semi-processed rubber have reported as Rs.0.7 billion in the year 2019, while it was Rs.0.63 billion in the year 2018. Accordingly, total export earnings from the rubber industry remained at Rs.160 billion showing an 8.5% increase from the previous year.

Global rubber industry review

Natural rubber supply

Total world NR production increased to 13,764 thousand tonnes in 2019 against the year 2018, which was around 13,864 thousand tonnes. World NR production has increased by 4.4% according to ANRPC statistics. This is mainly due to the favourable markets in the major markets in the Asia Pacific region during the mid of the year.

NR average yield:

Despite the yield decline recorded in Thailand, China, India, Indonesia, Vietnam and Sri Lanka, yield per hectare has increased in Malaysia and Cambodia during 2019. The expansion in mature area reflects the large scale planting undertaken during the period from year 2005 to 2012. Average annual yield of Sri Lanka has been recorded as 667 kg/ha/year in the year 2019 while it was 774 kg/ha/year in the year 2018.

Global NR demand:

Total NR demand was estimated as 13,702 thousand tonnes in 2019 showing a 2.2% decline from the previous year. This showed an oversupply of about 62,000 tonnes of NR during the reference period.

World NR price movement

Despite of the declining trend prevailed in most of the market starting from the year 2011 to 2016, prices experienced an increase in the year 2017. However the rubber prices has declined slightly in the year 2018 against the year 2017. Afterwards, global rubber prices was slightly higher throughout the year 2019. In Sri Lanka, annual average RSS3 price in 2019 was US\$ 1.86 per kg showing slightly higher value against US\$ 1.84 recorded in 2018. The average price of RSS3 was recorded as US\$ 1.66 in Bangkok against the previous year average value of US\$ 1.56. Average Indian RSS4 has increased to US\$1.89 from US\$ 1.84 per kg against the previous year. According to the predictions of ANPRC countries, global natural rubber prices are likely to further decline due to slower economic growth and weaker demand from the major consumers in the world.

Research and development focus

Considering the continuity of low rubber price situation amidst high cost of production, associated decline in rubber production in the country and lack of skilled workers for rubber cultivation, research and development (R&D) activities were aimed at increasing the overall land productivity, reducing the cost of production, avenues for attracting workers and promoting indirect benefits of rubber cultivation. In addition, developing new avenues for value addition and processing raw rubber in healthy and environmental friendly manner were in high priority. Whilst encouraging to adopt good agricultural practices for sustainable productivity, low frequency tapping systems were promoted as a practical means of reducing cost of production and retaining skilled

harvesters in the industry by providing extra income. Research on new planting techniques for better field establishment, slow release fertilizer for increase in fertilizer use efficiency, convenient weed management system and new high value intercrops for rubber to increase the overall income of rubber lands continued. Further, focus on clone development was multifaceted having the directions of high yielding, disease tolerance, timber production and drought resistance. Also, research began on identifying clone specific latex quality parameters for niche markets. Whilst assisting to cultivate rubber in nontraditional areas, the institute focused on developing a carbon trading project for voluntary carbon market with rubber cultivated in Ampara and Monaragala districts. Development of new rubber compounds for product manufacturing industries, new approach for manufacturing low protein centrifuged latex, natural based additives in rubber product manufacture and use of safer chemicals in raw rubber manufacture were looked into. In disease management, the highest priority had to be given to delimit the outbreak of Pestalotiopsis leaf disease. Also, rubber growers were assisted with the control of White Root Disease. Whilst targeting the technology transfer with more strategic approaches, an android mobile application was introduced initially to disseminate the knowledge on raw rubber manufacture. Also, the institute were able to hold 7th Symposium on Plantation Crop Research with the assistance of other plantation crop research institutes.

An acceptable level progress was shown in the Finite Element Analyses & Simulation Centre managed as a private public partnership at the institute. Further, Rs.50 Mn were received from the treasury through the Export Development Board to establish tyre testing facilities at the institute.

Obstacles for research

Having sufficient funds allocated to the institute, the biggest obstacle for research has been the lack of qualified senior scientists resulted from unattractive remuneration packages in operation for such high caliber positions. To be competitive, those should be made in par with the salary structures in national universities. This requires immediate attention of policy makers and all well-wishers of the rubber industry; else, it is inevitable to have substandard research in near future.

Administrative and financial functions

Director position of the institute had been vacant during the year and also, there was any no functioning Board of Management towards the beginning and the end of the year. Both resulted in some delay in decision making process. However, expected performance levels were achieved to a greater extent by the end of the year. In view of improving the human resource, employees (particularly in research and technical grades) were provided with both local and international trainings and exposure events. In total, 22 were sent abroad for the participation in training programmes, conferences and workshops in the countries; viz. Malaysia, India, Singapore, China, Thailand,

Cambodia, Australia and Myanmar, whilst attended in local programmes. Recruitments were done in the categories of AR 1, MA 4, MA 2-2 and PL 3.

Revaluation of assets except the lands and buildings of the institute was completed. Computer based asset management system was introduced along with the annual board of survey programme. Logbook recording system was introduced for effective traceability in research. In view of minimizing the cash handling in long distance field visits, the fuel coupon system of the Sri Lanka Petroleum Corporation was introduced to the institute owned vehicles.

Appreciations

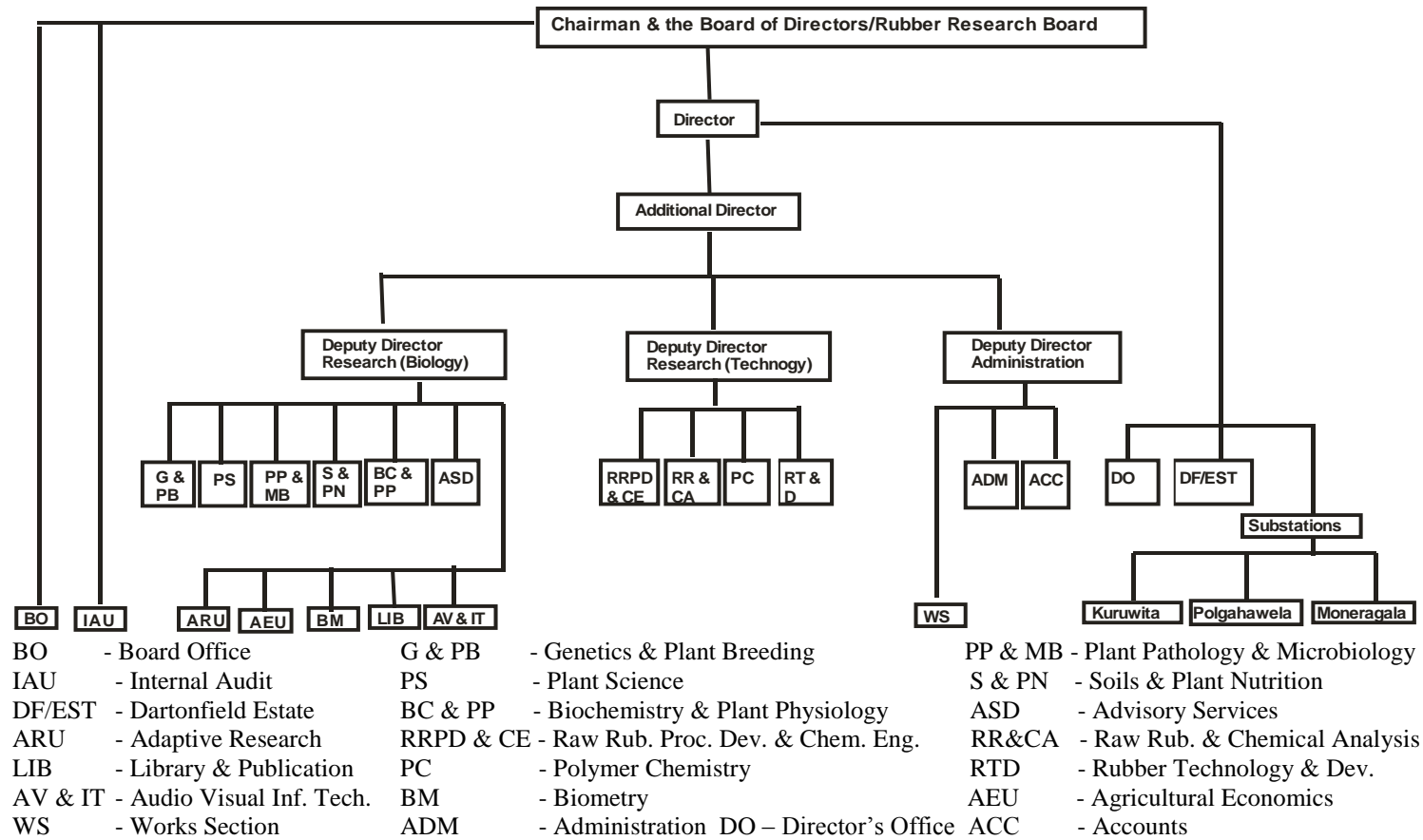
In effective conduct in R&D, the guidance and directions together with financial support and patronages given by the Rubber Research Board and the Ministry of Plantation Industries are appreciated. Other stakeholder support received in conducting R&D activities is well respected. The contributions made by Deputy Directors, all Heads of scientific and non-scientific divisions and other staff towards the Annual Report are acknowledged.

In particular, special appreciations are given to the Economic Unit for providing required data for this review and to the staff in the Library and Publication Unit for compiling the materials and finally building up the Annual Report 2018.



Dr. V.H.L. Rodrigo
Additional Director

ORGANIZATIONAL STRUCTURE



Major Achievements during 2019

- Application of two types of Encapsulated Coir Bricks (ECB) gave better plant growth of immature rubber plant compared to conventional type of split fertilizer applications at the end of thirty months.
- A type of reusable Porous Tube (RPT) showed significantly higher value of plant diameter and leaf nutrient contents compared to the conventional type of fertilizer application at the end of 6 months period.
- “Shaka Sara” new liquid organic manure gave higher girth increment of 4th year immature Hevea plants compared to normal estate practice.
- Two soil maps relevant to rubber growing areas in Colombo and Kurunegala districts were prepared and seven different soil series were identified.
- Site Specific Fertilizer Recommendation programme following under 5% of mature rubber extent in the country (5500 ha) supported to serve at least Rs.13 million for the estate sector and Rs.42 million for the country.
- Three genotypes (1995-HP 55, 1991-HP 57 and 1991-HP 58) were characterized to register under group III recommendation.
- Two germplasm selections were taken into Estate/RRI collaborative level evaluation.
- With gene expression studies it has been identified the clone RRISL 203, RRISL 2005 and RRISL 121 as possible drought-tolerant clones.
- The efficacy of the newly introduced bio-pesticide was shown under field conditions against White root disease control.
- The knowledge revealed from the investigation on the brown root disease was employed in managing the disease.
- Training programmes conducted on white root disease management was successfully under taken.
- Twelve demonstration plots on White root disease were established.
- Fifty rubber clones are screened against the economically important diseases under non traditional rubber growing regions.
- Latex harvesting was inaugurated in the firstly planted smallholder rubber field in Vavuniya District of Northern Province (Figure 1).



Figure 1: Commencement of tapping and establishment of processing centre at Vavuniya, Northern Province

- Livelihood Capital improvements were quantified in rubber growing community of the Eastern Province.
- Latex harvesting was commenced in the firstly established rubber field in the Moneragala sub-station of the institute.
- A low cost adhesive for rubber tiles produced in Sri Lanka was developed using MG-grafted natural rubber.
- NR latex based non-toxic adhesive was developed for toys and infant items using a plant based preservative and a plant based tackifying agent.
- NR/neoprene rubber (CR) based adhesive was developed and commercialized (Figure 2)
- NR based tyre patch compound was developed.
- NR based adhesive for a water-proof fabric was developed.
- Novel mechano-chemical process for reclaiming of nitrile rubber (NBR) based glove waste was developed and commercialized.
- Foam rubber out of creamed latex and crepe rubber was successfully produced (Figure 3).
- A method to recycle rigid polyurethane foam waste obtained from the production of shoe soles was developed (Figure 4).



Figure 2: Newly developed adhesive using a blend of NR and neoprene rubber



Figure 3: Foam rubber produced out of creamed latex and crepe rubber



Figure 4: Recycling of rigid polyurethane foam waste obtained from the production of shoe soles

Activities of Research Departments - 2019

Agronomy departments/Sections/Units

GENETICS AND PLANT BREEDING DEPARTMENT

Flowering behavior of *Hevea* breeding pool was studied to maximize the hybridization efficiency of the breeding process. Selection of superior genotypes from 2012 HP progeny was done. Data collection in 2009 ECT at Eladuwa estate was continued with an objective of developing precise yield indexes. Two genotypes as 98–80/98–219 were selected from the 1998 HP progeny for ECT level. Twenty genotypes from 2012 HP progeny were taken to develop a model for early selections. Three genotypes were characterized to register under group III recommendation, and two germplasm selections were ready to establish under ECT level.

It has observed that the expression of *HbMnSOD* and *HbCAT* genes was down-regulated in TPD affected rubber clones.

Presence of cis-acting elements characteristics of light and dehydration responsive genes in promoter suggests inducible *REF* gene expression by drought and light.

Up-regulation of stress-responsive mitogen activate protein kinase (*MAPK*) gene in the clone RRISL 2005 under water stress condition showed that its higher drought tolerance capacity compared to the clone RRIC 121 and RRISL 2100. According to the up-regulation of the *CAT* gene, both clones RRIC 121 and RRISL 203 were showed the possibility to have soil moisture stress tolerance.

Bark anatomy analysis of selected three genotypes in ECT level was done to further characterization, it has observed around 50% negative correlation between latex vessels density and diameter of the latex vessels while observed over 50% positive correlation between girth and diameter of latex vessels.

PLANT SCIENCE DEPARTMENT

Priming (pretreatment) with water (hydropriming) and chemicals (urea and ZnSO_4) accelerated germination and increased percentage germination in rubber seeds. About 2500 plants were bud grafted with different clones to initiate new experimental trials in both dry and wet zones. Root bole plants were prepared with an improved potting mixture and planted in Galgamuwa (Dry Zone). Physio-chemical and growth data were recorded in plants for experiments related to alternative sowing media for river sand, alternative polybag sizes for the standard polybag size and plants treated with various chemicals and botanicals for improved germination, growth and abiotic stress tolerance. Girth data were recorded for experimental trials on planting densities and stumped buddings experiments.

One hundred fifteen nursery visits were made and about 759,800 plants were certified. Daily latex and tea yields were recorded. Cinnamon plants were pruned. Growth and physiological data were recorded for Rubber X Agarwood experiment in Dartonfield, Rubber X Fruit crops trials at Moneragala and Ampara. Infilling of rubber plants were done. 46 advisory visits and 345 experimental visits were made. 22 training programmes were done.

Application of antioxidants, chemicals and stimulations were done on trees at experimental trials in both intermediate and wet zone. Yield and weather data were recorded for night tapping experiments at Galewatta and Moneragala. Yield stimulation was done. Yield data were recorded for the experimental trials conducted on testing various chemicals and botanicals for alleviating TPD condition in rubber trees, for the clone RRISL 203 in response to D2 or D3 tapping frequencies and for winter rest experiments. Flow rates and plugging indices and bark thickness were recorded for bark management experiment. Brown bast count of rubber trees and DRC measurements were taken.

PLANT PATHOLOGY AND MICROBIOLOGY DEPARTMENT

Clonal screening programme towards the incidence of the secondary leaf fall diseases, Powdery mildew and Colletotrichum leaf disease showed moderate conditions except for a few disease vulnerable sites. Based on the *Corynespora* screening programme, there were no new disease reports from the field plants. Incidence of *Phytophthora* disease was severe during the year. *Corynespora* Leaf Fall Disease severity from the non traditional areas was comparatively higher. The antagonistic plants effective against *Rigidoporus* under *in vitro* conditions, were tested in the field. Studies on the biology of the pathogen population *Phellinus noxius* were undertaken due to the high incidence from non traditional rubber growing areas. Antagonistic fungi were identified from rubber growing areas to control the white root disease biologically. Talc was identified as a less bulky medium for the formulation of a biopesticide and the effectiveness has been proven under laboratory conditions. Ten training programmes were conducted to educate the growers on the effective management of white root disease. Twelve demonstration plots were established using the recommendations to demonstrate the efficacy of the new technologies. By the month of July 2019, a new leaf fall disease was reported from Sri Lanka. The involvement of several plant pathogens were reported and Colletotrichum & Pestalotiopsis are playing the major role. The disease reached epidemic proportions devastating nearly 5000ha in the main rubber growing districts Kalutara & Ratnapura. The disease spread was controlled using two effective fungicides carbendazim & hexaconazole.

SOILS AND PLANT NUTRITION DEPARTMENT

Seven research activities on improvement of soil fertility, increasing fertilizer use efficiency, soil, water and nutrient conservation, weed control and one capital project on “Modification of fertilizer recommendations system of Hevea with reference to plant, soil and field parameters” were implemented and monitored during the year. Project entitled “Enhancing soil fertility in degraded rubber lands by combine use of agro management practices such as inorganic fertilizer, biofertilizer, cover cropping and mulching with organics” which was funded by National Research Council (NRC) was initiated with the effect from August. Bacterial cultures collected from Boralu series did not produce any halos on Higher Grade Eppawala Rock Phosphate (HERP) and Eppawala Rock Phosphate (ERP). “Shaka Sara” new liquid organic manure was tested for their Sri Lanka Standard (SLS) parameters and evaluated at Ekerrella estate gave higher girth increment of 4th year immature Hevea plants compared to normal estate practice. Application of alternative weed management practices; shade net showed 100% weed control under immature rubber more than 2 years period and oil palm waste showed same controlled condition with regular applications.

Application of two types of Encapsulated Coir Bricks (ECB) gave better plant girth of immature rubber compared to conventional type of fertilizer application at the end of thirty months. Further, no significant differences could be observed in between different treatments for leaf nutrients. Application of environmental friendly alternatives for inorganic fertilizers, compost and partially burned paddy husk were re-tested. Three species of earth worms; Eudrilus, Lumbricus and Eisenia were introduced and Eudrilus was identified as the most effective one for the decomposition of kitchen garbage. Maintained in-vitro earthworm cultures for further decomposition of organic manures. Reusable Porous Tube (RPT) experiment showed significantly higher value of plant diameter and leaf nutrient contents with RPT type 2 compared to other treatments of RPT type 1 and conventional type of fertilizer application at the end of 6 months period. Different fertilizer mixtures were tested to non traditional rubber growing areas in Moneragala, Mahaoya and Padiyatalawa and better immature plant growth improvement could be observed with R/SA based mixtures; R/SA 7:9:9:3, modified new fertilizer mixture and potassium double recommended mixture compared to R/U 12:14:14. Two soil maps relevant to rubber growing areas in Colombo and Kurunegala districts were prepared and seven different soil series were identified. Soil, plant and field parameters were collected from different soil series representing 5 estates in Colombo district and 2 estates in Kurunegala district. Collected plant and soil samples were analyzed for 1300 parameters covering an extent of 750ha. Four estates from Pussellawa plantation, 2 estates from Agalawatta plantation, one estate from each plantation, Kelani velly, Lalan rubber, Horana and Kegalle were selected to initiate the project activities related to the NRC project.

Site specific fertilizer recommendation programme provided 32 fertilizer recommendation reports for 5500 ha of mature rubber. Four land suitability reports were issued for 261 ha under land selection programme. Analytical service offered 94 analytical reports including 1664 parameters based on 405 fertilizer & soil samples from outside organizations to assure the application of good quality fertilizer for their rubber lands.

BIOCHEMISTRY AND PHYSIOLOGY DEPARTMENT

Physiological, biochemical and growth data of selected 10 *Hevea* genotypes established in Vauniya, Kandakadu, Hambegamuwa and Padiyathalawa experimental fields were assessed in order to identify the genotypes which are best suited for different agro- ecological zones.

Research and Development programme on a weekend low intensity harvesting (LIH) system was initiated for a sustainable rubber industry in Sri Lanka.

Technology transfer programmes on S/2 d4 low intensity harvesting system were conducted for 142 smallholdings and 12 RPC owned estates in districts; Kalutara, Kegalle, Ratnapura, Colombo, Gampaha, Kurunegala, Kandy and Galle. S/2 d4 LIH system was adopted in 495.50 ha of smallholdings and RPC owned estates in above districts.

Time course variation of yield data, biochemical components in latex and raw rubber properties with different types of ethephon was investigated in order to identify the best ethephon type for yield stimulation of rubber.

Under research and development work on developing a local yield stimulant formulation, commercial scale testing of locally produced yield stimulant mixtures has been started.

ADVISORY SERVICES DEPARTMENT

As a solution to tapper shortage, 114 new harvesting assistants were introduced through Tapping Training Schools (TTS) for the smallholder sector. Two hundred seventy three Semi - skilled harvesting assistants in estate sector were trained to improve the technical quality in tapping. The extension strategy focused on farmer participatory development of selected rubber units in each REO divisions in traditional rubber growing areas was continued and developed 104 rubber lands (46 – immature, 58 – mature) as model rubber holdings. Thirty one smallholdings were fixed rain guards as demonstrations. Four smallholdings established with different intercrops as models. Eighteen rubber processing centers were developed as models and construction of 28 new RSS processing centers and rehabilitation of 04 substandard centers were attended. Farmer training programmes were conducted to educate 122 smallholders and 239

estate staff (Field officers and estate workers) on general cultivation and processing aspects of rubber.

Basic data and information were collected to develop selected villages as model rubber villages and action plans were prepared. GIS based mapping is in progress in relation to all field training and advisory programmes. Three technology transfer centers were established at Kegalle, Rathnapura and Kalutara areas for effective technology transfer to rubber growers. Road constructions in selected area for Techno Park at Monaragala substation was completed. Preparation of technical banners and other field works are in progress. Group extension programme called “*Vihidum Sathkara*” was effectively conducted providing advisory and extension services for 259 small land units in traditional rubber growing areas for necessary improvements. One hundred twenty five advisory visits were carried out to solve problems in technology adoption on requests made by smallholders.

Involved as resource person in:

1. Six programmes of quality improvement of RSS programs, 07 Harvesters training programs 02 rain guard programmes and 08 Farmer Awareness Programmes organized by Thurusaviya Fund.
2. Eighteen farmer awareness and training programs for 385 smallholders and attended on selection of suitable rubber lands to develop as models in Monaragala and Ampara districts under STARR project.
3. Awareness programme on Rain guard application and three Tapper Training Programmes organized by Rubber Development Department at Morapitiya, Tholangamuwa and Katuwana.
4. Awareness program for students of Faculty of Agriculture, Rajarata University at Lalan Rubber Company and Polgahawela Epa Kanda estate.
5. Awareness and Tanning programs for Field level officers organized by Divisional Secretariat Office and District Secretariat Office in Kegalle and Warakapola.
6. Awareness programme for Rubber Development Officers, Thurusaviya Officers and Rubber Extension Officers at Nivithigalakale Training Center, under the Combined Pilot programme on “Forward March Rubber Village”.
7. Special programme on tapping at Vavuniya organized by Adaptive Research Unit, RRISL
8. Preparation of Hand book on field activities for Rubber small holders in Non - traditional rubber growing areas under STARR Project
9. Special Advisory visits requested by Rubber Development Department at Monaragala, Haliela and Bandaragama
10. Participated for the Rubber Organic Plantation Certification programme - Lalan Rubber Company
11. Conducted lectures for Officers of Thurusaviya Fund at RRISL.

12. Conducted lectures for Officers of Rubber Development Department at RRISL.
13. Conducted Awareness programmes for Officers of STARR Project at RRISL.
14. Participated for the exhibition organized by Rajarata University of Sri Lanka

BIOMETRY SECTION

Research support on statistical applications pertaining to experiments on rubber, *viz.* design of experiments, analysis and interpretation of the research findings, were extended to other research departments. In view of providing a better service on the above, development and modifications of statistical methods was continuously focused in the research programme of the Biometry section to suit the needs of the rubber sector.

The data generated from the project, “Indicator based identification and forecasting of droughts in Sri Lanka” were used in forecasting the identified drought indices for decision making in rubber plantations.

AGROMET station at Dartonfield and Meteorological stations at Kuruwita and Moneragala were maintained and data were recorded and disseminated for research purposes. Rainfall data were collected and recorded from Nivithigalakele, Galewatta and Polgahawela substations in addition to the stations mentioned above.

ADAPTIVE RESEARCH UNIT

Latex harvesting was inaugurated in the firstly planted smallholder rubber field in Vavuniya District of Northern Province with the participation of government officials of Ministry of Plantation Industries, local authorities and villagers in the area. Simultaneously, a processing centre was established to facilitate manufacturing of ribbed smoked sheets at the same location.



Commencement of tapping and establishment of processing centre at Vavuniya, Northern Province

Feasibility of cultivating rubber in Galenbindunuwewa and Kahatagasdigiliya Divisional Secretaries divisions of Anuradhapura district of North-Central Province was assessed through conducting SWOT analyses and four farmer participatory adaptive research plots were established in the area subsequently.



Farmer participatory adaptive research plots in North-Central Province

Latex harvesting was commenced in the firstly established rubber field (2.09 ha) in the Moneragala sub-station of the institute.

The study conducted to assess farmer perception and economics of adoption of technologies in smallholder rubber sector in Sri Lanka revealed that the adoption rates are respectively 55%, 35%, 20% and 5% less than the awareness level in application of rain guards, practicing of recommended tapping system, fertilizer application and weed management, aspects on rubber cultivation, respectively.

The smallholder survey was commenced to assess the willingness to accept beekeeping among rubber smallholders.

A Carbon Trading project was initiated with the objective of obtaining Voluntary Carbon Standards (VCS) for new rubber cultivations scheduled to be planted under the Smallholder Tea and Rubber Revitalization (STaRR) Project in Uva and Eastern provinces.

AGRICULTURAL ECONOMICS UNIT

Agricultural Economics Unit have involved in various types of economic analysis and impact assessment of different agronomic practices used in the rubber industry. Analysis of Technical Efficiency (TE) of latex harvesting and the impact of efficiency on poverty reduction of rubber farmers in Kegalle District was one of the major outcomes during this year. Further, Rubber-based agroforestry systems and poverty reduction were comprehensively analyzed using primary data collected from the Moneragala District. It was highlighted the importance of minor export crops including

cocoa, pepper and dairy cattle with rubber cultivation which has ultimately impacted on reducing poverty in rubber-based agroforestry farmers. Apart from that, the growth of rubber products sector has been identified using export and import custom data. Agricultural Economics continued their support in the selection of fuelwood growing model in the rubber plantation via conducting the cost-benefit analysis.

LIBRARY AND PUBLICATION UNIT

The reference section of the Library was updated with nineteen text books increasing the total collection to 6,182 books.

Several institutional publications, namely Journal of the RRISL Vol. 96 (2016), Annual Review 2017, RRISL Advisory Circulars 14 Nos. & Advisory Circulars collection 500 copies, Programme Information - 7th Symposium on Plantation Crop Research, Proceedings of the 7th symposium on plantation crop research Vol 01 & Vol. 02 were prepared.

AUDIO VISUAL AND INFORMATION TECHNOLOGY UNIT

Indirect Surge Protection System with equipotential bonding system was installed for Main & Sub Power Panels, Network Racks (Fiber termination points) at each department, PABX Telephone System, Direct Telephone Lines, Finger Scanners, installed at Dartonfield office premises.

Thirty Eight (38) Nos. of High Definition IP Surveillance Camera System was installed & configured using three type of camera (Outdoor, Indoor/Outdoor & Indoor Dome) at desired locations in Dartonfield office premises.

Direct Lightning Protection System was installed at the Outdoor pole mounted cameras & Indirect Surge Protection System (Power over Ethernet Surge Protector) was installed at the other Outdoor CCTV cameras in the Dartonfield office premises.

Two (02) Nos. of Hardware Firewall were installed & configured at Dartonfield & Ratmalana office for monitoring the internet access of users.

Multimedia Projection System in the Auditorium at Ramalana office was upgraded to improve the video quality & also, all the Audio Visual equipment installed in Main Auditorium at Dartonfield, Plant Science Auditorium & Main Auditorium at Ratmalana were properly maintained throughout the year.

Existing PABX System at Ratmalana office was replaced with latest version of PABX System & provided the call capturing facility with Database to the Reception of Ratmalana office.

Existing Copper Internet connection (ADSL) Ratmalana office was upgraded to the Fiber Optic connection (FTTx) with consistent, uninterrupted & high speed internet.

Necessary steps were taken to get Mail Server configured under the domain name 'rrisl.gov.lk' from SRI Lanka Telecom (SLTiDC) & approximately fifty (50) Nos. of user accounts were created for all Executive officers & selected staff officers in the institute.

Institutional official website (www.rrisl.gov.lk) was updated in English language under the instruction of the management. The initial steps were taken to translate the website to Sinhala language by a zonal translator.

As a result of discussions with Mobitel (pvt) Ltd., necessary steps were taken to get Mobitel signal coverage improved through dedicated fiber optic connection from Mobitel (Pvt) Ltd. Also, initial steps were taken to get a telecommunication pole installed at Dartonfield office premises from Mobitel (Pvt) Ltd., to improve the Mobitel 4G signal coverage.

Initial steps were taken to install & configure the Virtual Local Area Network (VLAN) at Dartonfield office.

Rubber Technology departments

RUBBER TECHNOLOGY AND DEVELOPMENT DEPARTMENT

Tested 107 sole crepe samples, 211 rubber compounds and 389 rubber/polymer products on request from the rubber industry.

Twenty one SMEs and four groups of students were trained on manufacture of NR based products. The staff of the Rubber Technology and Development department conducted four workshops on "Rubber based Products Manufacture" organized by the Thurusaviya Trust Fund and Vidatha Centres. Also, the staff was actively involved in arranging the RRISL / Rubber Sector stall at four exhibitions.

POLYMER CHEMISTRY DEPARTMENT

Trials on development of property correlations for nitrosamine safe binary accelerator systems in sulfur vulcanized natural rubber were continued throughout the year. It has been identified that the most of the processing, static and mechanical properties of compounds prepared with commercially available nitrosamine safe accelerators are inferior when compared to those of compounds prepared with traditional accelerators.

A novel method was developed to incorporate a filler *in-situ* in natural rubber latex. Comparison of the properties of *in-situ* filler incorporated natural rubber latex films with that of *ex-situ* filler incorporated films were initiated and continued.

A commercially available nano material was employed as a novel preservative agent along with TMTD to preserve centrifuged natural rubber latex. Initial results of the

study showed enhanced antibacterial properties in latex even with 80% reduction of TMTD when compared to conventional LATZ preservative system. An NSF travel grant was awarded to present the study results in the International Conference in Science and Technology held at Singapore National University in March 2019. The second stage of the project was initiated.

More than thousand samples of polymer materials and compounding ingredients received from industry and academia were characterized using FTIR, TGA, DSC (differential scanning calorimeter) and DMA (dynamical mechanical analyzer) available at the department. Industrial solutions were also given based on the characterization results to the clients on their request.

RAW RUBBER AND CHEMICAL ANALYSIS DEPARTMENT

The department is mainly cater to rubber industries, plantation sector as well as SME sectors by providing an internationally accepted testing facilities. The department offered the testing, analytical and certification services on raw natural rubber and rubber chemicals to all sectors of the rubber industry. These services were also extended to tuber traders, researchers from fellow departments of the institute and various local institutions such as Universities, other research institutes as well as individuals including postgraduate students, consultants and inventors etc.

A total number of 998 samples of natural rubber latex, dry rubber and rubber processing chemicals were tested for their quality during the year. This included 325 dry rubber samples, 644 latex samples and 29 rubber processing chemicals. In total 350 no test certificates were issued on requests received from the respective parties for their quality assessment and marketing purposes. In addition, the department carried out miscellaneous analytical tests, troubleshooting activities and two research projects during the year.

The department was renovated according to the international standard during the first quarter of the year.

Use of surface energy evaluate adhesion of bituminous based rain guard sealants to substrate was identified as a successful method to select quality rain guard sealant.

Dynamic properties of RRISL 203 clone was studied and above clone was identified as a good clone for a product which need good elastic properties.

A new test method was identified to analyze the soap quality in NR latex.

RAW RUBBER PROCESS DEVELOPMENT & CHEMICAL ENGINEERING

A novel process to manufacture low protein centrifuged latex was developed to mitigate the problem associated with antigenic proteins in natural rubber latex in an attempt to find an alternative route as presently available methods are commercially unviable in the industry. A combined process of dilution, fractionation, creaming and centrifugation was applied to manufacture concentrated latex with reduced protein level by removing both water-soluble and insoluble protein. Fractionated creamed centrifuged latex was compared with single centrifuged and double centrifuged latex in terms of latex properties. In addition, the effect of the DRC level of the fractionation process on the removal of protein was studied at various DRC levels at 15%, 18%, 21% and 24%. It was found that centrifuged latex manufactured using creamed latex fractionated at 15% DRC level has the lowest non-rubber content and nitrogen level than the other treatments studied. Also, it has the lowest VFA development. Film properties using low protein centrifuged latex has lower film properties because most of the non-rubbers removing during the process. Overall, it can be suggested that the process of manufacturing centrifuged latex using creamed and fractionated at 15% DRC level is more suitable to manufacture low protein centrifuged latex than currently available methods such as double centrifugation, in the industry.

A study was carried out to develop a novel curing method for thin latex films in order to reduce the cost, energy, and time consumption required for latex product manufacturing process. In this method, a dispersion of curing ingredients including sulfur, accelerators and activator with suitable conditions was used to compound with centrifuged latex, instead of conventional compounding method in which we add each curing ingredient's dispersion separately at different stages of compounding. According to the results, the curing system with 50% TSC stored at room temperature with 18-30 hour compounding maturation period has better film properties than the conventional system. In conclusion, this novel method might be a suitable substitute for conventional method used in latex compounding while improving film properties and curing rate.

After establishing processing parameters of plastic and natural blends, unvulcanized and vulcanized blends with fillers and without fillers were prepared and their mechanical and rheological properties were tested. All blends exhibited the behaviour of typical thermoplastic elastomers. The tensile strength, ageing properties and material flow index (MFI) values were increased as increasing plastic content. According to physio – mechanical properties the optimum sulfur loading and filler loading were determined.

The first android mobile application was introduced to the Sri Lankan rubber industry to enhance overall performance of the rubber industry by providing effective

knowledge dissemination & promoting technologies while letting access to updated information & effective communication. It contains all the calculations required for raw rubber processing, RSS defects identifier, SS dryer designing, communication network with audio caller option, Facebook and YouTube, and RRISL recommendations & other information such as advisory circulars.

The staff of the department continued to process routine technical assistance, analytical services and training to large scale raw rubber producers, small and medium scale sheet rubber producing and various government institutions and non-government organization.

Estates own by RRI and Sub stations

DARTONFIELD GROUP

A total crop of 150,416kg has been harvested during the year achieving 76% of the estimated crop. When comparing with the previous year, crop records a decrease of 16%. The crop harvested on wet days due to the rain guards was 26,292kg which amounts to 17% of total harvested crop.

Average Yield per Hectare (YPH) for the year was 845 kg showing a decrease of 158kg from the previous year.

The average intake per tapper recorded during the year was 7.2kg from a tapping task of 230 trees. Highest intake per tapper of 10.8kg was recorded from the 2010 field in 3rd year tapping with a tapping task of 223 trees of clone RRISL 203/2001 tapped on S₂ d4 tapping system with ethral.

The total number of normal, late, rain guard & no tapping days recorded during the year were 201,19,65 & 80 days, respectively.

Total rainfall recorded for the year was 4389.7mm with 204 wet days showing 616.4mm more rainfall and 09 wet days more than the values recorded in the previous year.

The Cost of Production (COP) and Net Sale Average (NSA) recorded for the year was Rs.330.91 and Rs.276.22, respectively, giving a loss of Rs.54.69 per kg and a total loss of Rs.8.2 million. Loss per hectare recorded for the year was Rs.46,209.70. Quality level of grade 1 manufactured 91% of ripped smoke sheets (RSS).

KURUWITA SUB – STATION

The mature and immature extents of the Kuruwita Sub Station were 79.36 and 2.80 hectares, respectively.

A total crop of 72,308kg was harvested during the year recording and decrease of 8840 kg from previous year's crop.

Average yield per hectare (YPH) was 911kg. The average intake tapper (IPT) of the estate was 7.4kg showing a difference of decrease 1.2kg from the previous year value.

The total number of normal, rain guard, rain interference and no tapping days recorded during the year were 250, 63, 0 & 31 respectively.

The annual rainfall recorded during the year was 3976.8mm with 226 wet days as against 4560.8mm with 244 wet days during the previous year.

The cost of production (C.O.P) and the Net Sale Average (N.S.A) for the year were Rs. 337.71 and Rs.263.54 per kg, respectively. The loss made for the year was Rs5.3 million and the loss per hectare recorded for the year was Rs.67,579.19

POLGAHAWELA SUB – STATION

A total crop of 15678 has been harvested during this season and it was 86% of the estimated crop. This was 6% increase with compared to the previous year's crop.

The YPH for the year was 883kg.

The average intake per tapper during the year was 9.4kg. The highest intake per tapper of 11.22kg was recorded from the 2008 clearing with a tapping task of 269 trees of clone RRIC121 tapped on D3 system.

The total numbers of normal, rain guard, rain interference and no tapping days during the year were 289, 11, 10 & 55, respectively.

Total rainfall recorded for the year was 2170mm with 139 wet days as against 2683.7mm with 153 wet days during the previous year.

Out of the total manufactured RSS, the share of No.01 grade is 73%.

MONERAGALA SUB – STATION

Experimental work :

Maintenance of all experimental sites was done. Eight hundred and fifty cocoa plants were planted in rubber × cocoa intercropping trial. About 2700 Cinnamon plants and 150 moringa plants were also planted during the year as intercrops with rubber.

Data collection of the night tapping trial was continued.

Maintenance of 5000 Grilicidia plants established around the boundary of the substation in 2015 was done.

The auditorium was made available for a number of training programmes during the year under review. The details of the programmes conducted are given in Table 01. General advice on rubber cultivation were provided for 103 farmers from the area.

Training Programme	Number and the participants	Resource persons and sponsorship
1.General training on rubber cultivation (11 day residential programme)	55 Small Holder Farmers	Advisory Service Department and Thurusaviya Fund
2.Low Frequency Harvesting	50 Small Holder Farmers	Export Development Board, Rubber Development Department, RRISL
3.Nusery Management and Rubber Harvesting	14 & 18 students from two bathches - Weerawila Agricultural School	RRISL substation
4.Field visit	14 students from Udawela M.M.V.	RRISL
5.Field visit	14 students from Badulla National School	RRISL
6.Field visit	24 Technology stream students	RRISL
7.One day training programme on rubber cultivation	20 students from Dutugamunu M.M.V.	RRISL
8.Tapper Training	20 Smallholder farmers	RDD & RRISL
9.Awareness programme for latex collectors.	25 Smallholder farmers	Dipped Products Plc. & RRISL
10.Rubber cultivation training (for 6 months)	2 students from National Youth Centre	RRISL
11.Biomass project	50 Officers of RRISL & RDD	Biomass project

Awards

- Dr. N.M.C. Nayanakantha received the “Best Overall Presentation Award” for his paper entitled “*Moringa oleifera* leaf extract as a biostimulant on growth and other physio-chemical attributes of rubber (*Hevea brasiliensis*) under drought and heat stress conditions” presented at 7th Symposium on Plantation Crop Research- 2019, Marino Beach Hotel, Colombo, 4-6th November, 2019.



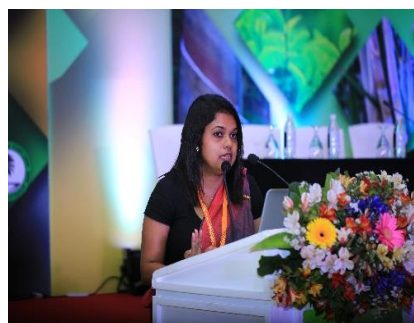
- Dr. N.M.C. Nayanakantha received an Award for the “Contribution made to Rubber Industry during 2016-2018” at 7th Symposium on Plantation Crop Research, 4-6th November, 2019, Colombo.



- Dr. N.M.C. Nayanakantha received “High Minds Idea Master Award” for the “Best Rubber Industry Participation” in the Leadership and Capacity Building Training Programme for young rubber industry professionals conducted by High Brand Team and Organized by the Ministry of Industry and Commerce under the programme of “Rubber Young Cluster Network “in the Rubber Master Plan, 28-30th August 2018.



- Mrs. N. P. S. N. Karunarathne, Research Officer, Department of Biochemistry and Physiology of RRISL received the award for the ‘Best Presentation in the Rubber Sector’ at 7th Symposium on Plantation Crop Research 2019 for the paper ‘Effectiveness of commercially available selected water- based and oil- based ethephon formulations as a yield stimulant of rubber (*Hevea brasiliensis*) (N.P.S.N. Karunarathne, K.V.V.S. Kudaligama, L.T.B.K. Fernando, N.N. Abewardhana, P.D.T.L. Madushani, M.K.P. Perera, P. Seneviratne and V.H.L. Rodrigo).



Board of Management, Committees & Staff Members

RUBBER RESEARCH BOARD OF SRI LANKA

BOARD OF MANAGEMENT

Members appointed by the Hon Minister of Plantation Industries

01. Ms Vishaka Sooriyabandara, Chairperson, Rubber Research Board (up to 22.11.2019)
02. Ms M K D N Madampe, Treasury Representative
03. Mr R A D S Ranatunga, Representative, Ministry of Plantation Industries
04. Mr Justin Seneviratne, Group Director, Lalan Rubber (Pvt) Ltd
05. Mr R C Peiris, Chief Executive Officer, Kotagala Plantation PLC
06. Mr Anusha Perera, Chief Executive Officer, Balangoda Plantation PLC
07. Dr J D H Wijewardana, Secretary/Director, Sri Lanka Council for Agricultural Research Policy (w.e.f. 31.01.2019)
08. Dr D T K Bernard, Chairman, Sri Lanka Council for Agricultural Research Policy (w.e.f.18.06.2019)
09. Mr V S Dickwella, Smallholders' Representative
10. Mr T Thangarajah, Union Representative (w.e.f. 12.02.2019)
11. Mr D C Nathaniel, Smallholders' Representative (w.e.f. 21.03.2019)
12. Dr L M K Tillekeratne, Representative for CRTA (w.e.f. 16.09.2019)

Ex-Officio Members

01. Mr R B Premadasa, Director General, Rubber Development Department
02. Mr S S Poholiyadda, Managing Director, RPC Plantation Management Services

STANDING COMMITTEES

Estates Committee

01. Mrs Vishaka Sooriyabandara, Chairperson, Rubber Research Board (up to 22.11.2019)
04. Dr V H L Rodrigo, Additional Director, RRI
05. Dr (Mrs) P Seneviratne, Deputy Director – Research (Biology), RRI
06. Dr Susantha Siriwardena, Deputy Director – Research (Technology), RRI
07. Mr Nissanka Seneviratne, Director, Kotagala Plantations Ltd.
08. Mr Jagath Hettiarachchi, Senior Manager, Paiyagala Estate
09. Mr Prince Gunasekera, General Manager, Namunukula Plantations Ltd.
10. Mr P A Lakshman, Senior Manager, Dartonfield Estate
11. Mr B S S Hewage, Senior Accountant, RRI

Audit and Management Committee

01. Ms M K D N Madampe, Chairman of the Committee, Treasury Representative
02. Mr R B Premadasa, Director General , Rubber Development Department
03. Mr R AD S Ranatunga, Representative, Ministry of Plantation Industries

In attendance

01. Ms Nilani Jayasiri, Audit Superintendent, Ministry of Plantation Industries
02. Dr V H L Rodrigo, Additional Director, Rubber Research Institute
03. Mr S Hewage, Senior Accountant, RRI
04. Ms S Senadheera, Internal Auditor, RRB
05. Mr Susantha Dissanayake, Senior Administrative Officer

Scientific Committee

Members of RRISL

01. Mrs Vishaka Sooriyabandara, Chairperson, Rubber Research Board
02. Dr V H L Rodrigo, Additional Director, RRI
03. Dr (Mrs) G P W P P Seneviratne, Deputy Director Research (Biology), RRI
04. Dr S Siriwardena, Deputy Director Research (Technology), RRI
05. Dr D M A P Dissanayake, Head, Advisory Services Dept., RRI
06. Dr (Mrs) D G Edirisinghe, Head, Rubber Technology & Development Dept., RRI
07. Dr (Mrs) S P Withanage, Head, Genetics & Plant Breeding Dept., RRI
08. Dr (Mrs) B W Wijesuriya, Principal Research Officer, Biometry Section, RRI
09. Dr N M C Nayanakantha, Head, Plant Science Dept., RRI
10. Dr (Mrs) T H P S Fernando, Head, Plant Pathology & Microbiology Dept., RRI
11. Dr (Mrs) E S Munasinghe, Principal Research Officer, Adaptive Research Unit, RRI
12. Dr (Mrs) K V V S Kudaligama, Principal Research Officer, Biochemistry & Physiology Dept., RRI
13. Dr (Mrs) R P Hettiarachchi, Principal Research Officer, Soils & Plant Nutrition Dept., RRI
14. Dr (Mrs) A P Attanayake, Senior Research Officer, Raw Rubber & Chemical Analysis Dept., RRI
15. Dr K K Liyanage, Senior Research Officer, Genetics & Plant Breeding Dept., RRI
16. Mr T U K Silva, Senior Research Officer, Plant Science Dept., RRI
17. Mrs B M D C Balasooriya, Research Officer, Adaptive Research Unit, RRI
18. Mrs D S A Nakandala, Research Officer, Plant Science Dept., RRI
19. Mrs M K R Silva, Research Officer, Plant Pathology & Microbiology Dept., RRI
20. Mrs P V A Anushka, Research Officer, Genetics & Plant Breeding Dept., RRI
21. Mr W D M Sampath, Research Officer, Rubber Technology & Dept., RRI
22. Mr P K K S Gunaratne, Advisory Officer, Advisory Services Dept., RRI
23. Mr J K S Sankalpa, Research Officer, Agricultural Economics Unit, RRI

24. Mr K Adikari, Research Officer, Raw Rubber & Chemical Analysis Dept., RRI
25. Mrs I H K Samarasinghe, Research Officer, Polymer Chemistry Dept., RRI
26. Mrs T T D Dahanayake, Research Officer, Genetics & Plant Breeding Dept., RRI
27. Mrs H A Ruwani Jayawardane, Research Officer, Soils & Plant Nutrition Dept., RRI
28. Mrs N P Surani Karunaratne, Research Officer, Biochemistry & Physiology Dept., RRI
29. Miss P G N Ishani, Research Officer, Agricultural Economics Unit, RRI
30. Mr Yashoda Somaratne, Research Officer, Polymer Chemistry Dept., RRI
31. Mr Y C Yohan Sudusinghe, Research Officer, Raw Rubber Process Development & Chemical Engineering Dept., RRI
32. Mr P A Lakshman, Senior Manager (Estate), RRI

Members representing the Industry and other Institutions

13. Mr R A D S Ranathunga, Director (Development), Ministry of Plantation Industries,
14. Mrs W K Chathurangi, Assistant Director (Development), Ministry of Plantation Industries
15. Mr Sampath Manthirinaayake, Director, PMMD
16. Mrs J M C Priyadarshani, Assistant Director, PMMD
17. Mr Deumith Rohana, Director (Development), Rubber Development Department, No 465, Ganahena, Baththaramulla.
18. Ms Nadeesha, Assistant Director, Director (Development), Rubber Development Department, No 465, Ganahena, Baththaramulla.
19. Dr K de Silva, Director, Thurusaviya Fund, No 74, Kaduwela Road, Battaramulla
20. Dr P Dharmasena, Director, National Institute of Plantation Management, M D H Jayawardane Mawatha, Athurugiriya
21. Mr Manoj udugampola CEO, Agalawatte Plantations PLC, FLC Tower, No 19, Dudlu Senanayake Mw, Colombo 08.
22. Mr A C Bertus, General Manager, Agalawatte Plantations PLC, FLC Tower, No 19, Dudlu Senanayake Mw, Colombo 08.
23. Mr S Dissanayake, DGM, Agalawatte Plantations PLC, Pambegama Estate, Parakaduwa.
24. Mr L H S Chaminda, Superintendent, Agalawatte Plantations PLC, Peenkanda Estate, Nivithigala
25. Mr K M A S Wijeratne, Superintendent, Agalawatte Plantations PLC, Kiriwanaketiya Estate, Mahagama
26. Mr K Fernando, Superintendent, Agalawatte Plantations PLC, Culloden Estate, Neboda
27. Mr D Wekunagoda, Superintendent, Agalawatte Plantations PLC, Doloswella Estate, Nivithigala

28. Mr R A D I Ramanayake, Superintendent, Agalawatte Plantations PLC, Watapotha Estate, Nivithigala
29. Mr D P A Perera, DGM, P.B.06, Balangoda Plantations PLC, Palmgarden, Ratnapura
30. Mr D K Wijerathne, Superintendent, Balangoda Plantations PLC, Rambukkande Estate, Rathnapura
31. Mr B L L Premathilake, Superintendent, Balangoda Plantations PLC, Mahawala Estate, Rathnapura
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35. Mr K I C Isuru, Manager, Elpitiya Plantations PLC, Bentota Estate, Elpitiya
36. Mr R B S Douglas, Senior Manager, Elpitiya Plantations PLC, Elpitiya Estate, Elpitiya
37. Mr N M S B Nawaratne, Manager, Elpitiya Plantations PLC, Gulugahakande Estate, Wanduramba
38. Mr U A Karunanayake, Manager, Elpitiya Plantations PLC, Devithurai Estate, Ethkandura
39. Mr S A Eriyagama, CEO, Kegalle Plantations PLC, 310 High Level Rd, Navinna, Maharagama
40. Mr S A A P Jayathilake, Superintendent, Kegalle Plantations PLC, Pallegama Estate, Niyadurupola
41. Mr S D Munasinghe, Superintendent, Kegalle Plantations PLC, Eadella Estate, Polgahawela
42. Mr B M J A Moonamalle, Superintendent, Kegalle Plantations PLC, Atale Estate, Atale
43. Mr M Kariyapperuma, Director, Horana Plantations PLC, No 400, Deens Rs, Colombo 10
44. Mr Harendra S Katugaha, Actg. Director, Horana Plantations PLC, Kobowella Estate, Govinna
45. Mr Gamini N Ratnayake, DGM, Horana Plantations PLC, Neuchatel Estate, Neboda
46. Mr B A N Nuwan, DM, Horana Plantations PLC, Halwatura Estate, Ingiriya
47. Mr N B Seneviratne, Director – Low Country, Kotagala Plantations PLC, Regional Office, Ellakanda, Horana
48. Mr J N Hettiarachchi, Senior Manager, Kotagala Plantations PLC, Paiyagala Estate, Dodangoda

49. Mr LA D J Perera, Senior Manager, Kotagala Plantations PLC, Delkith Estate, Baduraliya
50. Mr R Tennakoon, Senior Manager, Kotagala Plantations PLC, Padukka Estate, Padukka
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53. Mr S Hewagama, DM, Kahawatte Plantations PLC, Hunuwella Estate, Opanayake
54. Mr K G A I Jayasinghe, Superintendent, Kahawatte Plantations PLC, Wellandura Estate, Kahawatte
55. Mr O Gaya K Weerasekara, Manager, Kahawatte Plantations PLC, Opatha Estate, Kahawatte
56. Mr D Tennakoon, Senior Manager, Kahawatte Plantations PLC, Pelmadulla Estate, Kahawatte
57. Mr U Millangoda, Asst. Manager, Kahawatte Plantations PLC, Poranuwa Estate, Kahawatte
58. Mr U Premathilake, Kelani Valley Plantations PLC, Director, No 400, Deans Rd, Colombo 10
59. Mr B Gunasekara, GM, Kelani Valley Plantations PLC, Panawatte Estate, Yatiyantota
60. Mr S Fernando, RGM, Kelani Valley Plantations PLC, Kiriporuwa Estate, Yatiyantota
61. Mr R M U S Jayasundara, Manager, Kelani Valley Plantations PLC, Urumillewa Estate, Bulathkohupitiya
62. Mr R L Obesekare, Senior Manager, Kelani Valley Plantations PLC, Edarapola Estate, Bulathkohupitiya
63. Mr E Welikala, DGM, Kelanivalley Plantation PLC, Kelani Estate, Yatiyantota
64. Mr P K A H Thilakaratne, Senior Manager, Kelanivalley Plantation PLC, We-oya Estate, Yatiyantota
65. Mr W P S B Abeywardana, Senior Manager, Kelanivalley Plantation PLC, Dewalakanda Estate, Dehiowita
66. Mr P De S A Gunasekara, GM, Namunukula Plantations PLC, No 310, High Level Rd, Nawinna, Maharagama
67. Mr J B Weerasekara, Superintendent, Namunukula Plantations PLC, Pallegoda Estate, Darga Town
68. Mr H Rajapaksha, Superintendent, Namunukula Plantations PLC, Sirikandura Estate, Matugama
69. Mr Albert Peiris, GM, Lalan Rubbers (Pvt) Ltd, No 54, Kirulapana Avenue, Colombo 06
70. Mr D Amarathunga, GM, Lalan Rubbers (Pvt) Ltd, Malwana Biyagama

59. Mr N Senavirathne, GGM, Lalan Rubbers (Pvt) Ltd, Sapumalkande Group, Deraniyagala.
56. Mr R Alahakoon, GGM, Lalan Rubbers (Pvt) Ltd, Udabage Group, Deraniyagala
57. Mr I Wakkumbura, Manager, Lalan Rubbers (Pvt) Ltd, Mahaoya Group, Dehiowita
58. Mr B Madagama, Superintendent, Maturata Plantations Ltd, Andapana Estate, Kamburupitiya
71. Mr L M A C Bandara, Superintendent, Maturata Plantations Ltd, Wilita Estate Akuressa
72. Mr M H P Gunarathna, Superintendent, Maturata Plantations Ltd, Diddenipota Estate, Matara
73. Mr R Seneviratne, DGM, Pussellawa Plantations PLC, Elston Estate, Puwakpitiya
74. Mr K M C Prasan, Senior Manager, Pussellawa Plantations PLC, Halpe Estate, Thummodara
75. Mr C Jayalath, Assit. General Manager, Pussellawa Plantations PLC, Pussella Estate, 64. Parakaduwa
76. Mr L M Amarathunga, Superintendent, Pussellawa Plantations PLC, Salawa Estate, Hanwella
77. Mr D Daswatte, DGM, Watawala Plantations PLC, Thalangaha Estate, Nakiyadeniya
78. Mr C Fernando, Executive Director, Malwatte Valley Plantations PLC, No 280, Dam Street, Colombo 12
79. Mr R M V Ratnayake, Group Manager, Malwatte Valley Plantations PLC, Moraliya Estate, Ruwanwella
80. Mr S Seneviratne, Seneviratne Group, D.J.Wijesiriwardana Mawatha, Mt.Lavinia
81. Mr N M Amaraekara, Consultant, 37/9, Terrence Av, Mt.Lavinia
82. Mr Jayantha P.Muthutantri, Consultant, No4/4, Nelum Mw, Sirimal Uyana, Mt.Lavinia

Provident Fund Committee

01. Mrs Vishaka Sooriyabandara, Chairperson, Rubber Research Board (up to 22.11.2019)
02. Dr V H L Rodrigo, Additional Director, RRI, Member
03. Mr D M S Dissanayake, Senior Administrative Officer, Secretary
04. Mr B S S Hewage, Senior Accountant, RRI, Treasurer
05. Mr T B Dissanayake, Experimental Officer, Elected Committee Member
06. Mr P K K S Gunarathna, Advisory Officer, Elected Committee Member
07. Mr J A S Chandrasiri, Experimental Officer, Elected Committee Member

Chairman's Office & Board Secretariat

Chairperson	- Ms Vishaka Sooriyabandara
Acting Secretary to the Board	- Dr Wasana Wijesuriya, PRO (up to 28.02.2019)
	-Ms Padma Balasooriya, Personal Assistant to the Chairman (w.e.f. 05.04.2019)
Management Assistants	- Mrs H N Kanchana
	- Mrs P S Ishara (up to 15.07.2019)

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Attorney General
Attorney General's Department
(Government Institutions)
P O Box 502
Colombo 12

Bankers

Bank of Ceylon
Corporate Branch
75, Janadhipathi Mawatha
Colombo 1

Auditors

Auditor General
Auditor General's Department
No.306/72, Polduwa Road,

Bank of Ceylon
No.306/72,
Agalawatta
Battaramulla

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Darttonfield, Agalawatta

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Additional Director	034 - 2248458
Deputy Director Research (Biology)	034 - 3346118
General	034 - 2247426

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034 - 3349999

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Genetics and Plant Breeding Department

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Telephone: 045 - 2262115, 045 - 3460537

RUBBER RESEARCH INSTITUTE OF SRI LANKA

STAFF

DIRECTORATE

<i>Additional Director</i>	V H L Rodrigo, BSc Agric (SL), MSc (Essex) PhD (Wales)
<i>Deputy Director Research (Bio.)</i>	Mrs G P W P P Seneviratne, BSc (SL), PhD (Bath)
<i>Deputy Director Research (Tech.)</i>	S Siriwardene, BSc (SL), MSc (Australia) PhD (Malaysia)

RESEARCH DEPARTMENTS

Agronomy Departments

Genetics and Plant Breeding	<i>(at Nivithigalakele Substation, Matugama)</i>
<i>Head of Department</i>	Mrs S P Withanage, BSc Agric (SL), MSc (India), PhD (Malaysia)
<i>Senior Research Officer</i>	K K Liyanage, BSc Agric (SL) MPhil (SL), PhD (china)
<i>Research Officers</i>	Mrs P V A Anushka, BSc Agric (SL) ** Mrs T T D Dahanayake, BSc Agric (SL)
<i>Experimental Officers</i>	T B Dissanayake T M S K Gunasekera H P Peries, Dip. Agric (Kundasale) Mrs A K Gamage, BSc (SL)
<i>Technical Officers (Research & Development)</i>	B W A N Baddewithana, BSc Agric. (SL), MPhil (SL) Mrs N S Jayasinghe, BSc Agric. (SL) (from August)
<i>Management Assistant (Clerical)</i>	Mrs S D P K L Peiris

Plant Science	<i>(at Dartonfield, Agalawatta)</i>
<i>Head of Department</i>	N M C Nayanakantha, BSc (SL), MSc (India), PhD (India)
<i>Senior Research Officer</i>	T U K Silva, BSc Agric (SL), MPhil (SL)
<i>Research Officers</i>	Mrs D S A Nakandala, BSc Agric (SL) W D M N de Alwis, BSc (SL) (from August)
<i>Experimental Officers</i>	Mrs G A S Wijesekera (up to May) Mrs R K Samarasekera

<i>Technical Officers (Research & Development)</i>	D L N de Zoysa
	P D Pathirana, BSc (SL)
	P K W Karunathilake, Dip. Agric (Ratnapura)
	R Handapangoda, BSc Agric (SL)
	Mrs U Dissanayake, Dip. in Agric. (Naiwala) BSc (SL)
	Miss W K S W Watawala, BSc (SL)
	R P D Priyadharshana, BSc (SL)
	Miss H M Subsinghe, BSc (SL)
	Mrs U N Udaya Kumari, BSc (SL)
	Miss W M D Wickremakumari, BSc (SL) (from August)
	H D H C Arunasiri, Dip. of Agric. (from August)
<i>Management Assistants (Clerical)</i>	Mrs H D D E Jayawardena Mrs Aruni de Almeida
Plant Pathology and Microbiology <i>(at Dartonfield, Agalawatta)</i>	
<i>Head of Department</i>	Mrs T H P S Fernando, BSc (SL), MPhil (SL), PhD (SL)
<i>Research Officer</i>	Mrs M K R Silva, BSc Agric (SL), MSc (SL)
<i>Experimental Officers</i>	Mrs B I Tennakoon, Dip. Agric (Kundasale)
	Mrs E A D D Siriwardene, BSc (SL)
<i>Technical Officers (Research & Development)</i>	S C P Wijayaratne, NDT Agric (Hardy)
	E A D N Nishantha, Dip. Agric. (Ratnapura), BIS (Agric) (SL)
	P W Balasooriya, BSc (SL) (upto June)
	Miss R D N S Gunasekera, Dip. in Agric. (up to January)
	Miss A H M N R Abeyrathna, BSc (SL) (from August)
<i>Management Assistant (Clerical)</i>	D A N Mallikaarachchi, BSc (SL) (from August)
	Mrs K A D Y Madushani Lanka
Soils and Plant Nutrition <i>(at Dartonfield, Agalawatta)</i>	
<i>Principal Research Officer</i>	Mrs R P Hettiarachchi, BSc (SL), MPhil (SL), PhD (SL)
<i>Research Officers</i>	Mrs H A R K Jayawardana, BSc Agric. (SL)
	L A T S Liyanaarachchi, BSc Agric. (SL) (From August)
<i>Experimental Officers</i>	Miss V U Edirimanne, BSc (SL)
	Miss A P Thewarapperuma

<i>Technical Officers (Research & Development)</i>	P D T C Gunatilleke, NDT (Agric) Mrs Eranga de Silva, NDT C G Malawaraarachchi, Dip. in Agric. (Hardy) Mrs M Kulathunga, BSc (SL) Mrs R M Baddevidana, BSc (SL) Mrs P D S D O Rathnasooriya, BSc (SL) M H W Gayan, BSc (SL) B M K Rangana, BSc (SL) (from August) Mrs K A D L Rupasinghe Perera
<i>Management Assistant (Stenography)</i>	
Biochemistry and Physiology <i>Principal Research Officer</i>	(at Dartonfield, Agalawatta) Mrs K V V S Kudaligama, BSc (SL), MPhil (SL), PhD (SL)
<i>Research Officer</i>	Miss N P S N Karunaratne, BSc (SL)
<i>Experimental Officer</i>	M K P Perera, BSc (SL)
<i>Technical Officers (Research & Development)</i>	Mrs P A D T L Madushani, Diploma in Agric. Miss N N Abewardena, BSc (SL) L T B K Fernando, BSc (SL) (from August) Mrs H A Manoji Erandika
<i>Management Assistant (Clerical)</i>	
Advisory Services <i>Head of Department</i>	(at Telewela Road, Ratmalana) D M A P Dissanayake, BSc Agric. (SL) PhD (Aberdeen)
<i>Advisory Officer</i>	P K K S Gunaratne, BSc Agric. (SL)
<i>Assistant Training Officer</i>	Miss K G P Manahari, BSc (SL)
<i>Rubber Extension Officers</i>	R M S Ratnayake, NDT Agric. (Hardy) D E P M Nanayakkara, Dip. Agric. (Aquinas) Nihal Gamage, Dip. Agric. (Angunakolapelessa) S G G Wijesinghe I P L Kithsiri J A S Chandrasiri W P G D C P K Senanayake, NDT Agric (Hardy) T L Ramanayake, BSc (SL) A R Kulathunga, BSc (SL) H G M G Jayasinghe, BSc (SL) Mrs K K I Jayasundera, BSc (SL) D S Dissanayake, BSc (SL) K D K L Siriwardena, BSc (SL) Mrs G R Tennakoon, BSc (SL) Miss R R N D Thara, BSc Agric. (SL) (from Sept.) P V S Madubashana, BSc Agric. (SL) (from Sept.)

	M N P de Silva, BSc Agric (SL) (from Sept.)
	E W S Ruwan Kumara, BSc (SL) (from August)
	S M A Samarakoon, Dip. Agric. (Kundasale)
Management Assistants (Clerical)	Mrs J N R Jayasinghe
	Mrs S M Kaluarachchi
	R G A S Dharmaratne
	T R C Silva
	P Sachini Ishara
	Mrs K Y G P M Kumari, BA (SL) (up to Sept.)

Technology Departments

Rubber Technology and Development *(at Telewela Road, Ratmalana)*

<i>Head of Department</i>	Mrs D G Edirisinghe, BSc (SL), MSc (SL) MPhil (UK), PhD (SL)
<i>Research Officers</i>	W D M Sampath, BSc (SL) Mrs U A Weerasinghe, BSc (SL)
<i>Experimental Officer</i>	Mrs G M Priyanthi Perera, BSc (SL), MSc (SL)
<i>Technical Officers (Research & Development)</i>	V G M J Abeywardena, NDT Miss S G P Bhagayawedha, NDT K I D P Perera, BSc (SL) Miss P K I L Jayaratne, BSc (SL) K N D Tillekeratne, BSc (SL) (from August) Mrs E N N Nanayakkara, BSc (SL) A H R W M N Gunawardena, BSc (SL)
<i>Management Assistant (Clerical)</i>	Miss S M D S R de A Wijeratne

Polymer Chemistry

<i>Research Officers</i>	<i>(at Telewela Road, Ratmalana)</i> Mrs I H K Samarasinghe, BSc (SL) Y R Somaratne, BSc (SL) MSc (SL)
<i>Experimental Officer</i>	Mrs N Jayawardane, Dip. Agric. (Bibile)
<i>Technical Officers (Research & Development)</i>	Mrs H M H Dhanukamalee, BSc (SL) Mrs P S V Rupasinghe, BSc (SL) D V D Mallikarachchi, BSc (SL) Mrs H L T Tharaka, BSc (SL)
<i>Management Assistant (Clerical)</i>	N W E C Maduranga

Raw Rubber and Chemical Analysis *(at Telewela Road, Ratmalana)*

<i>Senior Research Officer</i>	Mrs A P Attanayake, BSc (SL), PhD (SL)
<i>Experimental Officers</i>	Mrs C S Lokuge Miss D M S Wijesekera, Dip. Rubber Tech. (PRI)

<i>Technical Officers (Research & Development)</i>	Miss S P Wijewardena, BSc (SL) Miss N C Y Kithmini, BSc (SL) Miss M U D S Weerasinghe, BSc (SL) H D M S Wijewardena, BSc (SL) K A S T Koswatta, BSc (SL) Mrs. N S Siriwardena, BSc (SL) MSc (SL) Miss G M Udayakumari, BSc (SL) (from August)
<i>Management Assistant (Clerical)</i>	Miss W D D Samanmali

Raw Rubber Process Development and Chemical Engineering

(at Telewela Road, Ratmalana)

<i>Research Officer</i>	Y C Y Sudusinghe, BSc (SL)
<i>Experimental Officers</i>	Mrs U M S Priyanka, BSc (SL), MSc (SL) Mrs V C Rohanadeepa A K D W Prasad
<i>Technical Officers (Research & Development)</i>	R D Illeperuma, BSc (SL) Miss P K N N Sandamali, BSc (SL) W R U de Silva, Dip. in Chem.(up to July) WA S Bandara, BSc (SL) (from August)

<i>Management Assistants (Clerical)</i>	Mrs H A Janani Lakshika, BA (SL) Mrs P D S Dilhani
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Sections/Units

Biometry Section

(at Dartonfield, Agalawatta)

<i>Principal Research Officer</i>	Mrs B W Wijesuriya, BSc Agric (SL), MPhil (SL), PhD (SL)
<i>Research Officer</i>	A M R W S D Ratnayake, BSc (SL) (from Sept.)
<i>Experimental Officer</i>	O V Abeyawardene, Dip. Agric. (Kundasale)
<i>Technical Officer (Research & Development)</i>	Mrs M I N Silva, BSc (SL) (from August)
<i>Management Assistant (Clerical)</i>	Mrs S N Munasinghe

Adaptive Research Unit

(at Dartonfield, Agalawatta)

<i>Principal Research Officer</i>	Mrs E S Munasinghe, BSc Agric (SL), PhD (SL)
<i>Research Officer</i>	Mrs B M D C Balasooriya, BSc Agric (SL)
<i>Technical Officers (Research & Development)</i>	P M M Jayatilleke, NDT (Agric.) Mrs N M Piyasena, Dip. in Agric.

<i>Management Assistant (Clerical)</i>	Mrs M A Randima Srimalee
Agricultural Economics Unit <i>Research Officers</i>	(at Dartonfield, Agalawatta) J K S Sankalpa, BSc (SL), MSc (SL) Miss P G N Ishani, BSc Agric. (SL)
Library and Publications Unit <i>Librarian & Publication Officer</i> <i>Library Assistant & Assistant</i> <i>Publication Officer</i> <i>Library Assistant & Publication</i> <i>Assistant (Ratmalana)</i> <i>Management Assistants (Clerical)</i>	(at Dartonfield, Agalawatta) Mrs N C D Wijesekara, BA (SL) Mrs R M Amaratunga, Intermediate; Lib. Sci. Doc. & Info. (SLLA) Mrs D N C Amarathunga P M P Jayantha
Audio Visual and Information Technology Unit <i>Network Administrator</i>	(at Dartonfield, Agalawatta) S R D C P Peiris, BSc (SL)

Management Divisions

Administration Department (Agalawatta) (at Dartonfield, Agalawatta) <i>Senior Administrative Officer</i>	D M S Dissanayake, BSc (Mgt.) (SL), MHRM (SL)
<i>Registered Medical Practitioner</i>	M Subasinghe
<i>Administrative Officer</i>	Mrs P Mandalawatta (Dip. in HRM) (up to Nov.)
<i>Management Assistants (Clerical)</i>	Mrs P W Neelamanie Mrs J A D Wijayanthi Mrs B D Niranjala Mrs O W D Namali Udayanthi Mrs P C Athukorala Mrs Thamosha Munasinghe Mrs O W D Nilusha Udayanthi Mrs M N D Perera Mrs B Chandralatha, BA (SL) Miss M G L Niroshani Mrs J A H S Kumari
<i>Management Assistant</i> <i>(Stenography)</i> <i>Telephone Operator</i>	Mrs J A D C Preethika

Administration Unit (Ratmalana)	<i>(at Telewela Road, Ratmalana)</i>
<i>Administrative Officer</i>	Mrs U K Akila Tharinduni, BSc (SL)
<i>Management Assistants (Clerical)</i>	A T Senaratne
	Mrs A R M de Alwis
	Mrs K A Geetha, BA (SL) (up to Sept.)
<i>Telephone Operator</i>	Mrs G D D Kalamini
Internal Audit Unit	<i>(at Dartonfield, Agalawatta)</i>
<i>Internal Auditor</i>	Mrs M S I Senadeera, IFA, IPFA, IRCA, LICA, FPFA, PGDM
<i>Management Assistant (Clerical)</i>	M A D W K Tilakeratne
Works Section	<i>(at Dartonfield, Agalawatta)</i>
<i>Resident Engineer</i>	K A D K Chathuranga, BSc (Eng.)
<i>Engineering Assistant</i>	Mrs W D D Prasadini, NDES
<i>Technological Officer (Civil)</i>	M A D K Jayasumana, NCT
<i>Transport Officer</i>	U L D R L Gunasinghe
<i>Technological Officer (Mech.)</i>	H J P Fernando, HNDE
<i>Management Assistants (Clerical)</i>	Mrs J A S Dharshanie (Dip. in Management)
	Mrs K C S Wickremasinghe (up to July)
	Mrs K K D K P Ranaweera
	Mrs M S W H Kumari, BSc (SL)
	Udaya Samantha Munindradasa, BA (SL)
Accounts Section	<i>(at Dartonfield, Agalawatta)</i>
<i>Senior Accountant</i>	S S Hewage, CPFA (UK), CBA, FPFA
<i>Accountant</i>	Mrs A M Lasanthi, BSc (SL), MBA (SL), CBA, APFA
<i>Management Assistants</i>	Mrs R Handungoda
<i>(Accounting)</i>	Mrs G P Kukulewithana
<i>Management Assistants (Clerical)</i>	Mrs C Dissanayake
	A K D A Wickremasinghe
	Mrs S I K Pathirage
	Mrs S A Niluka Harshani
	Mrs K K D Y L Ranaweera
	Miss K K T L Jayasekera
	Mrs R P Thilini
	J A J R Lakmal, BA (Mgt.)
	K A Dilan Sampath

	Mrs Erandi Kanchana Jayasinghe, BA (SL)
	Mrs S R Sinhabahu
	Harith Kalutharawithana, BSc (SL)
	G N K Gunasena
	Mrs K G P Hasara
Cashier	Mrs G A D D Jayawardena

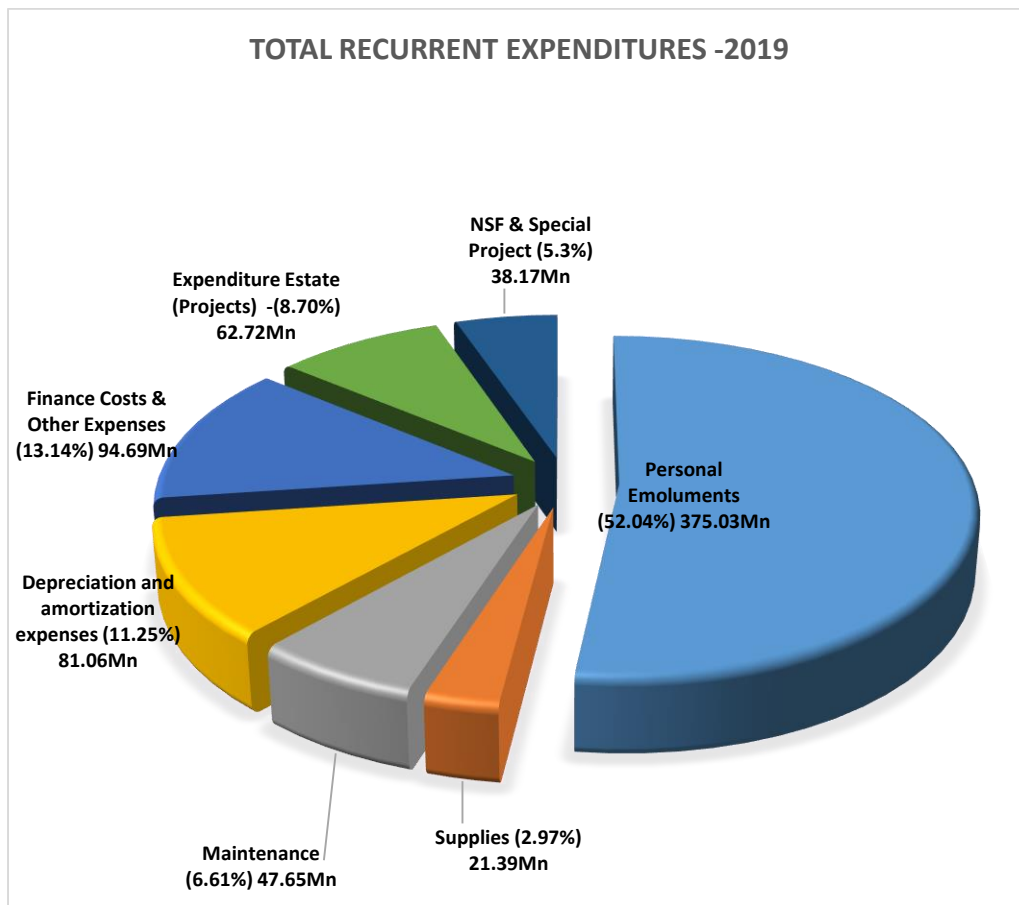
Sub – stations & Estates

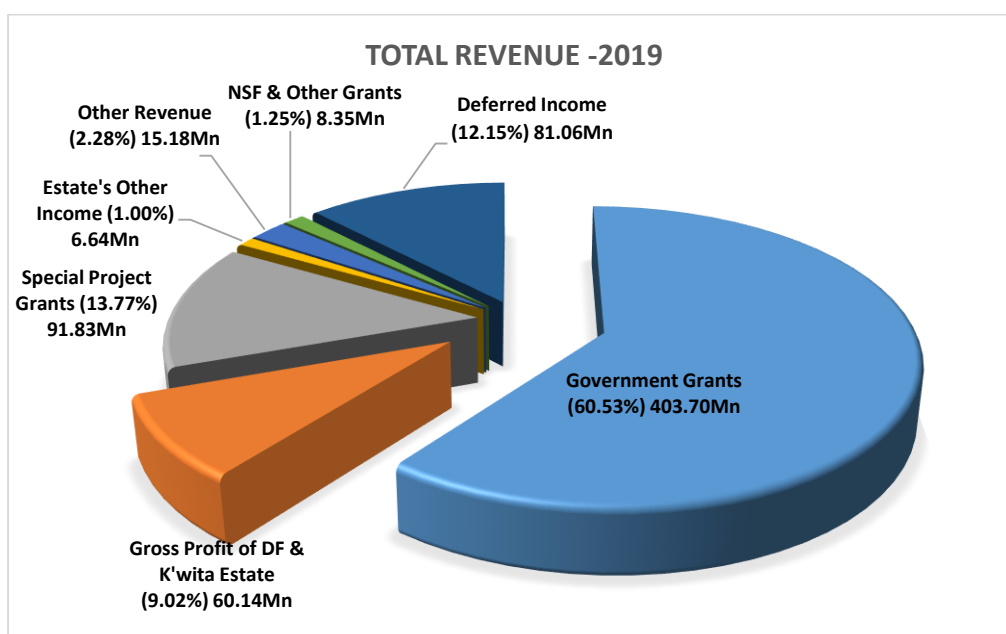
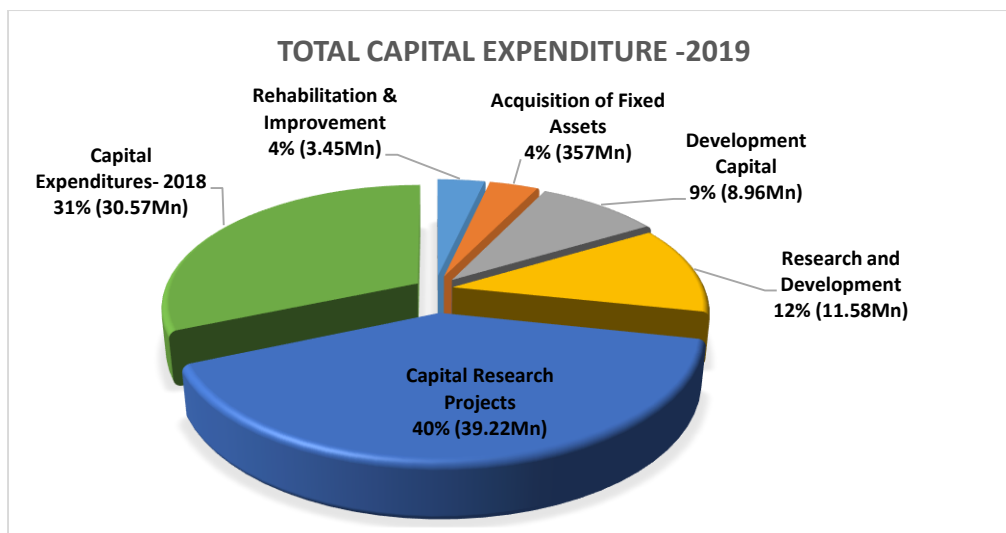
Kuruwita Sub-Station	<i>(at Kuruwita)</i>
<i>Field Officer</i>	D D A Jayathunga, Dip.in Agric.
<i>Management Assistants (Clerical)</i>	D S Jayasinghe
	K D P Senaratne
Polgahawela Sub-Station	<i>(at Narampola Estate, Nungamuwa, Yatigaloluwa)</i>
<i>Management Assistant (Clerical)</i>	D P N P Dissanayake
Moneragala Sub-Station	<i>(at Kumbukkana, Moneragala)</i>
<i>Field Officers</i>	V G D Nishantha Gunaseela
	N V U S Vijitha Kumara
<i>Management Assistants (Clerical)</i>	Mrs D M P Sandun Kumari
	M M Chamath Kumara
Dartonfield Group	
<i>Senior Manager - Estate</i>	P A Lukshaman, BSc (SL)
<i>Management Assistants</i>	H D D Achinda
	M A N Sachith Pawinda
	T D Harsha
<i>Field Officer (Nivitigalakele)</i>	B M Siriwardena

** No pay leave

Financial Statements

Analysis of Recurrent and Capital Expenditures for the Financial Year 2019





RUBBER RESEARCH INSTITUTE OF SRI LANKA
FINANCIAL STATEMENTS - 2019
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**RUBBER RESEARCH BOARD OF SRI LANKA - STATEMENT OF FINANCIAL POSITION
AS AT DECEMBER 31, 2019**

ASSETS	Note	2019 Rs		2018 Rs	
Non-Current Assets					
Land and Buildings	01	227,370,444.28	658,988,975.29	147,302,147.07	415,335,329.04
Infrastructure, Plant and Equipment		409,545,692.75		240,834,964.79	
Intangible Assets		22,072,838.27		27,198,217.18	
Current Assets					
Other Financial Assets	02	8,684,975.90	167,780,815.88	528,830.35	206,808,430.05
Other Current Assets	03	24,153,839.18		57,434,696.18	
Inventories	04	17,419,593.24		17,991,255.47	
Working Progress	04-A	34,765,643.01		-	
Receivables	05	25,113,697.91		10,491,121.92	
Investments in Associates	06	558,906.80		545,447.49	
Cash and cash Equivalents	07	57,084,159.84		119,817,078.64	
Total Assets			826,769,791.17		622,143,759.09
LIABILITIES					
Current Liabilities					
Payables	08	(94,573,442.05)	(97,756,040.10)	(58,024,149.50)	(59,502,965.98)
Short -Term Provisions	09	(3,182,598.05)		(1,478,816.48)	
Non-Current liabilities					
Employee Benefits	10	(143,314,133.50)	(143,314,133.50)	(130,991,234.00)	(130,991,234.00)
Total Liabilities			(241,070,173.60)		(190,494,199.98)
Total Net Assets			585,699,617.57		431,649,559.11
NET ASSETS/EQUITY					
Accumulated Fund	11	1,006,144,036.22		961,384,287.07	
Accumulated Surpluses/(Deficits)	12	(420,444,418.65)		(529,734,727.96)	
TOTAL NET ASSETS/EQUITY			585,699,617.57		431,649,559.11

The Financial Statements have been prepared in accordance with Sri Lanka Public Sector Accounting Standards (SLPSAS).



B S S Hewage
Senior Accountant – RRI



V.H.L. Rodrigo
Acting Director - RRI

The accounting policies and notes on pages from 45 to 97 from an integral part of these Financial Statements. The Board of Directors is responsible for the preparation and presentation of these Financial Statements. These Financial Statements were approved by the Board of Directors and signed on their behalf.



Prof. (Mrs) Sudeera Ranwala
Chairperson – RRB



Board Member
Rubber Research Board

STATEMENT OF FINANCIAL PERFORMANCE FOR THE YEAR ENDED DECEMBER 31, 2019

Description	Note	RRI		Dt. Estate		Kwita Estate		Kumarawatta Estate		Narampola Estate			Total	
		2019	2018	2019	2018	2019	2018	2019	2018	2019	2018	2016	2019	2018
		Rs		Rs		Rs		Rs		Rs			Rs	
Transfers from other government entities		403,700,000.00	372,300,000.00										403,700,000.00	372,300,000.00
Other revenue	13	15,187,176.92	11,172,102.03										15,187,176.92	11,172,102.03
Deferred income		76,537,795.29	32,788,688.50	3,459,993.02		1,061,368.25							81,059,156.57	32,788,688.50
Gross Profit Dt. Estate & Kwita Estate	22.23	-	-	39,438,719.61	53,345,505.84	20,699,322.98	27,150,560.14						60,138,042.59	80,496,065.98
Other Income Estate (Projects)	22.23,24,25	-	-	141,129.63	3,449,088.76	6,273,161.00	7,708,085.00	-	9,020.00	229,180.08	92,438.50	2,193,335.99	6,643,470.71	11,258,632.26
Special Capital Projects - MPI		62,019,951.82	45,929,463.79										62,019,951.82	45,929,463.79
Special Capital Projects - CF		29,811,774.63	13,621,719.62										29,811,774.63	13,621,719.62
NSF and other Projects	26	8,354,167.09	4,820,978.81										8,354,167.09	4,820,978.81
Total Revenue		595,610,865.75	480,632,952.75	43,039,842.26	56,794,594.60	28,033,852.23	34,858,645.14	-	9,020.00	229,180.08	92,438.50	2,193,335.99	666,913,740.33	572,387,650.99
Less: Expenses														
Wages, Salaries and employee benefits	14,15,14A,14B,14C	309,631,180.27	292,097,963.79	40,013,571.99	31,579,353.71	19,407,581.49	17,181,574.54	5,973,214.54	4,692,199.09	-	10,000.00	3,336,364.57	375,025,548.29	345,561,091.13
Grants and other transfer payments													-	-
Supplies and consumables used	16,14A,14B,14C	16,750,511.84	13,462,434.52	2,822,819.87	1,615,996.42	1,429,708.73	1,502,631.74	220,198.11	991,944.34	169,689.50	269,284.04	271,023.59	21,392,928.05	17,842,291.06
Depreciation and amortization expenses	17,14A,14B,14C	76,537,795.29	32,000,387.85	3,459,993.02	1,545,361.38	1,061,368.25	379,047.63						81,059,156.57	33,924,796.86
Maintenance of property, plant and equipment	14A	39,382,384.30	21,996,543.29	5,116,650.19	7,937,028.68	3,153,883.53							47,652,918.02	29,933,571.97
Other expenses	18,19,20,21,14A,14B,14C	90,916,459.60	96,478,387.79	1,772,330.55	760,598.08	317,116.51	258,196.72	866,025.51	179,836.00	93,169.39	121,815.00	103,221.75	93,965,101.56	97,798,833.59
Finance Costs	14A,14B	68,104.65	68,415.73	477,268.04	479,225.99	176,339.58	169,540.73						721,712.27	717,182.45
Other Expenditure Estate (Projects)	22.23			-		690,470.86	3,484,275.76	10,687.50	3,840.00				701,158.36	3,488,115.76
Special Capital Projects - MPI		62,019,951.82	45,929,463.79										62,019,951.82	45,929,463.79
Special Capital Projects - CF	20	29,811,774.63	13,621,719.62										29,811,774.63	13,621,719.62
NSF and other Projects	26	8,354,167.09	4,820,978.81										8,354,167.09	4,820,978.81
Total Expenses		633,472,329.49	520,476,295.19	53,662,633.66	43,917,564.26	26,236,468.95	22,975,267.12	7,070,125.66	5,867,819.43	262,858.89	401,099.04	3,710,609.91	720,704,416.66	593,638,045.04
Surplus/(Deficit) for the Period		(37,861,463.74)	(39,843,342.44)	(10,622,791.40)	12,877,030.34	1,797,383.28	11,883,378.02	(7,070,125.66)	(5,858,799.43)	(33,678.81)	(308,660.54)	(1,517,273.92)	(53,790,676.31)	(21,250,394.05)

**CONSOLIDATED CASH FLOW STATEMENT
FOR THE YEAR ENDED 31 DECEMBER 2019**

	2019		2018
	Rs		Rs
<u>Operating Activities</u>			
Surplus/Deficit		(53,790,676)	(21,250,394)
Non Cash Movements			
Add : Depreciations	76,537,795		33,924,797
Provision for Gratuity	36,511,447		20,214,974
Provision for bad debtors	(332,308)		178,420
Prior Year adjustment	(27,037,214)		(26,084,947)
Less : Interest on Investment	(430,189)		(34,037)
Deferred Income	(81,059,157)		(32,788,689)
Deferred Special and NSF			(64,372,162)
Net Cash Flow before working Capital Changes		4,190,374	(68,961,644)
<u>Working Capital Changes</u>			
Increase /(Decrease) Payables	38,253,074		(17,495,450)
(Increase) / Decrease other current Assets	(23,691,845)		34,426,069
Gratuity paid	(24,188,548)		(14,733,714)
Net Cash Flow from Operating Activity		(9,627,319)	2,196,906
<u>Investing Activities</u>			
Purchase of Property ,Plant and Equipment	(164,290,833)		(95,293,799)
Interest Income on Investment	430,189		27,915
Net Cash Flow from Investing Activity		(163,860,643)	(95,265,884)
<u>Finance Activities</u>			
Fund Received from Treasury for Capital Grant	80,500,000		87,000,000
Net Cash flow of NSF	5,396,201		3,040,123
Fund Received for Special Project	74,472,604		88,874,179
Net Cash Flow from Financing Activity		160,368,805	178,914,302
Net Cash Flow for the Year	-	(62,719,459)	(4,366,714)
Cash and Cash Equivalents at Beginning of the Year		120,362,526	124,729,240
Cash and Cash Equivalents at End of the Year		57,643,067	120,362,526

STATEMENT OF CHANGES IN NET ASSETS/EQUITY ENDED DECEMBER 31, 2019							
ATTRIBUTABLE TO OWNERS OF THE CONTROLLING ENTITY							
	Contributed Capital	Other Reserves	Translation Reserves	Accumulated Surpluses/(Deficits)	Total	Minority Interest	Total net Assets/equity Rs
Balance at December 31, 2017							
Changes in accounting policy	879,654,719.38	-	-	(482,349,191.43)	397,305,527.95	-	397,305,527.95
Restated balance							
Change in net asset/equity for 2017							
Gain on property revaluation							
Loss on revaluation of investments							
Exchange differences on translating							
Funds Received					-		-
Prior Year Adjustment				(26,084,947.48)	(26,084,947.48)		(26,084,947.48)
Net revenue recognized directly in net asset/equity	81,729,567.69			(482,349,191.43)	(400,619,623.74)		(400,619,623.74)
Surplus for the period				(21,250,394.05)	(21,250,394.05)		(21,250,394.05)
Total recognized revenue and expenses for the period							
Balance at December 31, 2018							
Carried forward	961,384,287.07	-	-	(529,684,532.96)	(431,699,754.11)	-	431,649,559.11
Balance at December 31, 2018 brought forward	961,384,287.07	-	-	(529,684,532.96)	431,699,754.11	-	431,649,559.11
change in net assets/equity for 2019	961,384,287.07	-	-	(529,684,532.96)	431,699,754.11	-	431,649,559.11
Loss on property Revaluation							
Gain on revaluation of investments	164,236,655.90				164,236,655.90		164,236,655.90
Prior Year Adjustment				(27,037,214.11)	(27,037,214.11)		(27,037,214.11)
Exchange differences on translating foreign operations							
	44,759,749.15			(503,853,184.13)	(503,853,184.13)		(503,853,184.13)
Net revenue organized directly in net assets / equity							(530,890,398.24)
Deficit for the period				(53,790,676.31)	(53,790,676.31)		(366,653,742.34)
Total recognized revenue and expenses for the period							(53,790,676.31)
Balance at December 31, 2019	1,006,144,036.22			(584,681,074.55)	421,462,961.67		(420,444,418.65)
							585,699,617.57

RUBBER RESEARCH BOARD OF SRI LANKA

Notes to the Financial Statements

1. Corporate Information

1.1 Reporting Entity

The Rubber Research Board (RRB) was established as a Public Corporation under the Rubber Research Ordinance. This Ordinance has been amended from time to time; the most recent introduction has been the “Rubber Research Bill Part II of April 2003 with the amendment No. 28”. The RRB coming under the purview of Ministry of Plantation Industries and the registered office of the RRB is located at Thelawala Road, Rathmalana.

1.2 Principal Activities and Nature of Operations

The Mission of RRB is to revitalize the rubber sector by developing economically and environmentally sustainable innovations and transferring the latest technologies to the stakeholders through training and advisory services.

1.3 Number of Employees

The number of employees of the RRB as at 31st December 2019 amounted to. 380. The comparative figure for the year 2018 was 386.

1.4 Financial Year

The Financial year of the RRB is the 12 months period ended by 31st December 2019.

1.5 Date of Authorization for Issue

The Financial Statements for the year ended 31/12/2019 of RRB were authorized for issue by the Board of Management on 20th February 2020.

2. Significant Accounting Policies

2.1 Basis of preparation of Financial Statements

The Financial Statement of the RRB is prepared in Sri Lankan Rupees on a historical cost basis and presented in Sri Lankan Rupees.

2.2 Statement of Compliance

The Financial Statement of the RRB has been prepared in accordance with the Sri Lanka Public Sector Accounting Standards (SLPSAS).

2.3. Assets and Basis of Valuation

2.3.1 Property Plant and Equipment are recorded at cost less depreciation in the financial statement.

The cost of Property Plant and Equipment are the market value or cost of purchase with any incidental expenses

- 2.3.2 Revaluation values of Motor Vehicles, Machinery & Tools, Laboratory Equipment, Audio Visual Equipment, Furniture & Fixtures, Office Equipment and Others Assets are recorded in the financial statements excluding Roads, Lands and Buildings.
- 2.3.3 Roads, Lands and Buildings are recorded at cost less depreciation in the financial statement due to non-receipt of revaluation values from Valuation Department.
- 2.3.4 Non biological assets of estates are shown separately in the financial statements.

2.4 Depreciation Policy

- 2.4.1 The depreciation for Fixed Assets are determined separately for each significant part of an item of Property, Plant and Equipment and begin to depreciate when it is available for use. Depreciation is not provided for lands.
- 2.4.2 The depreciation charges are determined separately for each significant part of an item of Property, Plant and Equipment and begin to depreciate when it is available for use.
- 2.4.3 The provision for depreciation is calculated at straight line method on the cost of all Property Plant and Equipment. The effective rates are as follows.

Description	Percentage
Buildings	2.50%
Intangible Assets	20.00%
Furniture, Fittings & Office Equipment	20.00%
Power & Water Supply	10.00%
Machinery & Tools	12.50%
Lab Apparatus	20.00%
Motor Vehicles	20.00%
Library Books	20.00%
Documentary Film	12.50%

Description	Percentage
Earth Slip Project	4.00%
Other assets	10.00%
Effluent Treatment Plant	4.00%
Audio Visual Equipment	20.00%
Road Development	10.00%
Solar Pannel - DF Estate	20.00%
CCTV Camera	20.00%
Surge Protection Device	20.00%
Rubber in bearing Df & k'wita	5.00%
Tea Replanting K'wita	5.00%
Replanting Cinnamon K'wita & Df	5.00%

2.5 Inventories

Inventories consist of spare parts, maintenance items, cleaning materials and stationery stock etc. are stated on Average cost basis.

2.6 Receivables

Receivables are stated at the amounts identified as active Debtors, receivables etc.

2.7 Provision for Bad and Doubtful Debts

Provisions for bad and doubtful debts is calculated and provided in the accounts as follows.

Period of outstanding	Provision Made
Less than one year	Nil
2015 to 2018	5.0%
Up to 2015	100.0%

2.8 Cash and cash equivalent

Cash and cash equivalent consists of Investment, cash at banks and cash in hand.

2.9 Conversion of foreign exchange:

Foreign currency has been converted at prevailing rates.

2.10 Retirement Gratuity

Provision has been made in the Financial Statements for retirement gratuities equivalent to an amount calculated based on a half month's

salary of the last month Financial Year of all employees for each completed year of service, commencing from the first year of service. However under the payment of Gratuity Act No 12 of 1983, the liability to an employee arises only on completion 5 years of continued service.

2.11 Government Grant

2.11.1 Recurrent Grant

The Recurrent Grant received from the government is reflected in the Income Statement as the source of income of the RRB.

2.11.2 Capital Grant

The Capital Grant received from the government has been set up as Deferred Income which is recognized as income on a systematic and rational basis over the useful life time of the assets. The acquisition of Property Plant & Equipment under the Capital Grant is Rs. 163,107,548.28.

2.11.3 Replanting subsidies have been set off against replanting expenditure and net amount has been represented in the balance sheet under fixed assets.

2.11.4 Other Grants

National Science Foundation (NSF) and Special Project Grants for the year 2019 have been shown under the Note No 26A and 26B. The amount equal to the expenditure for the year 2019 has been treated as NSF and Special Project Grants in the statement of Financial Performance.

2.12 Deferred Income

Deferred Income consists of the Capital Grant received from the General Treasury in the year 2019 for capital expenditure. The Deferred Income is recognized as income on a systematic and rational basis over the useful life time of the assets in case of capital grant and amortizes the deferred income set up for capital purchases.

2.13 Revenue Recognition

Institute generates Revenue from the following sources, and recognizes such revenues for accounting purposes on the accruals basis.

- (a) Testing and Analytical Fees
- (b) Seminars and Work Shops
- (c) Sale of Publications
- (d) Sale of Tapping Knives
- (e) Sundry Receipts

2.14 Expenditure

All expenditures are recognized on the accrual basis.

2.15 Adjustments made to the Cumulative Expenditure

Adjustment of Rs. 27,037,214.11 has been made to the cumulative expenditure account.

3. Legal Matters

Legal issues pertaining to matters of employees were pending at Courts as at 31st December 2019 are as follows.

4. Consolidation Policies:

4.1 The Rubber Research Board accounts comprise the consolidation of the activities of the R.R.I. Estates (plantations) managed by the Rubber Research Institute. i.e. Dartonfield Group & Kuruwita Estate.

4.2 The Rubber Research Institute and estates have a common financial year which ends on 31 December.

4.3 The profits and losses of the plantations have been taken in to the Rubber Research Institute surplus/deficit account and reflected in the balance sheet.

4.4 The project accounts have not been consolidated with the Rubber Research Institute accounts, since they are separate entities. However, the detail information of the projects have been shown separately and it has been reflected in the financial statements.

5. Non-Current Assets:

5.1 Lands

The Rubber Research Institute of Sri Lanka has ownership of all the lands except Galewatta, Kumarawatta (Monaragala) and Narampola (Alawwa).

5.2 Substation at Narampola (Alawwa) Kumarawatta (Monaragala)

5.2.1 Narampola (Alawwa)

The extent of this land is 106 Acres 02 Roods & 31 perches. This land was taken over on 14.12.2004 under MOU on a Rental agreement.

5.2.2 Kumarawatta (Monaragala)

The extent of the land is 50 acres and this was taken over from the JEDB on 19 September 2006 under MOU on 30 years Lease agreement.

	Case No.	Court / Institution	Applicant
01.	KT/18/517/216	Labour Court, Kalutara	Mr. L.P.K.W. Waliwatta

The cabinet approval has been obtained to acquire these Lands and the ownership will be transferred by the Ministry of Plantation

Industries (MPI) to RRB after completion of legal requirements with land Reform commission (LRC) and Janatha Estate Development Board (JED

5.2.3 Profit and Loss - Narampola (Alawwa), Kumarawatta (Monaragala) Substations

- (i) Narampola substation is established for the purpose of research and extension activities and it is still in developing stage.
- (ii) Kumarawatta (Monaragala) Substation has been established for Research and extension activities related to non-traditional Rubber growing areas including Northern and Eastern Provisions. RRI can't expect a profit from the substation as it is a small Land for research activities and cultivation.

6. Goods in Transits

The amounts of Rs. 824,676.82 is shown as Goods in transit for the year 2019.

7. Current Assets

7.1 Debtors & Other Receipts

The Surety Bond Debtors balance as at 31.12.2019 is Rs. **3,509,706.50** which has made up as follows.

Mr. H.H.Talgaswatta	-	38,402.56
Mr. S.M.C.E.Silva	-	1,635,005.85
Mr. Nalinda P Wickramasinghe	-	10,643.54
Mr. B.P.Weerarathna	-	<u>1,825,654.55</u>
Total		<u>3,509,706.50</u>

8. Research & Development Expenditure:

Research and development expenditure have been charged to departmental expenditure for the relevant period.

9. New planting /replanting /crop diversification expenditure

The above categories of expenditure have been capitalized in the accounts and depreciation will be made on maturity.

10. Categorizing Expenditure against Budget Format.

Laboratory Working expenses and Field Working expenses have been shown under Research and Development Expenditure in the Statement of Financial Performance. In the Budget Format, Laboratory working expenses and Field working expenses have been shown under Supplies and services respectively.

Other Operating Expenses are the value of services rendered from the estates (Dartonfield and Kuruwita) to the Rubber Research Institute except Rent for Narampola and Kumarawatta. These expenses are charged to the Rubber Research Institute from the Monthly accounts of Dartonfield and Kuruwita Estates. Labour Charges related to Institute activities have been charged to the relevant department expenditure votes.

RUBBER RESEARCH BOARD OF SRI LANKA
NOTES TO THE STATEMENT OF FINANCIAL POSITION AS AT 31ST DECEMBER 2019
NOTE 01 - LAND & BUILDINGS

ASSETS	Cost as at 01.01.2019 Rs.	Additional during the year 2019 Rs.	Vehicles Sales Rubber Came into Tapping Rs.	Total as at 31/12/2019 Rs.	Accumulative Depreciation as at 01.01.2019 Rs.	Depreciation for the year 2019 Rs.	Accumulated Depreciation as at 31/12/2019 Rs.	Written down value as at 31/12/2019 Rs.
Road Development Df.	10,726,428.59	7,719,748.22		18,446,176.81	1,050,465.05	1,072,642.86	2,123,107.91	16,323,068.90
Land - Df.	1,010,704.74			1,010,704.74	-		-	1,010,704.74
- N'kele	357,805.89			357,805.89	-		-	357,805.89
- Galewatta	1,865,476.48			1,865,476.48	-		-	1,865,476.48
- Kuruwita	732,681.96			732,681.96	-		-	732,681.96
- Rathmalana	270,760.81			270,760.81	-		-	270,760.81
Lease Land - Alawwa (55 years lease)	662,365.75			662,365.75	-		-	662,365.75
- Monaragala (99 years lease)	106,650.00			106,650.00	-		-	106,650.00
Buildings - Df. H.Q	68,251,621.85	36,708,987.26	501,820.00	104,458,789.11	10,155,031.08	1,867,943.84	12,022,974.92	92,435,814.19
- Auditorium	33,848,323.04			33,848,323.04	4,928,673.94	846,208.08	5,774,882.02	28,073,441.02
- Df. Estate	3,986,745.16	9,167,565.14		13,154,310.30	1,099,645.00	99,668.63	1,199,313.63	11,954,996.67
- N'kele	4,413,793.59	574,875.92		4,988,669.51	882,289.44	116,408.60	998,698.04	3,989,971.47
- Galewatta	815,733.74	30,948.45		846,682.19	172,522.47	20,949.30	193,471.77	653,210.42
- Kuruwita	5,950,434.04	1,404,736.90		7,355,170.94	1,158,684.94	161,438.80	1,320,123.74	6,035,047.20
- Rathmalana	20,731,095.01	29,585,675.37		50,316,770.38	5,620,414.51	630,682.12	6,251,096.63	44,065,673.75
- Alawwa	1,302,848.78			1,302,848.78	300,938.62	32,571.22	333,509.84	969,338.94
- Monaragala	14,897,068.52	102,047.00		14,999,115.52	3,391,525.21	374,523.57	3,766,048.78	11,233,066.74
Upgrading telecommunication	6,284,836.20	662,639.05		6,947,475.25	153,036.82	164,069.08	317,105.90	6,630,369.35
Intangible Assets								
Software	27,917,332.93	510,000.00		28,427,332.93	719,115.75	5,635,378.91	6,354,494.66	22,072,838.27
Solar Pannel - Df Estate		12,695,629.92		12,695,629.92		710,445.53	710,445.53	11,985,184.39
CCT V Camera		5,297,282.79		5,297,282.79		382,936.61	382,936.61	4,914,346.18
Surge Protection Device		4,799,742.00		4,799,742.00		927,433.29	927,433.29	3,872,308.71
Infrastructure, Plant and equipment								
Machinery & Tools - Df.	3,881,864.00	16,149,646.02		20,031,510.02		492,632.10	492,632.10	19,538,877.92
- N'kele	298,260.00			298,260.00		37,282.50	37,282.50	260,977.50
- Df. Estate	449,935.00	1,375,710.00		1,825,645.00		63,943.76	63,943.76	1,761,701.24
- Kuruwita	1,393,750.00	35,721.43		1,429,471.43		174,235.67	174,235.67	1,255,235.76
- Rathmalana	1,850,819.00	2,601,905.80		4,452,724.80		471,439.60	471,439.60	3,981,285.20
- Alawwa	207,500.00			207,500.00		25,937.50	25,937.50	181,562.50
Laboratory Equipments - Df.	53,560,176.00	18,727,109.98		72,287,285.98		12,788,590.35	12,788,590.35	59,498,695.63
- Rathmalana	57,119,466.00	467,650.04		57,587,116.04		11,464,750.07	11,464,750.07	46,122,365.97
- N'kele	8,520,490.00	50,964.00		8,571,454.00		1,708,342.67	1,708,342.67	6,863,111.33
Audio Visual Equipment	5,543,154.00	1,537,320.50		7,080,474.50		1,368,905.34	1,368,905.34	5,711,569.16
Effluent Treatment Plant	9,422,910.68			9,422,910.68	1,619,050.46	376,916.45	1,995,966.91	7,426,943.77
Motor vehicles - H.Q	58,592,969.00			58,592,969.00		11,718,593.80	11,718,593.80	46,874,375.20
- Df. Estate	2,154,000.00	56,205.00		2,210,205.00		441,100.76	441,100.76	1,769,104.24
- Kuruwita	900,000.00			900,000.00		180,000.00	180,000.00	720,000.00
- N'kele	4,750,000.00			4,750,000.00		950,000.00	950,000.00	3,800,000.00
- Rathmalana	30,965,000.00			30,965,000.00		6,193,000.00	6,193,000.00	24,772,000.00
Power & Water Supply - Df.	3,817,947.18	516,308.74		4,334,255.92	931,857.60	409,573.02	1,341,430.62	2,992,825.30

NOTE 01 - LAND & BUILDINGS

ASSETS	Cost as at 01.01.2019 Rs.	Additional during the year 2019 Rs.	Vehicles Sales Rubber Came into Tapping Rs.	Total as at 31/12/2019 Rs.	Accumulative Depreciation as at 01.01.2019 Rs.	Depreciation for the year 2019 Rs.	Accumulated Depreciation as at 31/12/2019 Rs.	Written down value as at 31/12/2019 Rs.
- N'kele	132,038.73			132,038.73	28,021.37	13,203.87	41,225.24	90,813.49
- Kuruwita	228,831.39			228,831.39	127,534.03	22,883.14	150,417.17	78,414.22
- Rathmalana	450,808.00	11,100.00		461,908.00	244,728.32	45,676.85	290,405.17	171,502.83
- Monaragala	1,695,132.00			1,695,132.00	1,104,076.02	169,513.20	1,273,589.22	421,542.78
- Alawwa	90,685.00			90,685.00	59,065.10	9,068.50	68,133.60	22,551.40
- Df. Estate		340,229.76		340,229.76		1,771.06	1,771.06	338,458.70
Furniture & Fixtures & Office Equipment - D	44,332,521.00	7,975,701.15		52,308,222.15		9,516,817.48	9,516,817.48	42,791,404.67
- N'kele	5,932,585.00	232,806.46		6,165,391.46		1,221,284.19	1,221,284.19	4,944,107.27
- Kuruwita	2,581,145.00			2,581,145.00		516,229.00	516,229.00	2,064,916.00
- Rathmalana	10,632,137.00	987,543.07	18,421.80	11,601,258.27		2,245,180.92	2,245,180.92	9,356,077.35
- Alawwa	172,875.00			172,875.00		34,575.00	34,575.00	138,300.00
- Df. Estate	845,150.00	364,432.69		1,209,582.69		211,809.37	211,809.37	997,773.32
- Monaragala	1,248,250.00			1,248,250.00		249,650.00	249,650.00	998,600.00
Others Assets - Df. H.Q	737,090.00	1,564,261.09		2,301,351.09		134,776.31	134,776.31	2,166,574.78
- Df. Estate	26,394,990.00	96,000.00		26,490,990.00		2,643,470.51	2,643,470.51	23,847,519.49
- Rathmalana	44,140.00	1,129,667.77		1,173,807.77		28,505.21	28,505.21	1,145,302.56
- N'kele	79,240.00	3,037.14		82,277.14		8,136.53	8,136.53	74,140.61
- Kuruwita	65,200.00	1,800.00		67,000.00		6,581.64	6,581.64	60,418.36
- Alawwa	130,800.00	35,333.33		166,133.33		13,564.02	13,564.02	152,569.31
- Monaragala	450,420.00	41,364.61		491,784.61		46,561.51	46,561.51	445,223.10
Library Periodicals Journals & Sub etc.	9,983,973.40	66,093.48		10,050,066.88	7,489,695.88	2,005,589.63	9,495,285.51	554,781.37
Rubber Replanting Df & K'wita	37,916,243.56	30,046.26	1,869,890.38	36,076,399.44			-	36,076,399.44
Rubber in bearing Df & k'wita	22,959,746.97	1,869,890.38		24,829,637.35		1,147,987.35	1,147,987.35	23,681,650.00
Tea Replanting K'wita	3,918,517.76			3,918,517.76		195,925.89	195,925.89	3,722,591.87
Replanting Cinnamon K'wita & Df	1,433,445.89		644,336.21	789,109.68		71,672.29	71,672.29	717,437.39
Replanting Pepper	106,848.01			106,848.01			-	106,848.01
Earth Slip Project	139,543.30			139,543.30	56,657.02	5,581.73	62,238.75	77,304.55
Documentary film	3,723.33			3,723.33	3,540.49	182.84	3,723.33	-
	-			-			-	-
Total	620,267,028.28	165,527,726.72	3,034,468.39	782,760,286.61	41,296,569.12	82,474,742.10	123,771,311.22	658,988,975.39

NOTE (02) OTHER FINANCIAL ASSETS

NOTE 2B -I KURUWITA

Description	Rs. 2019	Rs. 2018
Young Budding Nursery 2013	-	-
2007 Bud Wood Nursery		
Bud wood Nursery 2008		
Bud Wood Nursery 2011	36,795.39	36,795.39
2014 Young Bud wood Nursery	29,208.23	29,208.23
2007 BUD Wood Nursery	1,781.41	
Cinnamon Nursery	247,608.23	
Sub Total	315,393.26	66,003.62

NOTE 2B -II DARTONFIELD ESTATE

Description	Rs. 2019	Rs. 2018
2013/2014 Young Budding Nursery NK		-
G/W Young Budding Nursery 2014/2015		-
2018 Young Budding NS		243,648.04
Banana Trails - DF		15,488.73
SOR-Rubber Replanting Expenditure	8,016,824.18	-
Paper Trails - DF		92,439.76
Budwood Nursery NK		17,210.00
Budwood Nursery - GW	94,040.20	94,040.20
Cinnamon Nursery		
2013-2014 Young Budding Nursery	258,718.26	
Sub Total	8,369,582.64	462,826.73
Grand Total	8,684,975.90	528,830.35

Note 03
OTHER CURRENT ASSETS

Description	Schedule No.	RRI		K'wita Estate		Df. Estate		Total	
		Rs		Rs		Rs		Rs	
		2019	2018	2019	2018	2019	2018	2019	2018
Deposits	Schedule 04	754,944.57	661,323.57					754,944.57	661,323.57
Other Debtors	Schedule 05	1,286,278.99	2,803,029.97					1,286,278.99	2,803,029.97
General Debtors	566,224.71							-	-
		566,224.71	756,190.67					566,224.71	756,190.67
Debtors		4,752,954.70	3,726,632.33					4,752,954.70	3,726,632.33
Loan Receivable		4,722,437.14	3,505,956.93					4,722,437.14	3,505,956.93
Trade & Other Receivables	Schedule 07			1,036,439.37	290,277.04			1,036,439.37	290,277.04
Trade & Other Receivables	Schedule 07					10,231,366.60	5,554,150.74	10,231,366.60	5,554,150.74
Good In Transite A/C		824,676.82	31,172,353.95					824,676.82	31,172,353.95
Debtor's Clearance A/C		23,173,704.39	23,349,076.55					23,173,704.39	23,349,076.55
Less : Provision for bond debtors (Schedule 06)		(23,195,188.11)	(23,527,496.41)					(23,195,188.11)	(23,527,496.41)
(Inter Transaction Accounts - Current A/C)				7,480,235.30	3,869,276.60	17,131,058.45	5275730.53	-	9,145,007.13
		12,886,033.21	42,447,067.56	8,516,674.67	290,277.04	27,362,425.05	5,554,150.74	24,153,839.18	57,436,502.47

Note 04**INVENTORIES/STOCKS**

Location	Schedule No.	2019	2018
		Rs.	Rs.
RRI	Schedule 01	15,758,064.97	16,914,719.88
K'wita Estate	Schedule 02	351,520.23	330,056.48
Df Estate	Schedule 03	1,310,008.04	746,479.11
Total		17,419,593.24	17,991,255.47

Note - 04 A

WORKING PROGRESS

Description	2019	2018
	Rs.	Rs.
Renovation of Minor Staff Quarters, N. Kela	821,795.07	-
Construction of New washroom for Soil Department	68,379.91	-
Renovation of OI04 / MA 03,04,08 & 12	1,317,351.75	-
Extension to DDRT Office	801,060.00	-
Renovation of Guest House, RRISL	268,700.00	-
Construction of CEB Chamber	445,948.35	-
Renovation of Sport Club	304,455.00	-
Electrical Installation for Factory	4,079,338.78	-
Construction of Garage to Work Section	414,480.00	-
Rehabilitation of Land around Plant Science	317,950.00	-
Tiling of Factory Building	730,938.50	-
Extension to Work Section Building	19,290,943.76	-
Drain repair- Factory	434,611.00	-
Renovation of Tissue Culture Lab of Plant Science	332,368.99	-
Renovation of Admin Unit (Rathmalana)	572,632.00	-
Lab infrastructure development of RRISL	4,564,689.90	-
Total	34,765,643.01	-

NOTE 05 - RECEIVABLES

Description	2019 Rs.	2018 Rs.
RDD / ASD / RRI Control A/C.	316,121.70	208,295.19
RDD		261,000.00
Festival Advance	104,216.70	68,966.70
Travelling Advance	228,500.00	137,400.00
A.S.D.Building Complex	5,214,500.00	5,214,500.00
Special Salary Advance	4,400.00	400.00
Security Deposits	32,150.00	32,150.00
E T F	35,081.56	37,692.08
Insurance	(229,936.93)	(172,307.97)
Pre Payments T.Premaratne,Suranga Motors Ampara	150,000.00	150,000.00
Cheques and Cash Purchase Advance	220,704.24	373,631.91
Mobilization Advance & On Account Payment	19,028,570.64	3,858,188.75
Supplier and cash Advance A/C		223,801.26
Receivable A/c 03.51.06	5,380.29	97,404.00
Cash Advance Payment	4,009.71	
Total	25,113,697.91	10,491,121.92

Note - 06**INVESTMENT**

Description	2019	2018
	Rs.	Rs.
Bank Of Ceylon Agalawatta C/29 200835	200,000.00	200,000.00
National Savings Bank-City Branch A/C No.1-0002-04-5806-06	357,215.83	343,917.17
National Savings Bank-Matugama FD No.2-0045-01-58658	1,690.97	1,530.32
Total	558,906.80	545,447.49

Note -07 CASH AT BANK AND IN HAND

	Cash at Bank	Cash in Hand	2019 TOTAL Rs.	2018 TOTAL Rs.
Bank of Ceylon - Cor.Branch		-	-	62,561,640.68
A/C No.1837	36,676,147.36	-	36,676,147.36	-
Bank of Ceylon - Agalawatta		-	-	36,026,840.78
A/C No.335976	11,665,653.20	39,455.00	11,705,108.20	-
Bank of Ceylon - Agalawatta	5,836,674.19	-	5,836,674.19	5,442,071.74
		-		
Dartonfield Estate	1,913,364.32	2,068.59	1,915,432.91	13,782,571.67
A/C No.335978			0	-
Kuruwita Estate	753,266.18	31.00	753,297.18	2,003,953.77
A/C No.4320540			0	-
			-	
Fuel Coupons Imprest	197,500.00		197,500.00	
Total	57,042,605.25	41,554.59	57,084,159.84	119,817,078.64

Note 08

Payables

Description	Schedul No.	RRI		K'wita Estate		Df. Estate		Total	
		Rs.		Rs.		Rs.		Rs.	
		<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>	<u>2019</u>	<u>2018</u>
Creditors	Schedule 08	23,119,624.07	21,714,479.88					23,119,624.07	21,714,479.88
Payables	Schedule 08, 09, 10	7,005,330.05	1,500,590.42	3,579,631.60	3,400,672.48	10,856,294.57	9,831,278.87	21,441,256.22	14,732,541.77
				(Schedule 09)	(Schedule 09)	(Schedule 10)	(Schedule 10)		
Accrued Expenses	Schedule 11	50,012,561.76	21,577,127.85			-		50,012,561.76	21,577,127.85
Total		80,137,515.88	44,792,198.15	3,579,631.60	3,400,672.48	10,856,294.57	9,831,278.87	94,573,442.05	58,024,149.50

PROVISION FOR AUDIT FEE

Note - 09

Description	2019 Rs.	2018 Rs.
Beyond 2019.01.01	0.00	-
Provision for 2019	3,182,598.05	1,478,816.48
Total	3,182,598.05	1,478,816.48

PROVISION FOR GRATUITY

Note - 10

Description	2019 Rs.	2018 Rs.
RRI	114,210,233.50	107,680,114.00
Kuruwita	6,379,800.00	5,082,000.00
Dartonfield	20,342,700.00	15,868,300.00
Provision for Gratuity Polgahawela	950,600.00	981,120.00
Provision for Gratuity Monaragala	1,430,800.00	1,379,700.00
Total	143,314,133.50	130,991,234.00

Note - 11

Description	Schedul No.	2019	2018
		Rs.	Rs.
Accumulated Fund	Schedule 12	45,044,234.46	45,044,234.46
Other Capital Grants		294,377,422.20	219,904,817.99
Treasury Grants Capital		623,369,762.28	623,928,918.84
Treasury Grants for Special Capital Projects		(42,775,418.12)	
Treasury Grants -R & D expenditures for special capital projects			(13,621,719.62)
Treasury Grants Cess		79,828,035.40	79,828,035.40
Plantation Crop Development Fund		6,300,000.00	6,300,000.00
Total		1,006,144,036.22	961,384,287.07

Note 12

Description	2019	2018
	Rs.	Rs.
Deficit A/C Balance B/F 01.01.2019	(503,853,184.13)	(482,399,386.43)
Prior Year adjustment	(27,037,214.11)	(26,084,947.48)
	(530,890,398.24)	(508,484,333.91)
Revaluation A/C	164,236,655.90	
Deficit 2019 year	(53,790,676.31)	(21,250,394.05)
Total	(420,444,418.65)	(529,734,727.96)

Note-13 - OTHER INCOME - 2019

DESCRIPTION	TOTAL RS.	
	2019 Rs.	2018 Rs.
Interest On Institute Loans	153,277.57	120,120.80
Sales Of Publication	85,600.00	194,400.00
Bus fare Recoveries	288,742.00	280,831.00
Sundry Receipts	1,676,307.35	4,771,305.56
External heavy vehicles entering to RRI Premises	-	-
Effluent Treatment- B/C Dept.	86,650.00	39,700.00
Testing of Rubber - Polymer	-	334,875.00
Testing of Rubber - Rubber Technology	206,965.00	250,222.00
Testing of Rubber - RRP Dept.	249,100.00	-
Kuruwita Guest House Occupational Charges	2,750.00	11,050.00
Sale of Rejected Items	49,502.00	34,088.00
Soil & Foliar analysis Fee	274,118.30	-
Interest on Investments	430,189.41	34,036.81
Sale of Tapping Knives	-	24,090.00
Use of RRI Vehicles for Projects	297,681.26	254,887.80
Profit on Training Programmes	305,186.00	606,633.20
Guest House Income	48,040.00	4,758.00
Soil Foliar Survey	694,783.80	150.00
Waste Rubber of RRI Depts. Sold	-	-
Tapping Panel Making plants sale	100,375.00	98,500.00
Testing T.S.R.Samples	1,224,212.00	1,205,580.20
Testing and Analytical Fees Polymer Chemistry	576,250.00	510,500.00
Insurance claims Received Factory Fire	-	-
Auditorium Income	41,606.00	-
RRI Internal Timber Used	-	-
Sale of Bud wood Stumps	500.00	-
Claims Received from Insurance Corporation	-	-
Registration Suppliers	-	60,260.00
Testing fee Plant Pathology	-	-
Testing Fees - Plant Patho	-	-
Testing Fees - Plant Science	2,500.00	-
I.R.R.D.B.- Income	-	1,126,900.00
Other Sales	630,066.23	1,209,213.66
Symposium Registration Fees	7,720,200.00	
Testing Of soil Samples	42,575.00	
Salaries Control A/C	-	
Total	15,187,176.92	11,172,102.03

Note -14 PERSONAL EMOLUMENTS
EXPENDITURE STATEMENT - 2019

Research Departments	Emoluments	P.F.	E.T.F.	Medical Fund	Over Time	House Rent	Transport Allowance	Fuel Allowance	Total Rs.
Plant Science	15,758,114.58	2,427,401.62	446,605.69	3,017,392.17	584,524.96	72,281.42	604,420.00	192,120.00	23,102,860.44
Plant Pathology	9,287,296.36	1,154,355.95	230,871.18	1,377,159.04	308,811.38	54,257.09	600,000.00	192,120.00	13,204,871.00
Genetics & Plant Breeding	14,580,095.60	2,150,956.98	398,959.07	2,794,069.43	1,156,431.54	52,688.83	600,000.00	192,120.00	21,925,321.45
Soils & Plant Nutrition	11,493,673.83	1,641,594.33	328,318.86	1,998,895.63	431,109.71	55,865.00	624,193.54	199,958.70	16,773,609.60
Raw Rubber & Chemical Analysis	7,836,694.68	1,291,114.78	211,936.54	1,123,864.70	118,745.36	41,371.26			10,623,727.32
Bio-Chemistry & Physiology	5,469,873.95	738,078.74	147,615.74	880,014.68		20,832.00	617,741.93	183,108.38	8,057,265.42
Adaptive Research Unit	6,811,070.78	856,025.10	171,205.01	1,148,091.73	416,201.88	39,480.00	600,000.00	192,120.00	10,234,194.50
Rubber Technology	8,278,978.27	1,335,604.99	219,891.71	981,121.04	245,934.90	58,739.77	600,000.00	192,120.00	11,912,390.68
RRPD & CE Dept	6,633,162.02	1,073,577.02	191,721.14	1,194,907.98	371,655.37	49,377.42			9,514,400.95
Bio Metry	4,188,619.32	659,739.07	110,820.77	479,467.98	93,226.83	19,710.67	600,000.00	192,120.00	6,343,704.64
RRI New Advisory Services Dept	17,648,448.06	3,003,011.95	494,262.70	2,458,065.62	9,231.00	266,214.97	600,000.00	148,680.00	24,627,914.30
Training Center	1,002,188.23	137,109.03	27,421.81	210,765.30	24,254.04	3,598.71			1,405,337.12
Polymer Chemistry	5,886,466.75	751,707.11	150,341.42	1,094,722.56	31,512.11	40,620.00			7,955,369.95
Agriculture Economics	1,880,348.72	218,643.96	43,728.79	76,831.30		1,100.00			2,220,652.77
SUB TOTAL	116,755,031.15	17,438,920.63	3,173,700.43	18,835,369.16	3,791,639.08	776,137.14	5,446,355.47	1,684,467.08	167,901,620.14
Other Departments									
Library & Publication Unit	3,106,877.69	440,517.48	88,103.50	721,586.20	323,603.06	15,840.00			4,696,527.93
Director's Office	7,103,089.91	711,486.11	142,297.23	716,001.91	12,935.10	6,720.00	750,000.00	668,588.75	10,111,119.01
Internal Audit	2,279,530.10	276,633.89	55,326.78	382,218.18	10,523.00	18,034.67			3,022,266.62
Board Office	5,064,220.38	393,922.80	79,306.66	562,016.81	56,515.22	24,920.00		195,364.31	6,376,266.18
Administration	27,533,662.30	3,625,285.49	713,471.53	5,081,392.66	2,624,617.66	156,729.99			39,735,159.63
Finance (Accounts)	13,378,154.74	1,853,251.38	346,774.86	2,627,328.42	965,760.91	52,241.89	600,000.00	297,003.32	20,120,515.52
Stores	1,760,199.57	254,232.42	50,846.48	389,053.55	124,834.92	15,840.00			2,595,006.94
Maintenance (Work Section)	28,363,261.95	4,194,087.24	810,569.51	6,093,562.06	4,683,204.34	139,360.66			44,284,045.76
PP&MD-Audio Visual Unit -Emoluments									-
SUB TOTAL	88,588,996.64	11,749,416.81	2,286,696.55	16,573,159.79	8,801,994.21	429,687.21	1,350,000.00	1,160,956.38	130,940,907.59
Grand total	205,344,027.79	29,188,337.44	5,460,396.98	35,408,528.95	12,593,633.29	1,205,824.35	6,796,355.47	2,845,423.46	298,842,527.73

DARTONFIELD ESTATE EXPENDITURE

Note 14A

Wages, Salaries & Employee Benefits	2019		2018	
Salaries & Wages etc	7,679,989.39		7,048,592.80	
EPF	5,938,143.83		4,495,986.96	
ETF	1,505,301.12		1,123,996.74	
Medical	1,260,558.35		1,057,289.59	
L/Wages	20,233,519.09		15,303,788.07	
Holiday pay	3,270,210.21		2,424,999.55	
Attendance Bounds	125,850.00		124,700.00	
Total		40,013,571.99		31,579,353.71
Grants & Other Transfer Payment				
Supplies & Consumables Used				
Tools	36,709.00		24,990.00	
Rain Guard	2,287,682.36		396,642.70	
Stimulation	59,202.00		136,996.17	
Tapping Utensils	85,250.00		95,400.00	
Chemicals	352,810.51		931,757.48	
packing Materials	1,166.00		30,210.07	
Total		2,822,819.87		1,615,996.42
Depreciation & Amortization Expenses				
Fixed Assets	(3,459,993.02)		482,712.96	
Repenting	1,219,659.64		1,062,648.42	
Total		(2,240,333.38)		1,545,361.38
Maintenance of Property, Plant & Equipment				
Supervisory Vehicle	303,522.48		1,489,664.94	
Stationery & Communication	766,289.22		765,503.76	
Bungalows	713,278.35		830,204.49	
Lines	132,062.83		210,530.33	
Miner Building Up-Keep	23,944.35		221,706.80	
Weeding	1,871,726.62		2,896,990.97	
Marking	201,923.76		100,182.50	
Tapping Panel Treatment	9,900.00		59,050.00	
Latex (Transports)	477,401.38		697,141.43	
Fuel	292,928.93		218,414.76	
Factory Up-Keep	38,207.92		101,212.21	
Machinery Up-keep	60,251.70		48,080.58	
Factory Sundries	42,456.70		32,995.67	
Transport of Produce	182,755.95		265,350.24	
Total		5,116,650.19		7,937,028.68
Other Expenses				
Contingencies			138,137.41	
Welfare & Sports	57,933.81		50,752.58	
Audit Fee	211,641.73		184,036.29	
DE-Sanitations – Cost of sweepers Eel Co	428,995.69			
Other	1,073,759.32		387,671.80	
Total		1,772,330.55		760,598.08
Other Expenditure Estate (Projects)				
Finance Costs				
Commission Cash Transport/Insurance	471,575.06		420058.28	
Bank Charges				
Insurance	5,692.98		59167.71	
Insurance				
Total		477,268.04		479,225.99
Total Revenue expenditure		47,962,307.26		43,917,564.26

KURUWITA SUB STATION

Note 14 B

Wages, Salaries & Employee Benefits

Description	2019 Rs.	2018 Rs.
Emolument	3,101,283.93	2,759,242.74
EPF	1,557,568.44	1,462,670.60
ETF	389,392.11	365,667.65
Medical	584,105.64	429,743.86
L/Wages - Tapping/other sundries	12,657,337.96	11,087,382.85
Overtime pay / Holiday pay	1,072,880.91	1,025,933.51
Attendance bonus	45,012.50	50,933.33
House rent		
Total	19,407,581.49	17,181,574.54
Supplies & Consumables Used		
Tools	11,450.40	8,778.53
Rainguard	999,951.62	916,455.49
Stimulation	51,464.65	141,271.55
Tapping Utensils	61,335.00	97,970.00
Packing Materials		
Fuel		
Packing Materials	17,920.00	11,659.00
Chemical etc	287,587.06	326,497.17
Total	1,429,708.73	1,502,631.74
Depreciation		
Fixed Assets	(1,061,368.25)	305,587.69
Replanting	195,925.89	73,459.94
Total	(865,442.36)	379,047.63
Maintenance of Property, Plants & Equipment		
Supervisory Vehicle	693,378.58	558,175.49
Stationery & Communication	730,883.69	459,554.46
Bungalows	198,913.79	273,782.34
Lines	192,770.87	149,046.05
Minor Building upkeep	139,042.49	162,618.40
Weeding	733,910.35	1,154,929.37
Marking	86,500.38	178,532.63
Tapping panel treatment	34,720.00	15,770.00
Latex transport	54,405.00	58,015.00
Fuel	99,899.39	136,771.43
Factory upkeep		
Machinery upkeep	60,685.19	248,527.80
Factory sundries	49,637.29	45,664.20
Transport of Produce	79,136.51	42,888.59
Total	3,153,883.53	3,484,275.76
Other Expenses		
Contingencies	87,037.51	171,923.53
subscription & Visiting		
Welfare	24,440.00	29,148.00
Audit fee	65,693.97	57,125.19
Other Expenses	139,945.03	
	317,116.51	258,196.72
Finance Costs		
Legal		
Commission on Cash	124,080.39	121,009.83
Insurance	52,259.19	48,530.90
Total	176,339.58	169,540.73
Grand Total	23,619,187.48	22,975,267.12

MONARAGALA SUB STATION

Note 14 C

Description	2019		2018	
	Rs.		Rs.	
Emolument	5,028,962.16	5,973,214.54	4,146,333.49	4,692,199.09
EPF	828,196.98		480,361.68	
ETF	116,055.40		65,503.92	
Supplies & Other Consumables used	220,198.11	1,086,223.62	991,944.34	1,171,780.34
Other Expenses	866,025.51		179,836.00	
Total	7,059,438.16		5,863,979.43	

POLGAHAWELA SUB STATION

Note 14 C

	2019		2018	
	Rs.		Rs.	
Emolument		-	10,000.00	10,000.00
EPF				
ETF				
Supplies & Other Consumables used	169,689.50		269,284.04	
Other Expenses	93,169.39	262,858.89	121,815.00	391,099.04
Total	262,858.89		401,099.04	

Note-15 - TRAVELLING

Description	2019 Rs.	2018 Rs.
RESEARCH DEPARTMENTS	Travelling & Subsistence	
Plant Science	1,296,489.00	527,472.90
Plant Pathology	497,554.00	142,270.00
Genetics & Plant Breeding	1,263,430.00	751,017.86
Soils & Plant Nutrition	537,290.00	24,811.50
Raw Rubber & Chemical Analysis	60,628.00	116,360.07
Bio-Chemistry & Physiology		157,510.08
Adaptive Research Unit	282,705.05	108,810.00
Rubber Technology	222,112.55	207,292.00
RRPD & CE Dept	343,814.11	219,312.83
Bio Metry	39,608.00	48,427.50
Polymer Chemistry	106,750.50	96,956.75
Agriculture Economics	24,000.00	13,950.00
Sub Total	4,674,381.21	2,414,191.49

OTHER DEPARTMENTS	2019 Rs.	2018 Rs.
Library & Publication Unit	32,875.00	29,370.00
Director's Office	144,931.00	106,142.50
Internal Audit	87,969.00	50,642.00
Board Office	55,685.00	276,992.70
Administration	477,516.53	316,664.50
Finance (Accounts)	222,560.00	151,810.30
Stores	68,400.00	45,910.75
Maintenance (Work Section)	2,906,417.00	1,959,707.00
RRI New Advisory Services Dept	2,109,423.80	1,552,359.61
Training Centre	8,494.00	6,707.00
Sub Total	6,114,271.33	4,496,306.36
Grand Total	10,788,652.54	6,910,497.85

Note -16 - SUPPLIERS AND CONSUMABLES

RESEARCH DEPARTMENTS **OTHER EXPENSES**

Description	2019 Rs.	2018 Rs.
Plant Science	397,914.75	382,716.77
Plant Pathology	254,302.20	275,952.70
Genetics & Plant Breeding	260,617.21	353,393.60
Soils & Plant Nutrition	401,739.92	246,507.51
Raw Rubber & Chemical Analysis	1,128,695.21	274,292.14
Bio-Chemistry & Physiology	92,369.78	242,595.87
Adaptive Research Unit	248,245.29	272,648.84
Rubber Technology	45,170.47	268,873.93
RRPD & CE Dept	502,673.92	266,033.78
Bio Metry	15,807.94	13,974.49
Polymer Chemistry	522,810.28	255,364.13
Agriculture Economics	2,250.00	232,977.14
SUB TOTAL	3,872,596.97	3,085,330.90

OTHER DEPARTMENTS

Library & Publication Unit	53,414.53	102,112.46
Director's Office	56,057.13	33,355.40
Internal Audit	12,952.69	500.00
Board Office	448,244.90	43,386.77
Administration	2,880,277.48	470,994.43
Finance (Accounts)	21,685.56	49,694.00
Maintenance (Work Section)		389,264.58
RRI New Advisory Services Dept	315,545.52	497,281.46
Training Centre	442,600.93	579,534.57
Stores	44,950.07	36,945.39
Electronic Repair Unit		
SUB TOTAL	4,275,728.81	2,203,069.06
L.P gas for Bungalows	409,430.27	382,399.37
Fuel & Lubricants	7,116,055.19	6,193,347.23
Stationery and Office Requisites	479,897.77	1,130,824.84
Medical Expenses	596,802.83	467,463.12
SUB TOTAL	8,602,186.06	8,174,034.56
GRAND TOTAL	16,750,511.84	13,462,434.52

Note-17**CATEGORY OF ASSETS****Percentage****Rs.**

Description		2019 Rs.	2018 Rs.
Buildings	2.50%	4,314,463.24	2,839,564.33
Intangible Assets	20.00%	5,635,378.91	352,715.75
Furniture, Fittings & Office Equipment	20.00%	13,995,545.97	3,830,962.54
Power & Water Supply	10.00%	671,689.64	276,997.37
Machinery & Tools	12.50%	1,265,471.12	338,786.49
Lab Apparatus	20.00%	25,961,683.09	17,085,553.02
Motor Vehicles	20.00%	19,482,694.56	5,183,229.98
Library Books	20.00%	2,005,589.63	359,251.26
Documentary Film	12.50%	182.84	26.12
Earth Slip Project	4.00%	5,581.73	3,453.60
Other assets	10.00%	2,881,595.74	965,988.87
Effluent Treatment Plant	4.00%	376,916.45	325,160.84
Audio Visual Equipment	20.00%	1,368,905.34	176,533.28
Road Development	10.00%	1,072,642.86	1,050,465.05
Solar Pannel - DF Estate	20.00%	710,445.53	
CCTV Camera	20.00%	382,936.61	
Surge Protection Device	20.00%	927,433.29	
Rubber in bearing Df & k'wita	5.00%	1,147,987.35	
Tea Replanting K'wita	5.00%	195,925.89	
Replanting Cinnamon K'wita & Df	5.00%	71,672.29	
Total		82,474,742.10	32,788,688.50
Less:			
Replanting Depreciations		(1,415,585.53)	
Dartonfield Estate - Depreciation		(3,459,993.02)	(482,712.96)
Kuruwita Estates - Depreciation		(1,061,368.25)	(305,587.69)
		76,537,795.29	32,000,387.85
Less: Amortization		-	-
		76,537,795.29	32,000,387.85

Note-18 -**MAINTENANCE**

Description	2019 Rs.	2018 Rs.
Office & General Building Repair & Maintenance	947,291.70	1,517,736.92
Maintenance of Auditorium	110,589.40	167,679.39
Maintenance of Bungalows	5,787,185.13	2,974,332.34
Bungalow Premises & Compounds	2,861,133.06	8,066,357.38
Maintenance of Plant & Machinery	841,318.22	72,977.10
Furniture, Fixtures & Fittings	166,390.00	73,800.00
Institute General Building Premises & Compounds		862,838.53
RRI Ratmalana Building Premises Upkeep-Maintenance	10,732,589.28	323,258.92
Maintenance Tools	5,965.00	4,560.00
Maintenance of Computer (Note 32A)	3,592,509.82	1,901,274.20
Computer Network	465,343.50	851,060.61
Maintenance Of Computer -Agri. Econ.		25,900.00
BO-R.R.I Ratmalana Maintenance	90,911.00	
BO-RRI Photocopier Maintenance	350,772.50	
Operational Expenditure Vehicle	5,821,208.75	
Servicing of Vehicles		
Repairs & Maintenance		5,154,767.90
Total	31,773,207.36	21,996,543.29

Note-18 -**RESEARCH DEPARTMENTS**

Description	2019 Rs.	2018 Rs.
Plant Science	71,642.92	88,636.15
Plant Pathology	71,366.27	62,301.78
Genetics & Plant Breeding	52,917.74	62,321.76
Soils & Plant Nutrition	65,476.54	97,549.66
Raw Rubber & Chemical Analysis	176,949.90	-
Bio-Chemistry & Physiology	40,915.30	-
Adaptive Research Unit	51,970.10	33,928.17
Rubber Technology	62,280.99	15,900.00
RRPD & CE Dept	94,534.00	52,805.00
Bio Metry	444,840.26	123,280.51
Polymer Chemistry	70,362.54	33,959.00
Agriculture Economics	22,125.00	-

OTHER DEPARTMENTS

Library & Publication Unit	341,840.72	25,530.00
Director's Office	314,392.64	18,321.94
Internal Audit	33,124.65	26,368.50
Board Office	265,895.53	45,638.43
Administration	788,873.40	617,828.68
Finance (Accounts)	416,143.39	397,423.67
Maintenance (Work Section)	87,469.69	90,655.06
RRI New Advisory Services Dept	44,161.08	8,747.54
Training Centre		55,662.50
Stores	21,934.68	12,934.12
Audio Visual Unit	53,292.48	31,441.73
TOTAL	3,592,509.82	1,901,234.20

ADMINISTRATION - GENERAL CHARGES - 2019

Note-19 -

CONTRACTUAL SERVICES	2019 Rs.	2018 Rs.
Legal Expenses	365,097.00	333,558.00
Audit Fees	1,523,445.87	1,055,355.00
IRRDB Expenses	33,663.00	1,498,852.98
Entertainment Expenses	178,408.54	58,910.70
Entertainment Expenses	331,119.67	626,468.90
Environment Protection		
Insurance General Covers(Excluding vehicles)	1,986,877.98	2,299,627.94
Welfare and Recreation	332,900.78	301,587.23
BO-Fees for Staff Medical Examini Consul		
Conference/Seminars		
Bank Charges	68,104.65	-
Security Charges - RRI	2,030,209.67	1,516,398.06
Postage	191,944.00	214,745.34
Telephone	7,668,350.01	6,691,093.62
Advertisements	869,426.25	1,740,260.25
Transport & Handling Charges		1,051.32
Sundries & Utility Services	200,070.28	29,347.31
Staff Training & Development	4,896,324.37	8,492,987.27
Fees For Interview Panels	173,482.00	57,100.00
Provident Fund Expenses-RRI Component		28,625.00
Public Relations	18,506.55	13,801.04
Honorarium to Members Attending AMCOM	39,225.00	95,120.00
Honorarium to Members Attending for Board	640,340.00	472,832.80
Police Escort Expenses		
Photo Copier Maintenance		
Gratuity for the Year	24,118,967.50	19,898,154.00
Staff Gratuity Polgahawela	(30,520.00)	122,640.00
Staff Gratuity Monaragala	100,100.00	194,180.00
Power Supply & Maintenance	9,819,086.15	9,073,147.54
Water Supply & Maintenance	1,399,857.93	1,230,629.52
Revenue Licenses, Insurance Covers, Fitness fees &	336,120.20	533,741.63
External Vehicles Hired	1,414,877.53	1,702,948.00
Rent & Taxes	48,402.53	32,786.87
Operational Expenditure Vehicle		
Inland Revenue Stamp Duty	3,900.00	3,250.00
Sundry Expenses	859,172.99	479,182.24
RRI/TRI/CRI Symposium	9,515,966.95	
General Expenses BO	62,771.75	86,974.40
Library & Publication Unit-Working Expenses	1,453,974.22	502,825.00
Guest House – Hostel RRI D/F & Kuruwi	2,700,129.57	1,196,281.82
Subscriptions	117,310.00	170,308.50
BO-P.F. Maintenance	45,805.00	-
Administration Sundries	496,816.65	1,009,407.88
Bad Debtors & Doubtful Debtors	(332,308.30)	178,419.86
General Expenses DO	18,572.00	29,367.00
General Expenses OI	10,311.00	14,433.48
NRC Project	161,000.00	50,312.50
Rathmalana Stocks A/C Adjusment A/C	173,614.70	225,825.51
Stocks Adjusment A/C	556,860.05	1,970,494.60
AE-Working Expenses	6,950.00	
ARU-Working Expenses	4,967.00	
Working Exp BM	79,295.84	38,873.64
Working Exp G & PB	10,136.00	943.00
Working Exp LIB	240,596.83	329,088.83
Working Exp NAS	404,733.25	530,818.00
Total	75,344,962.96	65,132,756.58

Note -20 Research Departments

Description	Laboratory Working	Field Working	Total	Laboratory Working	Field Working	Total
	Rs. 2019			Rs. 2018		
Plant Science	310,945.60	2,432,514.38	2,743,459.98	278,835.68	3,447,242.36	3,726,078.04
Plant Pathology	2,229,006.24	619,844.24	2,848,850.48	1,092,310.05	701,826.22	1,794,136.27
Genetics & Plant Breeding	878,657.34	4,532,617.47	5,411,274.81	482,630.18	2,972,045.92	3,454,676.10
Genetics & Plant Breeding- Germplasm Project				5,654,744.14		5,654,744.14
Soils & Plant Nutrition	256,234.58	619,494.06	875,728.64	518,082.48	790,310.35	1,308,392.83
Raw Rubber & Chemical Analysis	278,385.76		278,385.76	762,686.04	28,611.19	791,297.23
Bio-Chemistry & Physiology	30,042.33	820,248.49	850,290.82	265,101.16	1,235,693.19	1,500,794.35
Adaptive Research Unit	70,610.00	377,618.04	448,228.04	2,220.00	95,667.80	97,887.80
Rubber Technology	262,583.74	5,000.00	267,583.74	884,969.87		884,969.87
RRPD & CE Dept	324,107.47	71,950.00	396,057.47	657,431.10	14,135.00	671,566.10
Bio Metry		4,754.14	4,754.14		21,742.24	21,742.24
Polymer Chemistry	128,699.94	1,000.00	129,699.94	614,185.91	2,611.24	616,797.15
Advisory Services Dept.			-		3,403.70	3,403.70
Rubber Re-Planting Ex.			-	3,544,190.47		3,544,190.47
Land & Land Improvment			-	42,900.00		42,900.00
Negenahira Navodaya	633,485.26		633,485.26	-	284,919.38	284,919.38
Northern Province Expenses	751,802.21		751,802.21	-	474,835.00	474,835.00
SUB TOTAL	6,154,560.47	9,485,040.82	15,639,601.29	14,800,287.08	10,073,043.59	24,873,330.67
NSF Expenditure						
EDB Project (T yre Center) - Ex	70,284.68		70,284.68			-
NSF Grant No. RG/2015/BT/01-EX	294,756.50		294,756.50			-
N.S.F. Grant RG/2016/AG/01- Expenditures	1,727,675.78		1,727,675.78			-
NSF Grant RG/2017/AG/01- Expenditures	1,965,023.83		1,965,023.83			-
ASD - UNDP Joint Project - EX	4,296,426.30		4,296,426.30			-
	8,354,167.09	-	8,354,167.09	-	-	-
Vote 23.02.15 Pest & Diseases	8,551,994.99	-	8,551,994.99	4,680,866.95	-	4,680,866.95
Vote 03.63G 60Million Project	14,814,428.17	-	14,814,428.17	14,814,428.17	-	14,814,428.17
Vote 03.63H Developing A Model Estate	35,689,337.41	-	35,689,337.41	17,544,184.08	-	17,544,184.08
Vote 03.63K Modification Of Fertilizer Recomm	2,107,119.82	-	2,107,119.82	1,400,719.98	-	1,400,719.98
03.63L Finite Element Analysing Center	7,344,264.61	-	7,344,264.61	7,344,264.61	-	7,344,264.61
Vote 03.63M Accreditation Of RRCA	548,327.00	-	548,327.00	145,000.00	-	145,000.00
SUB TOTAL	69,055,472.00	-	69,055,472.00	45,929,463.79	-	45,929,463.79
Vote 38.02.17 Carban Market	1,630,379.07	-	1,630,379.07	298,643.00	-	298,643.00
22.01.17 Intercropping	10,573,478.53	5,620,331.14	16,193,809.67	4,809,424.92	-	4,809,424.92
Vote 36.01.17 Low Intensity Harvesting	16,210,932.68	-	16,210,932.68	6,239,481.05	-	6,239,481.05
Vote 23.02.17 White Root Desiasies	188,301.71	-	188,301.71	2,274,170.65	-	2,274,170.65
SUB TOTAL	28,603,091.99	5,620,331.14	34,223,423.13	13,621,719.62	-	13,621,719.62
TOTAL	112,167,291.55	15,105,371.96	127,272,663.51	74,351,470.49	10,073,043.59	84,424,514.08

Note -21**OTHER OPERATING EXPENSES**

Description	2019	2018
	Rs.	Rs.
Medical Centre Labor	239,530.54	218,128.62
Sanitation		-
Roads, Fences & Boundaries	1,490,313.96	1,852,679.58
Watchmen & Gate Watchers	5,879,332.44	4,401,492.34
Total	7,609,176.94	6,472,300.54

Note 22

Description	2019		2018	
	Rs.		Rs.	
Sales of Rubber Kg 176136		39,169,929.61		53,963,485.84
2018.01.01 Stock kg 18,688		4,922,980.00		4,305,000.00
	141,129.63	44,092,909.61		58,268,485.84
2018.12.31 Stock (kg 23,464)		(4,654,190.00)		(4,922,980.00)
Gross Profit	268,790.00	39,438,719.61		53,345,505.84
<u>Add :-</u>				
Sundry Receipts			1,694,975.00	
Rubber Replant Subsidy	242,372.00		744,949.54	
Tea Green Leaf Sale	167,547.63		391,184.22	
Other Receipts			617,980.00	
Rain Guard Subsidy	-	141,129.63	-	3,449,088.76
		39,579,849.24		56,794,594.60
<u>Less :</u>				
<u>Expenses</u>				
Wages, Salaries and employee benefits (Note 14A)	40,013,571.99		31,579,353.71	
Supplies and Other consumables used (Note 14A)	2,822,819.87		1,615,996.42	
Depreciation and amortization expenses (Note 14A)	(2,240,333.38)		1,545,361.38	
Maintenance of property, plant and equip (Note 14A)	5,116,650.19		7,937,028.68	
Other expenses (Note 14A)	1,772,330.55		760,598.08	
Finance Costs (Note 14A)	477,268.04	47,962,307.26	479,225.99	43,917,564.26
Other Expenditure Estate (Projects) (Note 14A)		-		-
<u>Other Expenditure Projects</u>				
Tea Green Leaf Expenditure				
DE-Sanitations – Cost of sweepers Eel Co	428,995.69			
1980/93 Rubber Field Ex.		428,995.69		
Surplus for the period		(8,811,453.71)		12,877,030.34

Kuruwita Estate Working Account for the Year Ended 2019

Note 23

Description	2019		2018	
	Rs.		Rs.	
Revenue				
Sales of Latex & Scrap		20,699,322.98		27,150,560.14
Other Revenue				
<u>Add :-</u>				
Sundry Receipts	6,089,190.00		6,537,565.00	
Rubber Replanting Subsidy			1,170,520.00	
Sundry Income	183,971.00	6,273,161.00		7,708,085.00
Total Revenue		26,972,483.98		34,858,645.14
Less :				
Expenses				
Wages, Salaries and employee benefits (Note 14B)	19,407,581.49		17,181,574.54	
Supplies and consumables used (Note 14B)	1,429,708.73		1,502,631.74	
Depreciation and amortization expenses (Note 14B)	(865,442.36)		379,047.63	
Maintenance of Property, Plants & Equip (Note 14B)	3,153,883.53		3,484,275.76	
Other expenses (Note 14B)	317,116.51		258,196.72	
Finance Costs (Note 14B)	176,339.58	23,619,187.48	169,540.73	22,975,267.12
Rubber Replanting Kuruwita	189,510.65			
Cinnamon New planting Expenditure-KW	500,960.21	690,470.86		
Surplus for the Period		2,662,825.64		11,883,378.02

KUMARAWATTA ESTATE WORKING ACCOUNT FOR THE YEAR ENDED 2019

Note 24

Description	2019 Rs.	2018 Rs.
Sales of Income		9,020.00
Rubber Re-Planting Subsidy		-
<u>Less :-</u>		
Wages, Salaries and employee benefits	5,973,214.54	(4,692,199.09)
Supplies & Other Consumables used (Note 14C)	(220,198.11)	(991,944.34)
Other Expenses	(866,025.51)	(179,836.00)
Nursery Project Monaragala	(10,687.50)	(3,840.00)
Loss for the Year Rs.	4,876,303.42	(5,858,799.43)

NARAMPOLA ESTATE WORKING ACCOUNT FOR THE YEAR ENDED 2019

Note 25

Description	2019 Rs.	2018 Rs.
Rubber Sales	229,180.08	92,438.50
Rubber Re-Planting Subsidy	-	
	229,180.08	92,438.50
<u>Less :-</u>		
Wages, Salaries and employee benefits	-	(10,000.00)
Supplies & Other Consumables used (Note 14C)	(169,689.50)	(269,284.04)
Other Expenses	(93,169.39)	(121,815.00)
Rs.	(33,678.81)	(308,660.54)

NSF GRANTS OF SCHEDULES TO THE ACCOUNTS FOR THE YEAR ENDED 31.12.2019

Note 26

Description	Votes No.						
	03.30M	03.30X	03.30I	03.30U	03.30Y	42.01.15	Total
Opening Balance		1,110,749.52	356,001.00	386,761.71	1,227,928.39	6,842,947.00	9,924,387.62
Add :							-
Fund Received		695,116.00			1,563,925.00	3,137,160.00	5,396,201.00
							-
	-	1,805,865.52	356,001.00	386,761.71	2,791,853.39	9,980,107.00	15,320,588.62
Less :							
Expenditure for the Year 2019		1,727,675.78	-	386,761.71	2,163,023.83	4,296,426.30	8,573,887.62
Fund Transfer to NSF							-
	-	1,727,675.78	-	386,761.71	2,163,023.83	4,296,426.30	8,573,887.62
Balance as at 31.12.2019	-	78,189.74	356,001.00	-	628,829.56	5,683,680.70	6,746,701.00

NSF GRANTS OF SCHEDULES TO THE ACCOUNTS FOR THE YEAR ENDED 31.12.2019

Note 26B

Description	Vote 23.01.15 Pest & Dieases	Vote 03.63G 60Million Project	Vote 03.63H Developing A Model Estate	Vote 03.63K Modification Of Fertilizer Recomm	03.63L Finite Element Analysing Center	Vote 03.63M Accreditation Of RRCA	Vote 03.63 P EDB Project (Tyre Center)	Total
Opening Balance	4,133,558.87	65,995,804.47	39,962,651.99	20,182,516.82	49,772,590.00	2,600,000.00	0.00	182,647,122.15
Add :								0.00
Fund Received	2,900,000.00		36,764,774.00	6,707,650.00		15,400,000.00	25,000,000.00	86,772,424.00
	7,033,558.87	65,995,804.47	76,727,425.99	26,890,166.82	49,772,590.00	18,000,000.00	25,000,000.00	269,419,546.15

SCHEDULE TO THE STATEMENT OF FINANCIAL PERFORMANCE AS AT 31ST DECEMBER 2019

INVENTORIES/ STOCKS - RRI

SCHEDULE 01

	2019	2018
	Rs.	Rs.
Stock - Dartonfield	4,654,190.00	4,922,980.00
Stock - Rathmalana	1,152,728.86	617,080.68
Stationary	605,380.83	470,453.03
Stock - General	8,192,246.86	9,780,419.75
Stock in obsolete	489,004.07	489,004.07
Non Moving Stock	434,249.35	434,249.35
Monaragala Stock	160,854.00	123,014.00
polgahawela Stock	69,411.00	77,519.00
Total	15,758,064.97	16,914,719.88

SCHEDULE 02 - KURUWITA ESTATE STOCK

Fertilizer	2019		2018	
	Qty.(kg)	Rs.	Qty.(kg)	Rs.
Sodium bi sulphate			25 kg	7,255.48
Sulphate of Potash			5 kg	734.40
Fomic acid	35	11,639.15	105 Ltrs.	33,900.70
Sodium sulphate			50 kgs	17,812.07
L.P.Gas	1	1,524.00	1 No.	1,775.00
China Clay			150 kg	2,992.35
Polythene	496.9	159,642.92	147 kgs	48,247.94
Poly bags	10000	43,411.20	25000 Nos.	58,411.20
T/Cells			6 Nos.	360.00
Tapping Knives	1	565.00	2 Nos.	1,130.00
Timber	160.91	37,042.17	1846.5 Ft	115,477.17
Ethanol			12 Ltrs.	10,296.00
Petrol	20	2,922.32		
U 709			350"	7,816.67
Weedicide			8 Ltrs.	19,000.00
Equl Broom	1	133.54	5 Nos.	650.00
E/Bulbs			11 Nos.	930.00
CFL Bulbs			3 Nos.	1,672.50
Cement			2 Nos.	1,595.00
Urea	150	2,786.93		
M.O.P	150	2,786.93		
Dolomite	500	43,897.75		
U 709	1000	21,666.67		
Cinnamon Mixture	1000	21,079.55		
Firewood	7	2,422.10		
Total		351,520.23		330,056.48

SCHEDULE03 - STOCK VALUE - DARTONFIELD ESTATE

Item	2019		2018	
	Qty (Kg)	Value (Rs)	Qty (Kg)	Value (Rs)
Formic Acid			35 Lits	11,300.18
Dolomite			512 Kg	33,397.73
RU 465 N.P.K.			5502 Kg	228,786.20
Tar	2835 Ltrs	167,268.59	2855 Ltrs	167,268.59
Coir Brooms			4 Nos	520.00
China clay	100 Kg	16,686.52	100 Kg	16,686.52
Poly Bags	28750 Nos	71,105.43	28750 Nos	71,105.43
Etheral			24 Litr	20,592.00
Fire Wood	16 Yrds	28,660.21	35 Yrds	15,658.41
Eckel Brooms			-	-
Polythene rain guard	2725 Kg	860,341.87	140 Kg	46,098.37
Timber 3" x 4"	1,467.7 Ft	51,803.25	1,466 Ft	51,803.25
Timber 3" x 5"				
Timber				
Timber 2" x 4"				
Timber 2" x 2"				
Timber 1" x 9"				
Timber 1 1/8" x 4"				
Timber 2" x 1"				
Timber 2" x 2.5"				
Timber 1" x 1/8"				
Timber 2"x 1 1/2"				
Gutter Box			4 Nos	2,783.76
Gutter (Color)			60 Nos	7,440.60
U.709			450 Kg	21,770.85
Rain guard sealent	505 Kg	58,941.80	452.8 Kg	51,267.22
LDPE 600X300Polythene			-	-
Fertilizer	1233	55,200.37		
Total		1,310,008.04		746,479.11

SCHEDULE 04**DEPOSITS**

Description	2019 Rs.	2018 Rs.
Telecom	6,000.00	6,000.00
Electricity	90,500.00	90,500.00
Post Master General	50,327.57	6,706.57
New Bambalapitiya Service Station	4,000.00	4,000.00
Ceylon Oxygen Co. Ltd.	113,316.00	113,316.00
Tender	2,000.00	2,000.00
Lanka Filling station-Narahenpita	15,000.00	15,000.00
Leo Freight Services(Pvt) Ltd	3,801.00	3,801.00
M.P.C.S. Matugama (Fuel)	300,000.00	250,000.00
M.P.C.S. Moratuwa (Fuel)	50,000.00	50,000.00
S.P.Lanka Petroleum (Pvt) Ltd	70,000.00	70,000.00
B.K.S. Filling Station,Moratuwa	50,000.00	50,000.00
Samaranayake & Samaranayake		
Total	754,944.57	661,323.57

Description	2019 Rs.	2018 Rs.
SCHEDULE 05		
OTHER DEBTORS		
Mr.Thurul Warnakula	936,278.34	936,278.34
Mr.D.E.D.E.I.N.Perera	350,000.65	350,000.65
Mrs. Dilini Galpaya-DR		1,516,750.98
	1,286,278.99	2,803,029.97
TRADE DEBTORS		
General Debtors	566,224.71	756,190.67
SUNDRY DEBTORS		
Provident Fund Control A/C RRI	(226,902.09)	2,385,663.00
Interest Receivable	11,132.88	11,044.52
Handy Craft Project	57,235.25	57,235.25
N.S.F.Grant RG/2012/AG/06		37,725.56
RRI/TRI/CRI Symposium		1,234,964.00
Fund Receivable from Model Estate Project	4,115,698.66	
Other Receivables	795,790.00	
Total	4,752,954.70	3,726,632.33
LOAN RECEIVABLES		
	2019	2018
Motor Car / Motor Car Repair Loan	76,250.00	136,250.00
Motor Cycle Loan	29,166.55	39,166.51
Personal/Distress/Study Loan	238,580.96	134,546.68
New Personal Loan	4,307,614.95	2,599,541.34
Staff Medical Fund Loan	(35,327.00)	
Loan Receivables - Disaster Loan	106,151.68	596,452.40
Total	4,722,437.14	3,505,956.93
Note		
Bond Debtors	Balance as at 31.12.2019	Balance as at 31.12.2018
H .H. Thalgas watta	38,402.56	38,402.56
B.P.Weera rathna	1,825,654.55	1,825,654.55
SMCE Silva	1,635,005.85	1,635,005.85
Nalinda P Wicramasinghe	10,643.54	10,643.54
Total	3,509,706.50	3,509,706.50

SCHEDULE 06**DOUBTFUL DEBTORS**

Rs

Period of outstanding	Description	Balance	Provision Made	Provision
Less than one year	Other Debtors	1,286,278.99	Nil	
	General Debtors	566,224.71	Nil	
	Debtors	4,752,954.70	Nil	
2015 to 2017	General Debtors	756,190.67	5%	37,809.53
	Debtors	3,726,632.33	5%	186,331.62
Up to 2015	Debtors	23,173,704.39	100%	23,173,704.39
Total		34,261,985.79		23,397,845.54

KURUWITA ESTATE TRADE & OTHER RECEIVABLE

SCHEDULE 07

Description	2019	2018
	Rs.	Rs.
Check Roll Debts	35,959.84	15,564.37
Festival Advance (Staff)	127,400.00	130,000.00
Deposit A/c	21,788.00	35,728.94
Postage	313.00	443.00
St.Joachime Estate	76,840.28	63,902.83
Sundry Debtors	9,176.49	9,176.49
Paper Project		22,971.09
Electricity Bills Receivables	6,743.44	12,090.32
Book Allowance	400.00	400.00
Advisory Service	32,453.22	
G&PB Dept	110,657.74	
P.S. Dept VOTE 99	375,204.64	
P.S.DEPT - Perrenial crop	69,760.38	
P.S.DEPT Density trial	50,440.61	
PAYMENT ADVANCE	3,230.00	
P.P. Dept	90,782.74	
P.S. Dept Vote No 4	24,340.33	
SOILS & PN Dept	948.66	
	1,036,439.37	290,277.04

**DARTONFIELD ESTATE
TRADE & OTHER RECEIVABLE**

Description	2019	2018
	Rs.	Rs.
Check Roll debtors	53,787.06	53,195.84
Deposit A/c (Df)	2,690.00	2,690.00
National Institute of Plantation Management	66,066.14	66,066.14
Postage Stamp	140.00	140.00
Pry Month Rubber Industries	6,100.00	6,100.00
Tamil Festival Advance	12,300.00	12,300.00
Vogen Estate	125,034.95	191,949.77
Festival Advance Christmas	18,809.09	108,400.00
Factory chemical Balance	26,226.91	28,610.74
Co-Operative Society	16,125.00	16,125.00
Special Salary advance	46,189.36	46,189.36
Special Festive Advance	4,550.00	4,550.00
Kuruwita Sub Station	2,132,040.85	359,000.00
Festival Advance 18/19 (Df)	354,763.88	266,750.00
Payment in advance	70,000.00	14,961.73
Festival Advance -Deepavali	562,000.00	582,000.00
Other Receivable		527,000.00
Festival Advance - Sinhala	2,400.00	10,000.00
Receivable A/c	2,088,776.48	3,258,122.16
Funeral Funds	200.00	
Elhena Tea Factory	65,420.00	
Polgahawela Sub Station	1,105,710.09	
JD & SONS (PVT) LTD	3,472,036.79	
	10,231,366.60	5,554,150.74

SCHEDULE 08

Description	2019 Rs.	2018 Rs.
Creditors Ledger Control A/C (C L C)	6,151,641.71	5,565,110.85
<u>SUNDRY CREDITORS</u>		
Biometry Project - Climate Change on Rubber	5,637.68	16,338.28
Canteen Deposits	13,500.00	13,500.00
Carbon Market Project	118,108.57	118,108.57
Centre for Poverty Analysis	1,841.25	1,841.25
Contract Deposits	15,350.00	15,350.00
Divineguma B461	1,063,933.42	1,063,933.42
G.S.I.Mapping of Tea & Rubber Lands on Galle Dis.	155,000.00	155,000.00
Humate Plus Experiments	22,101.50	22,101.50
I.R.R.D.B.Plant Breeding Workshop	294,552.18	294,552.18
Insurance Claim Received	19,285.71	19,285.71
Intercropping Research (Sadaharitha Plantation)	87,243.75	87,243.75
Medical Fund Reserve RRI Staff	709.00	-
Moratuwa University	1,025,768.00	1,025,768.00
National Science Foundation NSF/RAP/2001/RRI/01	705.96	705.96
National Workers Congress	67,497.50	67,497.50
NSF - PG/99/C/7		5,637.68
NSF - SIDA/98/EP01	95,014.85	95,014.85
Payee Tax	412,240.56	141,777.67
Plant Science Intercropping Unit (Essex U.K)	21,731.55	21,731.55
Plantation Development Project		328,819.09
Postgraduate Institute of Peradeniya	24,640.00	24,640.00
Provident Fund Account - RDD	242,328.00	134,501.49
R.D.D.Kegalle	23,318.75	23,318.75
RDD (Salary Arrears)	92,837.57	92,837.57
RDD Nursery - Gampaha	45,000.00	45,000.00
RDD Staff Payments & Recoveries Control A/C	1,621.72	1,621.72
Receipt in Adv(Welfare)	595.00	595.00
Receipt in Advance (stamp)	271,645.00	271,645.00
Receipt-in -Advance A/C (J.I C.A)	208,297.09	208,297.09
Ru: Ban: Intercropping Programme Ecology UK (D F I D)	542,618.53	542,618.53
Staff Fire Wood A/C	10,813.24	10,813.24
Tender Deposits	4,262,480.81	3,887,624.34
Vitex Project	9,288.79	9,288.79
White root Diseases Research Project Sweden	25,717.80	25,717.80
Sundry Creditors	2,694,065.04	2,308,355.63
Creditors Clearance A/C	4,455,765.03	4,455,765.03
Staff Creditors	345,390.23	337,522.09
Sloar Assisted Sheet Rubber Dryer	275,000.00	275,000.00
Receipt In Advance - Sundries	16,338.28	
Total	23,119,624.07	21,714,479.88
<u>PAYABLE</u>		
Rent Payable		-
Abetment - Payable A/C	6,650.00	9,100.00
Retention Payable A/C	6,992,986.85	1,485,797.22
Lease Rental Payable A/C Kumarawatta, Narambola	5,693.20	5,693.20
Payable	7,005,330.05	1,500,590.42

SCHEDULE 09 -KURUWITA - PAYABLES

Description	<u>2019</u> <u>Rs.</u>	<u>2018</u> <u>Rs.</u>
Check Role Wagers - Kuruwita	1,057,580.00	1,274,390.00
CEB		
Sri Lanka Telecom Ltd	4,699.84	4,600.07
EPF Payable	385,508.52	338,429.47
ETF Payable	52,569.38	46,149.51
Holiday Pay	703,170.00	693,890.00
Attendance Bonus	45,012.50	50,933.33
Festival Advance		6,600.00
Dartonfield Group	704,446.05	70,973.80
Death Donation Welfare		
Deposits		
Kuruwita Substation		312,500.00
Ceylon Electricity Board	30,139.17	28,450.64
L.K.S.Rubber Stores	31,060.00	9,000.00
Palawela Rubber Stores	10,250.00	7,125.00
Prasad Hardware	10,213.00	5,570.00
Kuruwita M.P.C.S	45,515.00	54,748.00
S.L.N.S.S		
Agroserve		
Vishwa Shakthi Welfare	38,400.00	28,350.00
Accrued expenditure	20,751.45	14,786.70
Un paid coins A/C	51,217.62	51,119.42
Profit Bonus		
Bank Loan		
Sundry Creditors	29,080.00	27,530.50
Palanda Hardware	19,156.00	24,715.00
Motor Cycle Loan - staff		
Personal Bank Loan	173,800.00	137,300.00
Nidahas Sewaka Sangamaya	120,810.00	9,360.00
Suspence A/C- DF		204,151.04
Chamanex PLC	44,453.07	
New kuruwita Traders	1,800.00	
Total	3,579,631.60	3,400,672.48

SCHEDULE 10 - PAYABLES

Description	Rs. 2019	Rs. 2018
Attendance Bonus	131,800.00	132,450.00
Agalawatta Auto Service - DF	23,150.00	5,650.00
C.P.M.S.U.	14,300.00	7,400.00
C.S.C.& W.U.	570.00	570.00
Chanlo Hardware	30,655.00	11,125.00
Check Roll Debts - Df	5,029,490.00	4,928,200.00
Commission on Cash Transport	115,156.49	20,982.80
E.P.F.	1,486,396.52	886,542.80
E.T.F.	202,690.47	148,731.11
L.J.E.W.U.	32,232.00	16,864.00
Holiday Pay	2,113,532.52	1,531,133.25
Janatha Fertilizer Enterprises	298,577.50	298,577.50
Kovil Fund - Dartonfield	18,000.00	44,000.00
Kovil Fund - Galewatta	25,400.00	50,200.00
National Savings Bank	21,300.00	16,550.00
New Paper Agent	3,410.00	2,280.00
NUW	1,200.00	2,100.00
PND Construction Pvt Ltd	8,050.00	8,050.00
Poly pac secco Ltd.	688,781.28	688,781.28
Welfare Society -NK	15,800.00	52,850.00
Unpaid Wages	226,343.96	218,149.38
Refundable Deposits	42,796.00	42,796.00
RRI Canteen	13,490.00	4,550.00
Samaranayaka & Samaranayaka	500.00	9,555.00
Sri Lanka Nidahas Sewaka San DF	4,650.00	1,920.00
State Mortgage Bank	80,290.00	80,290.00
Sundry Creditors	41,540.00	170,711.00
Udaya Printers		660.00
Unpaid coins	3,736.86	3,439.53
Vishwashakthi Welfere	44,400.00	43,750.00
Welfare Society - H.O		83,000.00
Wijegunawardana & Sons	59,530.00	40,665.00
Polgahawela Substation		278,755.22
Chemenex PLC	32,559.10	
Personal Loan Staff	2,766.87	
Welfare Society GW	43,200.00	
	10,856,294.57	9,831,278.87

Schedule 11**Accrued Expenses**

Description	Rs.	Rs.
	2019	2018
Accured Expenses	4,828,925.52	10,290.00
Overtime 2019 December		1,117,961.88
Travelling & Subsistence 2019 Dec		914,261.34
Suppliers Payable A/C	7,362,977.08	10,912,023.72
Contract Payable A/C	37,027,564.96	7,836,127.71
Other Paybles	6,631.00	786,463.20
B.O.C.-Agalawatta-ARC	26,832.71	
Cancelled Cheque - Payble A/C	12,306.00	
Cost of Living Payble A/C -2006-2011	480,860.00	
Dialog Axiata PLC-ARC	4,489.55	
E.P.F.-ARC	2,861.42	
Kanrich Finance Ltd	9,000.00	
Mr.L.P.P.Vitharana-ARC	1,800.00	
Mr.R.A.D.Ranawake-ARC	15,799.82	
Mrs.W.D.D.Prasadini-ARC	3,000.00	
Newchatel Estate-Neboda-ARC	229,513.70	
	50,012,561.76	21,577,127.85

Schedule 12 **OTHER CAPITAL GRANTS**
Other Capital Grants

Accumulated Fund	Value as at 31.12.2019 Rs.
O.D.A. Grant	5,606.79
Government Grant	1,556,097.28
Australian Grant	165,221.00
World Bank Grant	4,739,779.82
UNDP Grant	2,571,866.95
UNICEF Grant	10,000.00
CRI /TRI Grant	334,058.64
NARESA Grant	1,345,912.39
UNDP Research Grant	2,510,441.46
Tea Board Grant	445,343.40
SRRP I Grant	12,624.52
ARP Project	4,578,055.64
CARP Grant	54,738.94
Treasury Grant (Motor Vehicles)	15,375,000.00
Medicinal Plant Project Grant	15,624.46
NERESA Grant	5,600.00
SRRP II - Grant	7,644,391.73
Treasury Grant (Capital)	8,893,721.84
N.S.F. Grant	1,487,616.70
D.F.I.D. Grant	49,151.93
Staff Grant Comfort room	10,272.93
European Union Grant	9,693.90
Centre for Poverty	2,221.03
Environment Project Phase II	3,489.70
Climate Change Project	3,445.16
3rd Symposium Grant	24,621.87
A.F.National Research Council	329,781.12
Divineguma	545,240.32
International Foundation for Science	73,536.00
Agricultural Research	12,542,595.30
White root Disease	4,620,000.00
Special Project Other Grant	8,958,000.00
NSF and Other Grants (Total)- Note 38A	6,746,701.00
Special Capital Project - MPI- Note 38B	208,706,970.38
	294,377,422.20

***Labour rates and break down of cost of production from 2015 to 2019 (Rs/Kg) in
Dartonfield estate***

	2015	2016	2017	2018	2019
1. Labour wages	687.50	687.50 up to Sept.805 from Oct.	805	805.00	805.00 up to Jan.and 855.00 from Feb.
2. Cost of production	270.57	241.13	280.55	268.43	330.91
2.1 Tapping	113.94	116.46	122.77	115.63	139.94
2.2 Manufacture	36.43	32.35	34.47	33.08	35.35
2.3 General charges	103.07	74.43	97.29	98.10	124.18
2.4 M/area upkeep	17.13	17.89	26.02	21.62	31.44
3. N.S.A.	255.26	234.84	319.00	255.44	276.22
4. Profit per kg	(15.31)	(6.29)	(38.45)	(12.99)	(54.69)

***Labour rates and break down of cost of production from 2015 to 2019 (Rs/kg) in
Kuruwita estate***

	2015	2016	2017	2018	2019
Labour rate	687.50	Jan. - Nov. 687.50 From December 805.00	805.00	805.00	805.00 up to Jan.and 855.00 from Feb
Cost of production	191.21	179.27	250.01	279.36	337.71
Tapping cost	87.77	89.65	99.08	108.80	134.74
Manufacturing	22.14	21.49	32.65	36.33	33.11
General chargers	64.72	54.48	92.38	97.16	135.40
Field & cultivation cost	16.58	13.65	25.90	37.07	34.47
N.S.A	207.86	217.11	294.18	244.89	263.54
Profit per kg.	16.65	37.84	44.17	(34.47)	(74.17)