

Rubber Research Institute of Sri Lanka



Action Plan 2024



RUBBER RESEARCH INSTITUTE OF SRI LANKA

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Introduction

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 showing 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 having the statutory responsibility for research and development (R & D) on all aspects of rubber cultivation, processing and product development for the benefit of the rubber industry. The institute carries out R & D on agronomy and biology of the crop, the chemistry of natural rubber and technologies of product manufacture together with environmental and socioeconomics aspects of all subsections. Further, the institute is committed towards technology transfer activities and training of extension personnel and 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 and Technology Departments i.e. Raw Rubber Process Development & Chemical Engineering, Raw Rubber & Chemical Analysis, Polymer Chemistry and Rubber Technology & Development. Technology transfer is carried out by the Advisory Services Department together with the unit/section of Adaptive Research, Biometry, Agricultural Economics and Audio Visual & Information Technology. Administration department, Accounts section and Works section support the R & D activities conducted by the above departments and units / sections.



Organizational Structure and Arrangements

The organizational structure is summarized in Diagram 1- (page10).



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Assignment of Responsibilities, Authority and Accountability

The Director as the Chief Executive Officer of the Institute is responsible for all the research and development activities, and administrative and financial affairs of the Institute under the general direction and control of the Rubber Research Board. The responsibility and authority for execution of the research, advisory and administrative plan of each department lies with the Head of the relevant department/section. The Deputy Directors are expected to assist the Director and Additional Director in discharging their executive functions in the relevant subjects.

Authority of the Organization

According to the Rubber Research Ordinance (No. 10 of 1930), a Rubber Research Board has been established for the purpose of furthering and developing the rubber industry. The Board governs a Rubber Research Institution with the view of managing, conducting, encouraging and promoting scientific research with respect to rubber cultivation, processing and product manufacture and dealing with all issues connected with the rubber industry. The areas covered are development of new clones, production of quality planting material, cultivation and management of rubber plantations, prevention and cure of diseases, pest control, harvesting rubber trees for latex, soil and moisture management, rubber based farming systems, expansion of rubber cultivation to new areas and impact assessment on rural livelihood, carbon sequestration & environmental impacts, raw rubber processing and conversion into marketable products, treatment of rubber factory effluents and providing of advisory services. 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”.

Our Clients

Management staff and workers of all Estates and Smallholders are important clients of the institute. Close links have been established between all these groups by constant interactions. The raw rubber and rubber product manufacturers, the consumers of raw rubber and raw rubber latex exporters are the other groups of institute’s clients. Along with other sister organizations such as Rubber Development Department and Thurusaviya Fund, RRISL caters to the needs of the smallholders and assists them in selling latex to centrifuged latex factories or in producing quality smoked sheets. Emphasis is given for marketing of rubber and also to introducing new technologies to rubber growers and small-scale industrialists. Further clients are supported with trouble shooting and testing facilities.



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THE VISION, MISSION STATEMENTS AND OBJECTIVES

Vision and Mission

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

The broad objective of the RRISL is to assist the Government of Sri Lanka (GoSL) in the sustainable development of the rubber industry by providing required technologies. Based on the policy for the Plantation sector, we expect the rubber industry in the country to be competitive in the international arena by capturing significant market share and also assuring decent living of plantation community in the country. Strategies proposed to be implemented are given below.

- Considering the existing level of popularity for rubber in the area, suitability and land availability for further expansion, two regions for rubber cultivation in the country are identified for focus oriented R&D activities.
 - ❖ A rubber triangle comprising Kalutara, Ratnapura and Kegalle districts is identified as a mega zone for rubber cultivation in the traditional rubber growing area. Since spare lands for further cultivation of rubber in this zone is limited, productivity increase is the focus in this zone. RRISL will provide sufficient technologies and suitable protocols targeting an average productivity of over 1500 kg/ha/-year by 2025 in this zone. To be competitive at international level, cost of production is expected to be kept below USD 2/kg for plantation companies. In line with other development programmes of GoSL, RRISL assist small & medium scale entrepreneurs to set up rubber industries in environmentally friendly manner by providing required technologies to do so.
 - ❖ Another mega zone for rubber in drier climate comprising Monaragala, Ampara districts and Anuradhapura is identified to expand the rubber cultivation for increased production. Whilst assisting GoSL to meet a target of 30,000 ha of rubber in this region, RRISL will provide improved protocols to maintain an average productivity level of 1500 kg/ha/year by 2025. Solar energy is promoted as the principal energy source for rubber industry in this zone. In addition, rubber is promoted in this zone as a means of sequestering atmospheric CO₂ targeting carbon trading in voluntary market. Farming system approach is encouraged to increase land use efficiency and farmers' income further.
- In addition to above the two-mega zones, RRISL is engaged in promoting rubber in other regions of the country on demand basis.



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- In order to meet the targets set in above approaches, agronomic research are focused on developing sustainable and user-friendly agronomic practices and disease resistant, environmentally robust high yielding genotypes for improved productivity and greater level of farmer acceptance. Rubber technological research will cater mainly the small & medium entrepreneurs and develop products for high level of value addition and for niche markets. In addition, information is generated with required technologies to promote rubber as an environmental friendly industry. Further, impact guaranteed technology programmes are advocated mainly in mega zones in support of achieving set targets.

Research Departments/Units

Research departments & units of RRISL are to carry out research and development work and dissemination of outputs to the relevant sectors through extension network in view of meeting the objectives through the strategies mentioned. Considering the upstream and downstream segments of the industry, they are categorized into two as rubber agronomy and technology.

Agronomy

Agronomy departments conduct research and development activities on all aspects of the growth of the rubber tree and its productivity. Research activities on breeding clones for high yields, disease resistant, vigorous growth, tolerance to gaseous stimulation and increased timber production are given the highest priority. In addition, reduction in cost of production with efficient uses of resources is the key focus in research. Further, research and development activities have been commenced on the expansion of rubber cultivation to nontraditional areas. The Advisory Services Department is catering to the needs of the smallholders. Whist Genetic & Plant Breeding Department is located at Nivithigalakale substation, Mathugama, other four biological research departments and three supporting units are functioning at Dartonfield, Agalawatta. The Advisory Services Department is located at Telawala Road, Rathmalana.

1. Genetics & Plant Breeding Department

Main objective of this department is to develop clones with high yield potential combined with desirable secondary characters. In order to achieve this, clones are produced by hand pollination and resulting new genotypes are tested first under small scale and then in collaboration with estates and also under smallholder conditions. Among the secondary characteristics; growth vigour, tolerance to diseases, resistance to wind damage & brown bast, high timber volume etc. are considered important. Research work is also conducted towards early identification of clonal characters using RADP techniques.



2. Plant Science Department

The broad objectives of this department are to identify and recommend cost effective techniques from plant production up to latex harvesting which would maximize the productivity. The quality of planting material is improved constantly. Planting techniques to improve the performance of the clearings and also methods of exploitation to cut down on cost of production (COP) are researched. Cultural practices during the immature phase along with intercropping are also looked at and recommendations are made where necessary. Plant physiological research is conducted to help increase the productivity and tissue culture work is also continued with some progress. Apart from research and advisory work, this Department is also involved in activities to ensure high quality plant production for the sector through regular monitoring of all rubber nurseries.

3. Soils & Plant Nutrition Department

The main trust areas are research on improvement of soil fertility, increasing fertilizer use efficiency, soil & water conservation and weed control. This department also provides services such as site-specific fertilizer recommendation for mature rubber, land selection for planting rubber and chemical analysis of soil, plant and fertilizer samples.

4. Plant Pathology & Microbiology Department

Centre for planning, implementation and management of research on (a) all aspects of the maladies of the rubber plantations and (b) improvement of beneficial soil micro flora. Main research projects include screening of clones for disease resistance, testing pesticides, development of integrated pest management systems, biology and epidemiology of pests and surveillance of potential pathogens & disease out breaks.

5. Biochemistry & Plant Physiology Department

This department aims to meet the needs of stakeholders in the rubber industry particularly in the biochemical and physiological aspects. Ultimate focus is to build up a cleaner environment meeting the productivity goals in the present day context. Among the research programs, testing low intensity tapping systems with different methods of stimulation and developing convenient and reliable means of assessing rubber content in latex are in priority.

6. Advisory Services Department

The main objective is the technology transfer to the rubber smallholders in order to improve the adoption rate of recommended technologies to enhance productivity and profitability of the rubber growers.



7. Biometry Section

Providing statistical consultancy to other research departments of RRI, stakeholders and students, maintenance of databases on meteorological factors in the rubber growing areas, while providing data of the agro-meteorological station at Dartonfield to the national system are among the key services of the Biometry section. Development, modification and application of statistical techniques to suit the rubber sector and studies on environmental change are the main research focuses.

8. Adaptive Research Unit

This unit uses both "Top-down" and "Bottom-up" approaches to refine the technologies available in the large scale plantation sector in favour of smallholders and plan the future research to cater the smallholder requirements, accordingly. In addition, this unit facilitates rubber cultivation in non-traditional areas. Among the research activities of the unit, developing protocols for rubber cultivation in nontraditional areas, assessing livelihood and environmental impacts of rubber cultivation and evaluating rubber based farming systems and other agronomic practices whilst characterizing the socio economic conditions of smallholdings are in top priority.

9. Agriculture Economics Unit

This unit is mainly involved in two major research areas namely, a) Socio-economic studies in the rubber sector in relation to cultivation, processing and marketing and b) Impact evaluation of different policies implemented in the rubber sector.

Technology

The Technology Departments of the Institute carryout research and development work on raw rubber processing and rubber products, with the aim of developing new high value end products and also improving the quality of the products already being manufactured in the country to meet international standards. The departments concerned are situated at Telawala Road, Rathmalana and their functions are as follows.

1. Raw Rubber Process Development and Chemical Engineering

The main function of the department is to carry out research and development on raw rubber processing for the betterment and sustainability of the industry while protecting the environment. The department provides advice on trouble shooting, process development and quality improvement in the raw rubber processing industry. The department is also responsible for assisting the raw rubber industry in human resource development and human safety. Providing technical know-how and all other assistance in the management of wastewater generated in raw rubber processing and rubber product manufacturing industries are also major functions of the department.



2. Polymer Chemistry

Major objectives of the department is to carry out Research and Development work on Polymers to optimize the quality and productivity of polymer manufacturing and processing industry. Modification of natural rubber, dry and latex form for improved quality, development of polymers including latex forms to suit the end user applications and identification and selection of additives to optimize process ability of polymer compounds are major Research and Development areas of the department.

3. Rubber Technology and Development Department

Major objective of the department is to carry out Research and Development work on all aspects of Rubber Technology in order to upgrade the rubber based product industries in Sri Lanka to acquire the global standards and thereby making Sri Lankan rubber products competitive in the international markets. Rubber compound development, both latex and dry rubber, physical testing of rubber products and compounds, assisting the small and medium scale prospective rubber product entrepreneurs in product development are among the major functions of the department.

4. Raw Rubber and Chemical Analysis Department

The main function of the department is to provide testing and analytical facilities for all forms of dry rubber and rubber latex and issuing of test certificates recognized by all parties concerned in the rubber trade. Research and development work related to chemical analysis and development of test methods related to testing of rubber and latex of all forms is the other major activity of the department.

Service Units

1. Audio Visual & Information Technology Unit

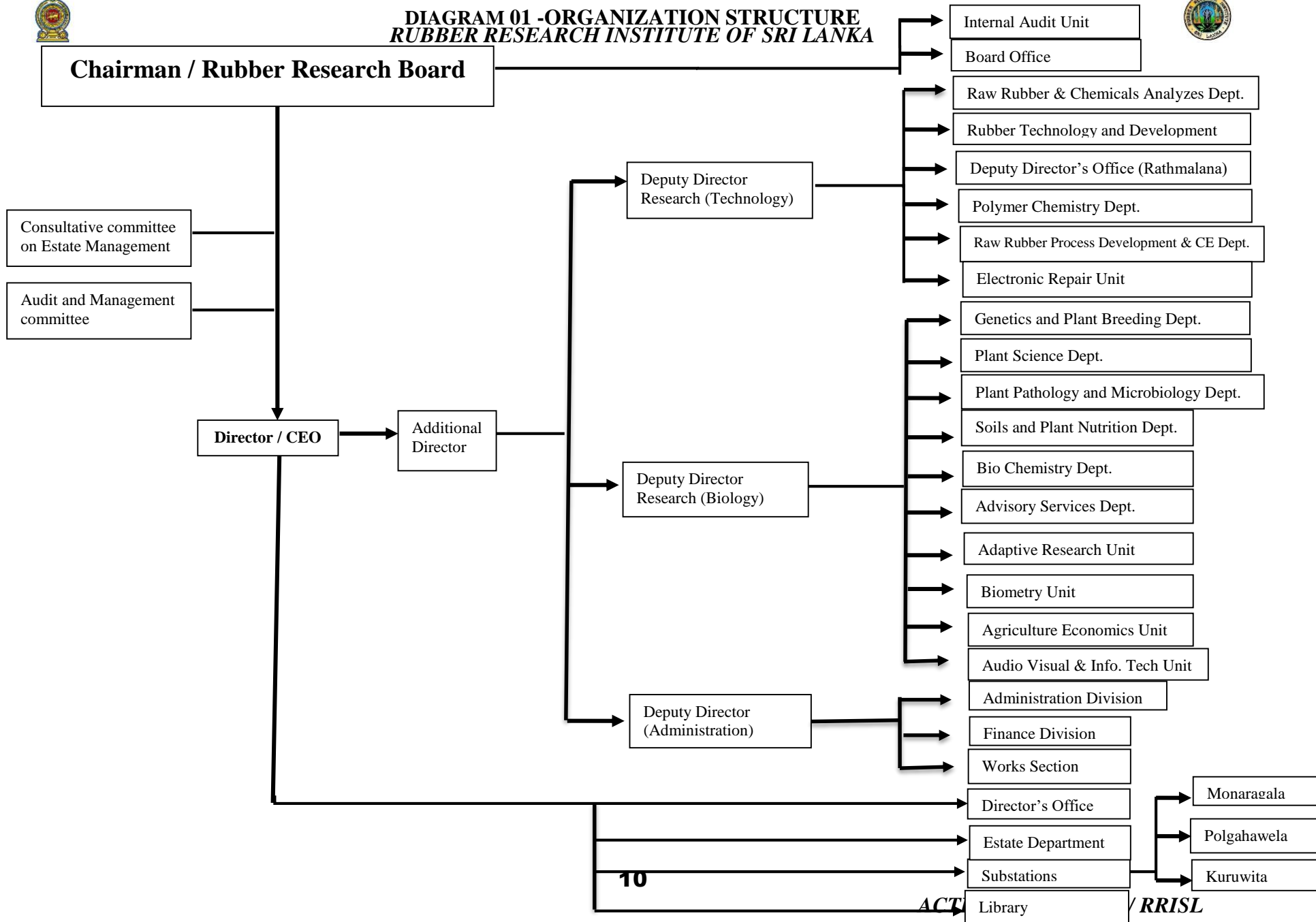
Provides audio visual aids including scientific photography for the research and extension activities. Administration and maintenance of the computer network of the institute including Rathmalana Offices, Technology departments and substations. Updating of the RRI website and supervising maintenance of the institutes' international telephone network and attendance recording machines. This unit also supports the functions of institute accounting software package.

2. Electronic Instruments Repair Unit

Undertakes the repairs of the electronic scientific instruments of the institute. However, currently this unit has no staff.



DIAGRAM 01 - ORGANIZATION STRUCTURE
RUBBER RESEARCH INSTITUTE OF SRI LANKA





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CURRENT RESOURCES AVAILABLE
Infrastructure

The Rubber Research Institute of Sri Lanka (RRISL) has about 2970m² of laboratory and office space at its Head Quarters in Agalawatta. Biological research departments and units are located in Agalawatta. In addition, Plant Breeding Department and the Training Center are located in Nivithigalakale substation, Mathugama. Technology Research Departments, Advisory Services Department and the Board Office situated at Rathmalana. Further, about 5313m² building space is available at substations located in Monararagla, Kuruwita and Polgahawela.

RRISL also owns approximately 492ha of lands at the Head Office Agalawatta, and its substations Nivithigalakale, Kuruwita, Polgahawela & Monararagla. In particular, Monararagla Substation is devoted to support the expansion process of the rubber cultivation in Monararagla District and in the Eastern Province.

Human Resources

Human resources are considered as the most important asset of any research organization and its qualification-based profile is presented in Tables 1- 4. Details of cadre positions are given in Table 05. Around 32 scientists are engaged on research activities. Advisory Services Department has 05 Regional Extension Officers and currently has only one Regional Officer.

HUMAN RESOURCE PROFILE BY DISCIPLINE ACROSS DIVISIONS
(As at 31st December 2023 with only the highest level of qualifications)

01. Research & Extension Staff (only executive grades)

Discipline	Ph.D.	M.Phil.	M.Sc.	B.Sc.	Without Degree/Diploma	Total
Management	01	00	00	00	00	01
Genetics & Plant Breeding	02	00	00	00	00	02
Plant Science	02	00	00	01	00	03
Plant Pathology & Microbiology	02	00	00	00	00	02
Soils & Plant Nutrition	00	01	00	01	00	02
Biochemistry & Physiology	01	00	00	01	00	02
Polymer Chemistry	00	00	00	01	00	01



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Raw Rubber and Chemical Analysis	01	00	00	00	00	01
Rubber Technology & Development	01	01	00	01	00	03
Raw Rubber Process Development & Chemical Engineering	00	00	00	01	00	01
Advisory Service	01	00	00	00	00	01
Biometry	00	00	00	01	00	01
Adaptive Research	01	00	00	01	00	02
Agricultural Economics	00	01	00	01	00	02
Estate	00	00	00	01	00	01
Grand Total	12	03	00	10	00	25

02. Research & Extension Support Staff (including staff grades)

Discipline	M.Phil.	M.Sc.	B.Sc.	Diploma	Without Diploma/ Degree	Total
Genetics & Plant Breeding	01	00	02	01	01	05
Plant Science	00	01	05	01	01	08
Plant Pathology & Microbiology	00	02	02	01	00	05
Soils & Plant Nutrition	00	00	04	03	01	08
Biochemistry & Physiology	00	00	03	01	00	04
Advisory Service	00	00	07	02	01	10
Polymer Chemistry	00	00	04	01	00	05
Raw Rubber and Chemical Analysis	00	00	03	00	01	04
Rubber Technology & Development	00	00	03	02	00	05
Raw Rubber Process Dev. & Chemical Engineering	00	01	02	00	02	05
Biometry	00	00	00	01	00	01
Adaptive Research	00	00	00	02	00	02
Grand Total	01	04	35	15	07	62



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03. Administrative Staff – Executives (non - research)

Discipline	MBA	Degree	ICASL/CIMA/ ACCA/APFA	IRCA	Diploma	Without Dip./ Degree	Total
Administration	01	00	00	00	00	00	01
Accounts	00	02	00	00	00	00	02
Internal Audit	00	00	00	01	00	00	01
Audio Visual Aids Production	00	01	00	00	00	00	01
Works Section	00	01	00	00	00	00	01
Estate	00	01	00	00	00	00	01
Grand Total	01	05	00	01	00	00	07

04. Administrative Staff – Non - Executives (including staff grades)

Discipline	MBA	Degree	RMP	Diploma	Without Diploma/ Degree	Total
Scientific Departments	00	01	00	01	03	05
Advisory Service Department	00	01	00	00	03	04
Administration Department	01	02	00	01	09	13
Accounts Section	00	01	00	00	11	12
Internal Audit Unit	00	00	00	00	01	01
Library & Publication	00	01	00	00	00	01
Board Office	00	00	00	00	02	02
Works Section	00	01	00	02	02	05
Estate Department	00	00	00	00	04	04
Instrument Repair Unit	00	00	00	00	00	00
Kuruwita Substation	00	00	00	00	01	01
Polgahawela Substation	00	00	00	00	01	01
Monaragala Substation	00	00	00	00	04	04
Grand Total	01	07	00	04	41	53



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Cadre Information as at 31.12.2023

Annex 1



Serial No.	Designation	Service	Grade	Salary Code	Salary Scale	Service Level	Approved Cadre			Actual Cadre			Other (Acting/...)
							Permanent	Contract	Casual	Permanent	Contract	Casual	
1	Chairman					Senior Level							
2	Director		HM 2-3	HM 2-3	98215-12x2700-130615	Senior Level	1			0			
3	Additional Director		HM 2-1	HM 2-1	93020-12x2700-125420	Senior Level	1			0			
4	Deputy Director Research		HM 1-3	HM 1-3	86865-15x2270-120915	Senior Level	2			1			
5	Heads of Research Departments		HM 1-3	HM 1-3	86865-15x2270-120915	Senior Level	10			4			
6	Principal Research Officer		HM 1-3	HM 1-3	86865-15x2270-120915	Senior Level	14			4			
7	Principal Advisory Officer		HM 1-3	HM 1-3	86865-15x2270-120915	Senior Level	1			0			
8	Deputy Director (Administration)		HM 1-2	HM 1-2	81670 -15x2270 -115720	Senior Level	1			0			
9	Senior Accountant		HM 1-2	HM 1-2	81670 -15x2270 -115720	Senior Level	1			1			
10	Senior Manager - Estate		HM 1-1	HM 1-1	80295-15X2270-114345	Senior Level	1			1			
11	Senior Research Officer		AR 2	AR 2	76200-10X2000-96200	Senior Level	19			3			
12	Senior Advisory Officer		AR 2	AR 2	76200-10X2000-96200	Senior Level	2			0			
13	Accountant		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			1			
14	Manager - Estate		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			0			



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15	Resident Engineer		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			1			
16	Senior Administrative Officer		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			1			
17	Network Administrator		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			1			
18	Internal Auditor		1/II	MM 1-2	54550-10x1375-15x1910-96950	Senior Level	1			1			
19	Research Officer		1/II	AR 1	53150-10X1375-15X1910-95550	Senior Level	26			11			
20	Advisory Officer		1/II	AR 1	53150-10X1375-15X1910-95550	Senior Level	3			1			
21	Registered Medical Practitioner		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
22	Administrative Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	2			1			
23	Training Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			1			
24	Engineering Assistant		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			1			
25	Librarian & Publication Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			1			
26	Personal Asst. to Chairman		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
27	Personal Asst. to Director		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
28	Accounting & Procurement Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
29	HR Development Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
30	PRO/Welfare Officer		1/II	JM 1-2	43355-10x755-18x1135-71335	Tertiary Level	1			0			
31	Rubber Extension Officer		1/II/III	MA-4	37970-10x755-15x930-5x1135-65145	Tertiary Level	22			10			
32	Audio Visual Aids Producer Officer		1/II/III	MA-4	37970-10x755-15x930-5x1135-65145	Tertiary Level	1			0			



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33	Experimental Officer		1/II/III	MA-4	37970-10x755-15x930-5x1135-65145	Tertiary Level	30			20			
34	Translator		1/II/III	MA-4	37970-10x755-15x930-5x1135-65145	Tertiary Level	1			0			
35	Technological Officer (Civil)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
36	Technological Officer (Mechanical)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			1			
37	Technological Officer (Electrical)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
38	Library Asst. & Publication Asst.		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	2			0			
39	Transport Officer		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			1			
40	Management Assistant (Book-keeping)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
41	Management Assistant (Store-keeping)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	2			0			
42	Pharmacist		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
43	Factory Officer		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
44	Technical Officer (Computer Hardware)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
45	Technical Officer (Audio Visual)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	1			0			
46	Technical Officer (R & D)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	51			33			
47	Technical Officer (Instrument)		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	2			0			
48	Field Officer		1/II/III	MA 2-2	30310-10X300-7X350-4X600-20X710-52360	Secondary Level	12			3			
49	Management Assistant		1/II/III	MA 1-2	27910-10x300-7x350-12x600-12x710-49080	Secondary Level	65			41	01		
50	Telephone Operator		1/II/III	MA 1-2	27910-10x300-7x350-12x600-12x710-49080	Secondary Level	2			2			



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51	Driver		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	30			20			
52	Electrician/Linesman		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	4			3			
53	Carpenter		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	4			2			
54	Mason		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	4			1			
55	Plumber		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	2			3			
56	Polisher/Painter		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			0			
57	Mechanic		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			0			
58	Motor Mechanic		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	2			0			
59	General Mechanic		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			1			
60	Ref./Air-conditioning/Electrician		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			1			
61	Tinker/Painter		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			1			
62	Tinker/Welder		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			1			
63	Blacksmith		1/II/III	PL-3	26290-10x270-10x300-10x330-12x350-39490	Primary Level	1			1			
64	Laboratory Attendant		1/II/III	PL 2	25750-10x270-10x300-10x330-12x350-38950	Primary Level	46			33			
65	Guest House Keeper		1/II/III	PL-2	25750-10x270-10x300-10x330-12x350-38950	Primary Level	2			0			
66	General Worker (Generator Operator)		1/II/III	PL -2	25750-10x270-10x300-10x330-12x350-38950	Primary Level	1			1			
67	Junior Assistant Field Officer *		1/II/III	PL 2	25750-10x270-10x300-10x330-12x350-38950	Primary Level	0			2			
68	Office//Club/Library/Stores Attendants		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	26			26			



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69	Vehicle Attendant		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	3			2			
70	Watcher		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	10			09			
71	Labourer		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			0			
72	Dispensary Attendant		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	2			2			
73	General Worker (Generator Oper.)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
74	Gardner		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	2			2			
75	General Worker (Gene./Water Pump)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	3			3			
76	General Worker (Masonry)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
77	General Worker (Motor Vehicles)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
78	General Worker (Painting/Polishing)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
79	General Worker (Plumbing)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
80	General Worker (Water Pump Oper.)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	3			3			
81	Sanitary Attendant		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	2			2			
82	General Worker (Carpentry)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
83	General Worker (Electrical)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
84	General Worker (Cooking)		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	1			1			
85	General Workers ***		1/II/III	PL 1	24750-10x250-10x270-7x300-15x330-37000	Primary Level	00			18			
	Total						460			292			

* No Scheme of Recruitment for these posts



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RECRUITMENT SCHEDULE FOR SOME OF THE VACANCIES TO BE FILLED DURING THE YEAR 2024

No.	Designation	Approved cadre	No. of Vacancies Scheduled to be filled	Time of recruitment Scheduled
01	Director	01	01	February
02	Additional Director	01	01	February
03	Head of Departments	10	02	April
04	Senior Research Officers	19	10	January
05	Senior Advisory Officers	02	02	April
06	Research Officers	26	05	January
07	Manager - Estate	01	01	-
08	Accounting & Procurement Officer	01	01	-
09	P.A. to Director	01	01	-
10	Technological Officer (Civil)	01	01	January
11	Technological Officer (Electrical)	01	01	-
12	Management Assistant (Book Keeping)	01	01	-
13	Rubber Extension Officer	22	05	January
14	Audio Visual Aids Production Officer	01	01	-
15	Technical Officer (R & D)	51	10	-
16	Technical Officer (Audio Visual)	01	01	-
18	Technical Officer (Computer Hardware)	01	01	-
19	Technical Officer (Instrumental)	02	02	-



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20	Factory Officer	01	01	-
21	Field Officers	08	04	-
22	Management Asst. (S.K.)	02	02	-
23	Drivers	30	07	-
24	Polisher/Painter	01	01	-
25	Mechanic	01	01	-
26	Motor Mechanic	02	02	-
27	Mason	04	03	-
28	Carpenter	04	02	-
29	Lab. Attendant	46	05	-
30	Guest House Keeper	02	02	-
	Total	256	78	



RUBBER RESEARCH INSTITUTE OF SRI LANKA

ACHIEVEMENTS DURING LAST FIVE YEARS

Rubber Research Institute of Sri Lanka has a proud record in all fields of rubber research with international recognition. Some achievements made during the last five years for the development of the rubber industry of the country are given below.

2023

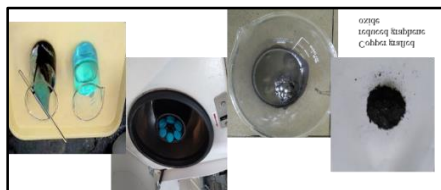
- Patent rights were applied for the low cost hand-made compost enriched rubberized-coir pith media developed to produce bio-fungicide.



- 2 Patent rights were applied for the new ethephon formulation developed by incorporating oleic acid to improve slow release properties of the active ingredient.



- Natural rubber (NR) composites with good mechanical properties were produced using reduced graphene oxide nanosheets synthesized in the laboratory. Polyethylene glycol (PEG) grafted reduced graphene oxide and Cu grafted reduced graphene oxide were also synthesized successfully and NR composites were produced incorporating the same. Electrical conductivity of 1 phr Cu grafted reduced graphene oxide incorporated NR composite was at a maximum level.





- Cellulosic fibers of corn husk (CHF) were extracted successfully from corn husk leaf waste and treated with chemicals. The treated CHF even at a low loading (2.5 phr) in NR composites showed its potential to reinforce NR in the presence of a coupling agent.



- A NR based eraser with the lettering “Dartonfield” was produced using the crepe rubber manufactured at the RRISL crepe rubber factory in Dartonfield, Agalawatta.



- NR latex based glue was developed to bond recycled carpet waste material (composite of wool and jute fibres and polypropylene) to different NR latex based materials and to a fabric material on a contract signed with Auckland University, New Zealand and the technology was transferred to the University.





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- A dry rubber based cellular rubber compound was developed for a marine engineering application at the request of Tantri Trailers (Pvt.) Ltd.
- A deproteinized natural rubber (DPNR) based transparent medical product was manufactured at the request of Ceylon Natural Rubber (Pvt.) Ltd.
- A crepe rubber based compound suitable to produce an innovative medical item was developed at the request of a neuro surgeon attached to the Kotalawala Defence University, Ratmalana.
- Tapping commenced at the clonal evaluation trial at non-traditional rubber growing areas to evaluate the best performing clone for water stress condition.
- National Vocational Qualification NVQ-qualified (NVQ Level 3) socially recognized Rubber Harvesting Assistants were trained and intended to introduce to the Rubber sector for the first time in Sri Lanka. The objective of this project is to offer a social and professional recognition to Rubber Harvesting Assistants with NVQ certification and attracting youth to the profession of latex harvesting in an attempt to find a solution for perennial tapper shortage issue while assuring enhanced tapping quality in the rubber sector.



- Farmer participatory adaptive research trials were established in Ipalogama and Nuwaragam Palatha-Central Divisional Secretaries Divisions of Anuradhapura District.





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- Rubber-based farming models were established in Thalawa and Nachchaduwa Divisional Secretaries Divisions of the Anuradhapura district.



- The rate of adoption of the RRISL recommendations among Regional Plantation Companies, medium-scale estates and smallholdings in the Kalutara district was identified.

2022

- Extension officers (142) from RDD, ASD and Thurusaviya have been given training on Low Intensity Harvesting (LIH) and use of ethephon.
- Smallholders (1834) belonging to 38 RDO divisions and managers, field staff and harvesters (1313) from 58 RPCs were given theoretical and practical awareness to adopt LIH system (S/2 d4).





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- Laboratory procedures were established as per ISO 17025 Laboratory accreditation status.
- Participated in the proficiency-testing programme conducted by the Malaysian Rubber Board and showed outstanding performance among 15 international latex testing laboratories.
- Field latex was modified to replace the currently used synthetic polymer based binder employed in the production of paper based on fibres of the “Mana” weed (Figure 1).



Figure 1. Use of a novel natural rubber latex based binder in manufacture of paper out of the fibers of “Mana” weed

- Tyre tread compound was developed using environmental and user-friendly sesame oil as an alternative to petroleum based aromatic processing oil.
- Crepe rubber based fishing bait was developed in collaboration with Samson International PLC at the request of Ministry of Fisheries and Aquatic Resources Development (Figure 2).



Figure 2. Crepe rubber based fishing bait



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- Crepe rubber based cellular compound for yoga mat was developed in collaboration with a rubber product manufacturing company.
- Crepe rubber based compound for a toy item for pets was produced at the request of an entrepreneur.
- Novel rubberized-coir based slipper sole was produced at the request of an entrepreneur.
- Low cost, novel shoe sole with different designs was produced using tyre crumbs (GRT) and compounded natural rubber latex at the request of a tyre crumb manufacturing company (Figure 3).



Figure 3. Shoe soles produced with tyre crumbs (GRT) and compounded natural rubber latex

- Reduced graphene oxide (rGO) was synthesized and natural rubber composites containing rGO were produced.
- Natural rubber based dental device was produced at the request of an entrepreneur.
- Natural rubber based compound for a novel machine was developed at the request of an entrepreneur
- Crepe rubber based compound was developed to produce erasers.
- 147 crepe rubber, 517 rubber compound, 29 rubber product and 40 polythene sample tests were conducted and reports were issued at the request of the rubber industry and state universities.
- 32 entrepreneurs / rubber small holders were trained at RRISL, Rathmalana on "Rubber product manufacture" on their request. Also, groups of 14 rubber small holders were trained at RRISL, Rathmalana on "Manufacture of rubber products at cottage level" in collaboration with the Advisory Services Department in connection with the "Livelihood Development Program" (Figure 4).



Figure 4. Workshop on "Rubber product manufacture at cottage level" held at RRISL, Rathmalana



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- Rubber Technology and Development department in collaboration with the Advisory Services department of RRISL conducted a workshop for 13 female entrepreneurs on manufacture of paper based on fibers of “Mana” weed using the novel binder developed with modified field latex at the request of the Divisional Secretariat, Galigamuwa
- Latex harvesting was commenced in the first established rubber field in the Mullaitivu district of the Northern Province.



- The carbon trading project developed for voluntary carbon market with the 3,000 hectares of new rubber cultivations in Uva and Eastern Provinces was validated by a third-party accredited auditor for Verified Carbon Standards (VCS).
- Awareness programmes were conducted to educate rubber growers on dry zone rubber cultivation in Horowupathana of Anuradhapura district and feasibility studies were conducted for suitability assessments.
- Farmer participatory adaptive research trials were established in Horowupathana, Nochchiyagama and Nuwaragam Palatha Central Divisional Secretariats of Anuradhapura district.
- A training programme was conducted on latex harvesting and sheet rubber processing for rubber farmers in the Northern Province at Vavuniya in collaboration with the Advisory Services Department.
- Development of five interim rubber clones to the rubber growers.



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2021

- Registration of two native biopesticides isolated from rubber growing soils against the white root disease



- Rubber compounds suitable to produce brake pads, brake washers and cable guides used in vehicles as well as a rubber component for a biomedical item produced in Sri Lanka were developed at the request of medium scale rubber product manufacturing companies.



- Sixty-four on farm participatory research trials were completed for compost application covering 131.8 total acres.
Districts – Kalutara, Kurunegala, Kandy/Matale, Kegalle, Matara, Galle, Colombo, Ratnapura

Mature lands – 27 (Acres – 68)

Immature lands – 37 (Acres 63.8)



Demonstration plots for organic manure application -
Kalutara Range



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Demonstration plots for organic manure application – Ittapana Range



Demonstration plots for organic manure application – Mathugama

- Introduction and Establishment of pasture in selected land of rubber smallholders in Kalutara district. Objective of this study was to improve the livelihood of rubber smallholder sector by introducing an extra income. Fourteen farmers were participated for the project covering 12 acres.



Harvesting of pasture in Kalutara district

- Promotion of cinnamon as a boundary crop for the rubber plantations. There have been no marked variations of growth and yield of rubber adjacent to the fence crops.





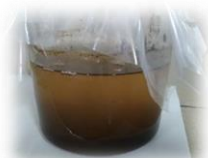
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- Graphene oxide was synthesized successfully using graphite as intermediate material in the synthesis of nanographene, which will be used in manufacture of electronic components.



Graphite



Graphene oxide

- Development of two rubber intercropping models with Guava and Soursop



Field establishment of Reusable Fertilizer
Porous Tube

- Establishment of environmental friendly, economically viable slow release fertilizer technique to improve crop performance of *Hevea* at 14 estates under Pussellawa, Agalawatta, Kelani Valley and Kegalle Plantations and six small holder sites.

Preparation of Porous tubes
for field application



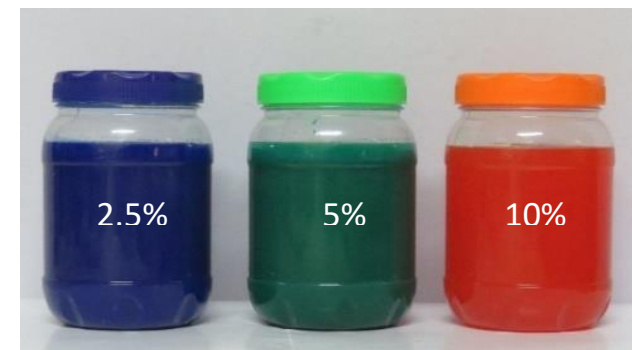


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2020

- Two new commercial ethephon formulations i.e. water based and oil based were developed locally.



- Use of the **Reusable Slow Release Fertilizer Porous Tube (RSPT)** has resulted in significantly higher in plant girth (20%), soil exchangeable Mg, leaf nitrogen and magnesium over the conventional fertilizer application.
- Shoes were produced for the export market in collaboration with a medium scale manufacturer by partial replacement of virgin rubber in out-sole compounds with patented novel reclaimed rubber developed using an environmental friendly reclaiming agent with the aim of reducing the cost of shoes.
- NR based composites with synthesized micro and nano fibers of coir were developed with the aim of replacing carcinogenic carbon black and enhancement of properties.
- Initial development of NR latex based fashionable gloves to protect against the Covid-19 pandemic.



- NR latex compound as a waterproof coating material for tents made out of fabric was developed on a request made by a client as a need during Covid-19 pandemic.
- NR based composites with durian husk fibres as a partial replacement for carbon black, which has been identified as a carcinogenic ingredient, were developed and shoe soles were produced in collaboration with the Textile Department, Open University of Sri Lanka.



2019

- Natural rubber latex foam was produced successfully using creamed latex for the benefit of Small and Medium Enterprises.
- Natural rubber latex based nontoxic adhesive was developed using a plant based preservative and tackifying agent at the request of a toy company and the formulation was transferred to the company.
- Natural rubber based formulation suitable to produce protective caps for bicycles were developed.
- A non – toxic, transparent natural rubber based compound for teats and teething rings was developed for a toy company.
- Natural rubber/Ethylene – Propylene – Diene Monomer blend compound suitable for an automobile application was developed.
- Novel nitrosamine free preservative system was developed for natural rubber latex.
- Coir pith and elephant dung were found to be better sowing media than river sand for germination of rubber seeds.
- Polybags of reduced sizes (from 15” x 6” to 15” x 4”) were found effective for raising budded rubber plants.
- Antioxidant treatments were found to be effective in arresting tapping panel dryness of rubber trees.
- A new microbial based medium was introduced for rapid skeletanization of rubber leaves.
- Application frequency of mammalian pest repellent was identified as six months for the Intermediate zone.
- Once in four days harvesting system was introduced successfully, to rubber smallholder sector.
- Raw Rubber and Chemical Analysis Department was renovated according to international quality standards in view of achieving ISO 17025 Laboratory Accreditation, which is an urgent requirement for the rubber industry in Sri Lanka.
- Mobile apps for technological solutions in the rubber industry was introduced.





RUBBER RESEARCH INSTITUTE OF SRI LANKA

BUDGET ESTIMATES- 2024
Head No. 410-02-03-1-1503 / 1509
Recurrent Expenditure – 2024

Object Code	Category/Object Title	Sche. No.	Budget 2023 Rs.000's	Budget Est. 2024 Rs.000's
	<i>Recurrent Expenditure</i>			
	<i>Personal Emoluments</i>		384,451	323,000
1001	Salaries & wages	1	216,256	180,794
1002	Overtime & Holiday Payments		19,672	19,127
1003	Other Allowances	2	148,523	123,079
	<i>Travelling Expenses</i>		11,000	8,500
1101	Domestic		8,000	7,500
1102	Foreign		3,000	1,000
	<i>Supplies</i>		28,786	33,850
1201	Stationary & Office Requisites		5,000	5,000
1202	Fuel - Other Vehicles			
002	Fuel Allowances		7,586	5,500
009	Fuel for pool vehicles		13,000	15,000
010	Fuel for other purpose			5,000
1203	Diets and Uniforms			
002	Uniforms			250
1205	Other	3	3,200	3,100



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	<i>Maintenance Expenditure.</i>		20,000	21,900
1301	Vehicles		8,000	7,000
1302	Plant, Machinery & Equipment		5,000	2,500
1303	Building & Structures - Repairs & Maintenance		7,000	12,000
1304	Software maintenance			400
	<i>Services</i>		55,350	85,750
1401	Transport/Hiring Vehicles		200	400
1402	Postal and Communication		4,000	4,000
1403	Electricity and Water		7,000	15,800
1404	Rents and Local Taxes		400	400
1405	Cleaning and Janitorial Services			1,100
1409	Other Services	4	43,750	58,250
138	Machinery and Other Equipment Service Agreement			4,500
139	Insurance Expenditures			500
140	Miscellaneous Service Expenditure			800
	Total Recurrent Expenditure		499,587	473,000



RUBBER RESEARCH INSTITUTE OF SRI LANKA
BUDGET ESTIMATE

Recurrent Expenditure (Detailed) – 2024

Object Code	Category/Object Title	Sche. No.	Budget 2023 Rs.000's	Budget Est. 2024 Rs.000's
1001	Salaries & Wages	1	216,256	180,794
	Salaries & Wages		182,682	149,651
	EPF Contribution		27,951	25,926
	ETF Contribution		5,623	5,218
1002	Overtime & Holiday Payments		19,672	19,127
	Overtime & Holiday Payments		19,672	19,127
1003	Other Allowances	2	148,522	123,079
	Cost of Living		32,198	29,509
	Rent and other Allowance		1,200	1,200
	Gratuity Payments		33,752	8,077
	Medical Benefits		45,086	39,949
	Research Allowances		21,136	11,023
	Professional allowance		3,240	3,000
	Interim Allowance		-	18,960
	Transport		6,600	6,600
	Telephone Allowance		5,310	4,761
1205	Other Supplies	3	3,200	3,100
	Medical Expenditures		600	100
	Other Consumables		2,000	2,000
	L.P. Gas Expenditures		600	1,000



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1409	Other Services	4	43,750	58,250
	Printing Charges/ Publications		500	800
	Insurance Expenditures (Fire and property)		1,500	2,000
	Polghawela Sub Station Maintenance		500	250
	Moneragala Sub Station Maintenance		500	250
	Field Expenditures		2,000	2,000
	IRRDB Contribution /Exp		2,500	2,100
	Administrative & General Charges		6,000	5,000
	Training Programe Exp.			12,600
	Welfare Expenditures		250	250
	Contractual services for Research Support		30,000	33,000
	Revenue	5	60,136	90,000
	Other Revenue		49,136	78,000
	Estates Contribution		11,000	12,000



RUBBER RESEARCH INSTITUTE OF SRI LANKA
BUDGET ESTIMATE

Capital Expenditure – 2024

Object Code	Category/Object Title	Sch: No.	Budget 2023	Budget Est. 2024 Rs.000's
	CAPITAL EXPENDITURE			
	Rehabilitation and Improvement of Capital Assets		4,000	-
2001	Buildings - Rehabilitation			
2002	Plant, Machinery and Equipment			
	Structures-Repairing of Internal Roads			
2005	Maintenance of Buildings		4,000	
	Committed Exp. 2019			
	Acquisition of Capital Assets		-	1,750
	Purchase of Motor Vehicles (Leasing Rental)			
2102	Furniture and Office Equipment			1,750
2103	Plant, Machinery and Equipment			
2106	Software Development			
	Library Books			
2105	Lands and Land Improvements		6,000	2,750
	Lands and Land Improvements- Research & Dev.		500	800
	Monaragla Substation Nursery		4,800	800
	Establishment of Adaptive Research Trials (Polgahawela)		200	400
	Establishment of Research Trials (North East)		500	750



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2401	Capacity Building		1,500	3,000
	Human Capital Development Programme		1,500	3,000
	Split Based PhD programme			
2507	Research Projects		18,500	22,500
	Research and Development		18,500	22,500
	Special Capital Project			
01	Project 1 (Carbon)			
02	Project 2 (LIH)			
03	Project 3 (Intercropping)			
04	Project 4 (White root)			
05	Project 5 (RR&CA)			
06	Project 6 (DDRT)			
07	Project 7 (GNPB)			
8	Project 8 (S&PN))			
	Total Capital Expenditure - CF		30,000	30,000



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BUDGET ESTIMATE
Capital Expenditure – 2024

Object Code	Special Capital Projects MPI - On Going		Budget 2023	Budget Est. 2024 Rs.000's
	Screening of drought/stress tolerant Hevea Clones for sustainable rubber cultivation in marginal areas		14,500	1,510
	Establishment of environmental friendly, economically viable slow release fertilizer technique		27,290	
	Monitoring and optimizing the performance of rubber effluent treatment plants to improve the treatment efficiency and ensure the work place safety.		10,780	
	Studies on the biology and epidemiology of the Pestalotiopsis Leaf fall disease and to develop effective management strategies		13,740	10,740
	Facilitate establishment of a research facility for tyre testing and development by the private sector.		13,030	
	Establishing mini latex testing lab in moneragala district		1,930	
	Introducing the Rubber farming Service Providers (RFSP)		3,150	
	Recommencement of tapping in untapped rubber lands		3,340	
	Introducing of NVQ qualified socially recognized tapper technicians in the Rubber Industry		4,040	
	Carbon		2,200	
	Total Special Capital Projects- MPI		94,000	12,250



RUBBER RESEARCH INSTITUTE OF SRI LANKA



BUDGET ESTIMATE
Capital Expenditure – 2024

Object Code	Category/Object Title	Sche. No.	Total Rs. 000's	2024
	Expenditure			
	Personal Emoluments		384,451	323,000
	Recurrent Expenditure		115,136	150,000
	Capital Expenditure - CF		30,000	30,000
	Total		529,587	503,000
	Financed by			
	Own Revenue - from RRI		49,136	78,000
	Own Revenue - from DF		11,000	12,000
	Treasury Grant – Personal Emoluments (1503)		384,451	323,000
	Treasury Grant – Other Recurrent (1509)		55,000	60,000
	Treasury Grant - Capital (2201)		30,000	30,000
	Total		529,587	503,000



CASH FORECAST FOR SPECIAL CAPITAL DEVELOPMENT PROJECTS

Project Name: Screening of drought /stress tolerant Hevea clones for sustainable Rubber cultivation in marginal areas

CF MPI

Month (2024)		Jan.	Feb.	Mar.	Apr.	May	June	July	August	Sep.	Oct.	Nov.	Dec.	Total
Financial Requirement (Rs.Mn)	Recurrent													
	Capital	-	0.20	0.30	-	0.30	-	0.30	0.20	0.21	-	-	-	1.51

Project Name: Studies on the biology and epidemiology of the Pestalotiopsis Leaf fall disease and to develop effective management strategies

CF MPI

Month (2024)		Jan.	Feb.	Mar.	Apr.	May	June	July	August	Sep.	Oct.	Nov.	Dec.	Total
Financial Requirement (Rs. Mn.)	Recurrent													
	Capital	-	0.30	0.50	0.50	1.00	2.20	2.00	2.00	1.00	0.74	0.50	-	10.74



RUBBER RESEARCH INSTITUTE OF SRI LANKA

**ACTION PLAN 2023
RUBBER RESEARCH INSTITUTE OF SRI LANKA**

Thrust Area

Recommendations on technologies and technology transfer to enhance productivity and profitability of rubber cultivation and rubber product manufacturing through research and development activities

Major research & development tasks for 2024

1. Introduction of novel mechanism for tapping of untapped lands through agro tech service providers.
2. Implementation of National Action Plan for integrated disease management system.
3. Establishment of the Rubber Product R & D Center and provide R&D and testing facilities for rubber product manufacturers and small and medium scale entrepreneurs (SMEs) to promote the rubber product development sector.
4. Improvement in land productivity of rubber through the knowledge enhancement and skill development in the plantation sector.
5. Promotion of SMEs and rubber small holders in rubber product manufacture with knowledge inputs and by assisting in troubleshooting.
6. Conducting new/ novel rubber product developments for local and foreign markets.
7. Provide testing facilities for different forms of raw rubber, rubber compounds and products to promote the raw rubber and rubber product manufacturing sectors.
8. Conducting R & D activities to control pests.
9. Promotion of rubber sector towards a sustainable industry.
10. Promotion of eco-tourism in Dartonfield rubber plantations
11. Issuance of 125,000 carbon credits to the voluntary carbon market by the project developed with 3,000 hectares of new rubber cultivations in Uva and Eastern Provinces.
12. Obtain the accreditation standards for the organizational carbon footprint of the Rubber Research Institute of Sri Lanka.
13. Analysis of climate change and variability indicators to study climate parameters in Rubber growing areas.
14. Development of new clones with high yields, vigour, and drought and disease tolerance/resistance through accelerating the breeding procedures.
15. Establishment of a latex testing facility at Monaragala Sub Station.
16. Ensure the issuing of the quality of rubber plants produced from government and RPCs for rubber growers
17. Introduction of an improved irrigation system and planting technique.
18. Introduction of the novel porous root trainers in rubber nurseries.
19. Introduction of novel rapid and juvenile bud grafting techniques to rubber nurseries.
20. Introduction of base bud grafting technique to bud wood nurseries.
21. Implementation of new slow release fertilizer technologies.
22. Strengthening and expansion of the activities of the DF (Dartonfield) Academy to provide competent human resources.
23. Introduction of digitalized data collection and extension service providing technologies.
24. Implementation of low cost wastewater treatment technologies for raw rubber processing industries.

Allocation of funds for the January to December 2024 (Rs. Million)

Source of fund	Capital	Recurrent	Total
Consolidated fund	30.00	383.00	413.00
Consolidated fund – Thro MPI	12.25	-	12.25
Generated fund	-	90.00	90.00
Grand Total	42.25	473.00	515.25



RUBBER RESEARCH INSTITUTE OF SRI LANKA



Annex 5

Procurement Plan for year 2024

Dept./Line Agency/ Ministry	Procurement Category (Goods, Works & Services etc.)	Estimated Cost Rs.(Mn)	Source of finance name of Donor	Procurement method (CB, LIB, LNB, NCB and National shopping etc.)	Level of Authority	Priority status U- Urgent P- Priority N- Normal	Current Status procurement	Schedule Date of Commencement	Schedule date of completion	Financial Targets (Rs. Mn)				Remarks		
										Q1	Q2	Q3	Q4			
	GOODS															
	Furniture and Office Equipment	1.75	CF	National Competitive Bidding (NCB) / Restricted National Competitive Bidding (LNB) / Shopping as applicable in accordance with procurement guidelines for goods/ works and services	DPC(Minor)		Awaiting Necessary Approvals	01.01.2024	31.12.2024		1.00	0.75		DFA & Research Dept.		
	Plant, Machinery & Equipment															
	Other Laboratory Equipment															
	Library Books															
	WORKS															
	Building Rehabilitation & Improvements Building															
	Structures-Repairing of Internal Roads															
	Maintenance of Buildings															
	Research Projects															
	Research and Development	22.50	CF			DPC(Minor)		P		01.01.2024	31.12.2024	5.63	5.63	5.63	5.63	
	SERVICES															
	Lands and Land Improvements-R&D	0.80	CF			DPC(Minor)		P		01.01.2024	31.12.2024	0.20	0.20	0.20	0.20	
	Monaragala Substation Nursery	0.80	CF			DPC(Minor)		P		01.01.2024	31.12.2024	0.20	0.20	0.20	0.20	



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Establishment of Adaptive Research Trials, Polgahawela	0.40	CF		DPC(Minor)	P		01.01.2024	31.12.2024	0.10	0.10	0.10	0.10	
Establishment of Research (Eastern and Northern) Provinces	0.75	CF		DPC(Minor)	P		01.01.2024	31.12.2024	0.19	0.19	0.19	0.19	
Human Capital Development Project (Foreign/Local)	3.00	CF		DPC(Minor)	P		01.01.2024	31.12.2024	0.75	0.75	0.75	0.75	
Sub Total	30.00						-	-	7.07	8.07	7.82	7.07	
Special Capital Projects- MPI													
Screening of drought/stress tolerant Hevea Clones for sustainable rubber cultivation in marginal areas	1.51	CF		DPC(Minor)	P		01.01.2024	31.12.2024	0.15	0.30	0.44	0.60	
Studies on the biology and epidemiology of the Pestalotiopsis Leaf fall disease and to develop effective management strategies	10.74	CF		DPC(Minor)	P		01.01.2024	31.12.2024	0.80	3.70	5.00	1.23	
Sub Total	12.25								0.95	4.00	5.44	1.83	
Total	42.25								8.02	12.07	13.26	8.90	



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Action Plan for Revenue Collection

Rs. Mn.

Annex 3

Category	Dept.	Programme	Activities	Key Performance Indicators	Targets								Output Outcome		Remarks
					Q1		Q2		Q3		Q4		Total		
					P	F	P	F	P	F	P	F	P	F	
Laboratory Services	Rathmalana														
	RT&DD	Technology transfer	Conducting workshops	No. of workshops	-	-	1	0.10			1	0.10	2	0.20	
		Testing of raw rubber, rubber compounds & products	Conducting tests requested by stakeholders	No. of tests	150	0.20	250	0.30	250	0.30	150	0.20	800	1.00	
	PC												5.00		
	RR&CA		Sample testing services	No. of test carries out	300.0	0.80	200.0	0.60	200.0	0.70	300	0.90	1,000	3.00	
			F/Consultancy											1.00	
	RRPD&CE												2.50		
	Tyre Centre												2.50	15.20	
	Dartonfield														
	BC													0.10	
	ARU													0.10	
	BM& Econ													-	
	PP	Sample testing	Microbiological tests 16	No of tests										-	
		Handicrafts	Selling as souvinours 200	No of items										-	
		Bio efficacy testing	No of products tested 1	No of bio efficacy certificates										-	



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S&PN	Soil and Foliar Survey Programme	Provide site specific fertilizer recommendation for mature rubber	Number of Activities	5%		10%	0.23	40%	0.60	45%	0.68	100%	1.50	
	Land suitability evaluation programme	Select suitable land for rubber cultivation in traditional as well as non-traditional areas	Number of reports issued	25%	0.05	25%	0.05	25%	0.05	25%	0.05	100%	0.20	
	Analytical services	Provide analytical reports to stakeholders on fertilizer, soil. Water and plant samples	Number of reports issued	25%	0.45	25%	0.45	25%	0.45	25%	0.45	100%	1.80	
PS	Inspection and certification of nursery plants (ongoing project)	Issuing authentic plants & Budwoods	No. of plants			1,000	0.15	2,000	0.30	2,000	0.30	5,000	0.75	
	Conduct training programmes / make advisory visits on nursery techniques, planting, tapping and intercropping	Bark audit and Tapping quality assessments	No. of hectares covered	100	0.30					100	0.30	200	0.60	
		Selling Marking plates	No. of stencils	10	0.02	10	0.02	10	0.02	10	0.02	40	0.10	
		Hiring Plant Science Auditorium	No. of days occupied	5	0.04	5	0.04	5	0.04	5	0.04	20	0.15	
ASD	Productivity improvement of RPCs	Four practical workshops	Number of workshops	1	0.13	1	0.13	1	0.13	1	0.13	4	0.50	
G&PB													5.80	



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DF Academy	DF Academy	Provide quality training to Rubber sector	1. On Request Programmes for Universities/Institutes /Schools/RPCs	120 Nos of Programmes	30	8.75	30	8.75	30	8.75	30	8.75	120	35.00	
			2. Scheduled Programmes Training on Rubber Agronomy /Training on Rubber Technology., outside programmes	40 Nos of Programmes	10	3.00	10	3.00	10	3.00	10	3.00	10	3.00	40
Eco Tourism	Eco Tourism	Rent Income	Guest House, Auditorium	No of Bookings	25%	0.25	25%	0.25	25%	0.25	25%	0.25	100%	1.00	1.00
Others	Accounts	Other Income	Tender Fees, Loan Interest and Others	No of Activities	25%	1.00	25%	1.00	25%	1.00	25%	1.00	100%	4.00	
	Admin	Other Income	Solar, Sale of Publication etc.	No of Activities	25%	1.25	25%	1.25	25%	1.25	25%	1.25	100%	5.00	
	Estate Contribution		Sale of Rubber - Estate	No of MT	25%	3.00	25%	3.00	25%	3.00	25%	3.00	100%	12.00	21.00
TOTAL						16.23		16.31		16.83		17.41		90.00	90.00



RUBBER RESEARCH INSTITUTE OF SRI LANKA



Rs. Mn.

DISTRIBUTION AMONG THE DIFFERENT DIVISIONS – January/ December 2024

Programme & Project 1. Name 2. Duration 3. TEC & Source of Funds	Act ivity	R&D Estimate (Rs. Mn) 2023	Source of funds DF&GF		R&D Targets (Rs. Mn) Jan - Dec	Output	Responsible Officer Name Designation
Plant Science Dept.	Research & Development Activities and providing services on all aspects of Natural Rubber	3.30	CF&GF	FT	3.30	One improved grafting technique introduced, One improved irrigation technique identified (50% progress in 2022), One spatial arrangement identified, Certified rubber plants produced from Government, RPCs and private nurseries, Two intercropping models identified (50%), One improved tapping technique and rain guard type tested, All requested training programs and troubleshooting attended	Dr. T. U. K. Silva, PRO
Plant Pathology Dept.		2.42	CF&GF	FT	2.42	<ul style="list-style-type: none"> • Recommendation of resistance <i>hevea</i> clones towards leaf disease - 05 • Identification of effective pesticide cocktail against CLSD. • Implementation of the National plan to combat CLSD. • Identification of beneficial microbes / applications. • Training of stakeholders. • Attending to complicated advisory visits. • Training programmes - 20 	Dr. (Mrs). S. Fernando, Head
Genetics & Plant Breeding Dept.		2.42	CF&GF	FT	2.42	Developed 200 new HPs progenies and evaluate 02 HP populations developed in last years, Exchanged 5 foreign clones from two countries and two clones were selected for evaluate at commercial level, New two genotype selected for interim recommendation, One genotype identified for smallholder, Molecular characterized at least 02 genotypes for accelerate the breeding programme.	Dr.(Mrs)S. P. Withanage, Head
Soils & Plant Nutrition Dept.		1.81	CF&GF	FT	1.81	Introduction of environmental friendly product, Effective weed control method, fertilizer recommendation for nontraditional areas, Three bio efficacy report issued, Introduction of a effective fertilizer management system, Mapping soil spatial variability of selected rubber plantations, Quantification of the variability of Silicon and micro nutrients, Determination of Sulphur status in Agalawatta soil series, Survey 5000 ha of rubber lands and provide 40 - 50 site specific fertilizer recommendation reports, Survey 500 ha of land for planting rubber Provide 3 - 5 land suitability reports, Assess 4000 parameters and provide 120 analytical reports and	Mr. Sangeeth Liyanaarchchi, RO
Biochemistry Dept.		1.14	CF&GF	FT	1.14	<ul style="list-style-type: none"> • Effective introduction of LIH systems to rubber growers • Identification of crop loss and financial status in CLSD effected fields harvested with LIH • Identification of sustainable rubber clones through latex diagnosis. • Identification of yielding capacity of genotypes during the early stages of the screening process • Identification of sustainable rubber clones for the nontraditional rubber growing areas • Identification of effect of CLSD on latex diagnosis and yield determinant factors • Improving the locally developed ethephon formulation by incorporating anti-stress compounds 	Dr. (Mrs) S. Kudaligama, Head



RUBBER RESEARCH INSTITUTE OF SRI LANKA

DISTRIBUTION AMONG THE DIFFERENT DIVISIONS – January/ December 2023

Rs. Mn

Programme & Project 1. Name 2. Duration 3. TEC & Source of Funds	Activity	R&D Estimate (Rs. Mn) 2023	Source of funds DF&GF		R&D (Rs. Mn) Jan – Dec	Output	Responsible Officer Name Designation
ASDept	Research & Development Activities and providing services on all aspects of Natural Rubber	0.56	CF	FT	0.56	<ul style="list-style-type: none"> • Rehabilitation of rubber holdings (70), RSS processing centers (8) in both sectors of smallholder and RPCs • Establishment of demonstrations of rain guards (10) and intercropping (6) and SS drying systems (4) • Technical advisory service for the RPCs (40) and smallholder (80) sector • Human resource development of stake holders of the rubber sector (200 rubber smallholders and 200 field staff of RPCs) • Introducing cyber extension approaches (e-advisory service and toll-free advisory service) into the rubber sector • Linking the alpha generation for rubber farming • Development of the protocol of private and public extension services in the rubber sector 	Dr. Sanjeewa Gunarathne, AO
R.R. & C.A. Dept.		2.02	CF	FT	2.02	<ul style="list-style-type: none"> • Conduct 1000 test for latex, dry rubber & rubber processing chemicals. • Conduct 03 training programmes for rubber industries. • Obtain accredited status for 07 latex quality parameters. • Conduct quality assurance & quality control related projects. • 5. Conduct 05 troubleshooting activities on client requests. 	Dr. A.P. Attanayake PRO
R.R.P.D& C.E. Dept.		1.82	CF	FT	1.82	Novel chemical and processes for manufacture of deprotenised natural rubber, novel chemical and process for manufacture of deprotenised rubber, a process for development of advanced foam rubber, Semi-mechanized raw rubber manufacturing process, single day crepe rubber dying system, Cost effective effluent treatment technologies, Advanced mobile app for raw rubber processing, appropriate technologies for clients	Mr. Kasun Adhikari, RO
RT & D		3.02	CF	FT	3.02	<ul style="list-style-type: none"> • Identification of 8 new/novel rubber products for the export market. • Development of 5 new / novel dry rubber based compounds / products for industries / entrepreneurs • Development of 3 new / novel latex based compounds / products for industries / entrepreneurs • Training of 150 entrepreneurs / rubber small holders on manufacture of rubber products • Carrying out 800 tests on raw rubber, rubber compounds and products • the request of the industry 	Dr (Mrs).D.G. Edirisinghe, Head



RUBBER RESEARCH INSTITUTE OF SRI LANKA



DISTRIBUTION AMONG THE DIFFERENT DIVISIONS – January/ December 2024

Rs. Mn

Programme & Project 1. Name 2. Duration 3. TEC & Source of Funds	Activity	R&D Estimate (Rs. Mn) 2023	Source of funds DF&GF		R&D (Rs. Mn) Jan – Dec	Output	Responsible Officer Name Designation
Polymer Chemistry Dept.		2.42	CF	FT	2.42	Developing 02 value-added natural rubber grades/value-added natural rubber composites. Conducting 1000 tests on raw rubber, rubber compounds, and products using FTIR and TGA based on customer requests.	Mrs. H I K Samarasinghe, RO
Adaptive Research Unit	Research & Development Activities and providing services on all aspects of Natural Rubber	0.74	CF	FT	0.74	Protocols for rubber cultivation in dry zone developed, Impact of rubber cultivation on livelihood in nontraditional areas quantified, Two new areas feasible for rubber cultivation identified, Area specific farming models established, Adoption rate of recommended agronomic practices for rubber cultivation in non-traditional areas assessed	Dr. (Mrs). E. S, Munasinghe, PRO
Biometry Section		0.44	CF	FT	0.44	Research support for projects identified for 2024 Action Plan, 01 developments/modifications/applications and subsequent publications, Maintained 5 databases, Analysis one indicator relevance to weather parameters.	Mr. Shanaka Dilhan, RO
Agriculture Economic		0.39	CF	FT	0.39	Rubber growth identified, Food security indicators developed for the estate sector, Sustainability measures identified, Rubber-farm livelihood types, New Policy guidelines formulated, Awareness reports for the public, and Rubber yield maps. Rubber farm household resilience measures for climate change, Databases developed and maintained.	Mr. J. K. S. Sankalpa SRO
Funds		22.50			22.50		
Other Capital		7.50			7.50		
Total Funds		30.00			30.00		



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For the Year 2024 - Divisional Capital / Recurrent Budget

Departments	Divisional Capital																
	Building Rehabilitation	Plant, Machinery & Equipment	Maintenance of Buildings	Maintenance of Electricity Supply	Furniture & Office Equipment	Other-Laboratory Equipment's	Library Books	Maintenance of Road	Land & Land Improvements - P. & D.	Monaragala	Polgahwela	North East	New leaf disease	PHD	HRD Programme	R & D	Total
Board Office																	-
Director Office																	-
DDR (T)																	-
Administration - RT																	-
Administration -DF															3.00		3.00
Accounts/Pro/ Stores																	-
Stores																	-
Work Section																	-
Internal Audit Unit		-															-
Audio Visual & IT Units																	-
Library DF																	-
Library RT																	-
Estate																	-



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Monaragala Substation																		-
Polgahawela Substation																		-
DDR (B)																		-
Training Centre - N'kele					1.75													1.75
Adaptive Research Unit											0.10	0.25					0.74	1.09
Adv. Service										0.80							0.56	1.36
Agriculture & Eco. Unit																	0.39	0.39
Bio- Chemistry											0.15	0.25					1.14	1.54
Bio Metry																	0.44	0.44
Genetics & PB									0.50								2.42	2.92
Plant Pathology											0.15	0.25					2.42	2.82
Plant Science									0.30								3.30	3.60
Polymer Chemistry																	2.42	2.42
RR & CA																	2.02	2.02
RR & CE																	1.82	1.82
Rubber Technology																	3.02	3.02
Soils & Plant Nutrition																	1.81	1.81
Total	-	-	-	-	1.75	-	-	-	0.80	0.80	0.40	0.75	-	-	3.00	22.50	30.00	



RUBBER RESEARCH INSTITUTE OF SRI LANKA



DISTRIBUTION AMONG THE DIFFERENT DIVISIONS – January/ December 2024 (Recurrent)

Programmed & Project	Allocation for 2024			Activity based budget			Source of funds	Financial Quarterly Targets				Responsible Officer's Name Designation						
	1. Name	CF	GF	Total (Rs. Mn)	Emoluments (Rs.mn)	Other (Rs. Mn)							Total	CF&GF	Q1	Q2	Q3	Q4
Board Office	14.29		14.29	11.94	3.68	15.63	CF&GF	3.91	3.91	3.91	3.91	Mr.D.M.S.Dissanayake, SAO						
Director Office	17.52		17.52	14.64	0.29	14.93	CF&GF	3.73	3.73	3.73	3.73	Dr. S. Siriwardane, Acting Director						
DDR (T)	4.57		4.57	3.82	0.26	4.08	CF&GF	1.02	1.02	1.02	1.02	Dr. S. Siriwardane, DDR(T)						
DDRB	4.57		4.57	3.82	1.97	5.79	CF&GF	1.45	1.45	1.45	1.45	Dr.(Mrs.) S.P.Withanage, Actg. DDRB						
Administration (DF,RT)	14.35	45.00	59.35	11.99	66.98	78.97	CF&GF	19.74	19.74	19.74	19.74	Mr.D.M.S.Dissanayake, SAO						
Accounts & Procurement	27.16		27.16	22.68	3.21	25.89	CF&GF	6.47	6.47	6.47	6.47	Mr. Sujith Hewage, SA						
Stores	3.18		3.18	2.65	1.45	4.09	CF&GF	1.02	1.02	1.02	1.02	Mr. Sujith Hewage, SA						
Work Section	47.94	45.00	92.94	41.87	34.10	75.97	CF&GF	18.99	18.99	18.99	18.99	Mr. K. Chathurange, RE						
Internal Audit Unit	4.59		4.59	3.77	0.22	4.00	CF&GF	1.00	1.00	1.00	1.00	Mrs. S. Senadheera, IA						
Library	5.94		5.94	4.96	2.11	7.08	CF&GF	1.77	1.77	1.77	1.77	Dr.(Mrs.) S.P.Withanage, Actg. DDRB						
Adaptive Research Unit	15.36		15.36	12.83	1.25	14.08	CF&GF	3.52	3.52	3.52	3.52	Dr. (Mrs.). E. S, Munasinghe, PRO						



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Adv. Service and Training	46.14		46.14	38.55	4.73	43.27	CF&GF	10.82	10.82	10.82	10.82	Mr. Sanjeewa Gunarathne, AO / Actg. Head
Agriculture & Eco. Unit	2.81		2.81	2.35	0.10	2.45	CF&GF	0.61	0.61	0.61	0.61	Mr. J. K.S. Sankalpa, SRO
Bio- Chemistry	10.36		10.36	9.06	2.42	11.48	CF&GF	2.87	2.87	2.87	2.87	Mrs. Sagari Kudaligama Head
Bio Metry	8.64		8.64	7.22	1.06	8.28	CF&GF	2.07	2.07	2.07	2.07	Mr. Shanaka Dilhan, RO
Genetics & PB	32.09		32.09	27.27	5.62	32.89	CF&GF	8.22	8.22	8.22	8.22	Dr.(Mrs.) S. P. Withanage, Head
Plant Pathology	4.20		4.20	3.51	3.61	7.12	CF&GF	1.78	1.78	1.78	1.78	Dr.(Mrs.).S. Fernando, Head
Plant Science	34.04		34.04	28.85	4.13	32.98	CF&GF	8.24	8.24	8.24	8.24	Dr. T. U. K. Silva, PRO
Polymer Chemistry	12.54		12.54	10.47	2.89	13.37	CF&GF	3.34	3.34	3.34	3.34	Mr. H I K Samarasinghe, RO
RR & CA	14.57		14.57	12.18	2.52	14.69	CF&GF	3.67	3.67	3.67	3.67	Mrs. A.P. Attanayake , PRO
RRPD & CE	16.01		16.01	13.37	1.78	15.15	CF&GF	3.79	3.79	3.79	3.79	Mr. Kasun Adhikari, RO
Rubber Technology	20.44		20.44	17.07	1.72	18.80	CF&GF	4.70	4.70	4.70	4.70	Dr (Mrs.).D.G. Edirisinghe, Head
Soils & Plant Nutrition	21.69		21.69	18.12	3.89	22.01	CF&GF	5.50	5.50	5.50	5.50	Mr. Sangeeth Liyanaarachchi, RO
Total	383.00	90.00	473.00	323.00	150.00	473.00	-	118.25	118.25	118.25	118.25	



RUBBER RESEARCH INSTITUTE OF SRI LANKA



Detailed Action Plan for Research &Development: -Agronomy Departments

Annex 2

Genetics and Plant Breeding Department (Rs. Mn. 2.42)

Priority Area :- Ensuring the availability of raw materials necessary for the rubber industry by providing encouragement for the development of cultivations of small and medium scale rubber estate owners

Objectives :- Development of genetically improved clones to the Industry

S. No.	Program me	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)	Annual Physical Target 2024		Annual Financial Allocation 2024	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
							unit	No.		Q1		Q2		Q3		Q4			
										F	P	F	P	F	P	F	P		
1	Breeding Selection and Evaluation of new Genotypes using Conventional and Molecular Breeding Strategies	Development of genetically improved clones	Annual hand pollination (HP) programme	Number of genotypes produced	2.5.1 & 2.5.2	CF	Geno types	250	0.20	0.06	10	0.16	100	0.18	200	0.20	250	Dr (Mrs) S. P. Withanage Head/ Genetics & Plant Breeding Dept.	
			Preliminary evaluation of HP mother plants and maintenance and re-establishment of bud wood nurseries and HP progenies.	Number of genotypes selected			genot ypes	02	0.30	0.075	10%	0.14	40%	0.225	70%	0.30	100%		
			Small scale evaluation of new genotypes (SSCTs)	Number of genotypes selected			Geno types	05	0.50	0.05	25%	0.20	50%	0.50	75%	0.50	100%		
			Evaluation of selected HP entries under estate collaborative level (ECTs)	Number of clones selected			clones	02	0.42	0.15	25%	0.25	50%	0.35	75%	0.42	100%		
			Evaluation of selected HP entries in collaborating with smallholders in traditional and non-traditional rubber growing areas (SRTs)	Number of clones selected			clones	05	0.40	0.15	25%	0.25	50%	0.35	75%	0.40	100%		
			Molecular characterization of selected genotypes	Number of genotypes characterized			Geno types	02	0.50	0.05	5%	0.20	20%	0.35	70%	0.50	100%		
			Multilateral clone exchange programme	Number of clones exchanged			clones	05	0.10	-	-	-	-	0.05	50%	0.10	100%		



RUBBER RESEARCH INSTITUTE OF SRI LANKA
Plant Science Department (Rs. Mn. 3.30)



Priority Area :- Productivity improvement

Objectives :- To increase the productivity of rubber lands by providing high quality plants (long term)

To increase the land use efficiency and additional income generation through rubber based farming systems

To introduce economical and sustainable latex harvesting systems

To mitigate the abiotic stress on growth and yield attributes

Crop diversification and enhance biodiversity through rubber based agroforestry systems

S. No.	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
						unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
1	Improvement of growth and abiotic stress tolerance in rubber plants	Nursery experiment on plant quality improvement	No. of new recommendations		CF	New recommendations	01	0.25	0.04	25%	0.09	50%	0.17	75%	0.25	100%	Dr. T. U. K. Silva, Principal Research Officer	
		Investigation the impact of seasonal floods on rubber cultivation and harvesting	No, of protocols developed			New protocols	01	0.30	-	25%	0.10	50%	0.20	75%	0.30	100%		
2	Different planting strategies and improved irrigation systems for rubber nurseries and field plants	Improved irrigation systems for nurseries and field plants	No. of new techniques introduced				New techniques	01	0.30	0.10	25%	0.15	50%	0.20	75%	0.30		100%



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3	Tissue culture and micro propagation of rubber and other crops	Development of tissue culture techniques	No. of tissue culture methods tested		tissue culture methods	02	0.35	0.10	25%	0.15	50%	0.25	75%	0.35	100%		
4	Planting at different densities to obtain maximum economic return from latex and timber	Development of Plant densities (ongoing project 10 years)	No. of new plant densities tested		CF	New plant densities	01	0.25	0.05	20%	0.10	44%	0.15	70%	0.25	100%	
5	Inspection and certification of nursery plants (ongoing project)	Inspection of Government, estate and private nurseries	No. of plants certified		CF	Plants certified	0.5 million	0.15	0.05	0.15	0.075	0.25	0.125	0.40	0.15	0.50	
6	Evaluation of intercrops under rubber	Development of rubber based intercropping models	No. of rubber intercropping models developed		CF	New recommendations	01	0.55	0.05	25%	0.20	50%	0.35	75%	0.55	100%	
		Enhance intercropping preventing elephant attack of 20 acres in Ampara	No. of acres converted to intercropping		CF	Acres converted to Intercrops	20	0.45	0.40	5	0.45	10	-	15	-	20	
7	Testing of different tapping systems and rain guards	Testing of different tapping systems	No. of tapping systems tested		CF	Tapping systems	01	0.25	0.05	25%	0.10	50%	0.17	75%	0.25	100%	
		Testing of different rainguard types	No. of rainguard types recommended		CF	Rainguard types	01	0.25	0.07	25%	0.12	50%	0.17	75%	0.25	100%	
8	Conduct training programmes / make advisory visits on nursery techniques, planting, tapping and intercropping	Training/awareness programs on tapping, nursery management, immature upkeep and intercropping	Number of programs conducted		CF	Programs	20	0.20	0.05	5	0.10	10	0.15	15	0.20	20	



RUBBER RESEARCH INSTITUTE OF SRI LANKA

Plant Pathology & Microbiology Department (Rs. Mn. 2.42)

Priority Area :- Plant Protection & Microbiology

Objectives :- Planning, implementation and management of research on all aspects of the maladies of the rubber plantations, improvement of beneficial soil microbiology and other microbiological applications in the most economical and environmentally sustainable manner.

S. No.	Project	Activities	KPI	SDG	Source of Fund (CF/GF)*	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
						unit	No.		Q1		Q2		Q3		Q4			
									F	p	F	p	F	p	F	p		
1	Screening of chemical pesticides to control pests – screening of clones to identify disease resistance	Screening of chemical pesticides to effectively control diseases	No of effective pesticides		CF	pesticides	08	0.60	0.07	25%	0.15	50%	0.25	75%	0.30	100%	Dr. (Ms.) T.H.P.S. Fernando, Head Plant Pathology & Microbiology Dept.	
		Screening of <i>Hevea</i> clones against the economically important diseases	No of disease resistant rubber clones			clones	50		0.07	25%	0.15	50%	0.25	75%	0.30	100%		
2	Studies on the biology, molecular biology of pests and biological controlling	Biology and molecular biology of leaf and stem disease pathogens	Expansion of knowledge			Publications	06	0.60	0.07	-	0.15	2	0.25	4	0.30	6		
		Biological controlling of pathogens	Effective bio pesticides			Biopesticides	01		0.07	25%	0.15	50%	0.25	75%	0.30	100%		
3	Studies on beneficial microbiology to explore methods to promote small scale cottage industries and to strengthen the microbiological testing	Maintenance of national culture collection	No of microbes			Microbe cultures	50	0.60	0.07	25%	0.15	50%	0.25	75%	0.30	100%		
		Development of microbiological applications	No of microbial applications			Microbe applications	02		0.07	25%	0.15	50%	0.25	75%	0.30	100%		



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4	Surveillance of potential pests and disease outbreaks to avoid unwanted sudden disease epidemics - Advisory & Training Programmes	Surveys to Identify destructive disease condition and making early warnings	No of early warnings			Early warnings	06	0.62		1	0.10	3	0.145	4	0.22	6		
		Advisory services	No of Advisory visits			Advisory visits	60		0.05	10	0.10	25	0.15	40	0.20	60		
		Training programmes	No of Training programmes			Training programmes	10		0.05	2	0.10	6	0.15	8	0.20	10		



RUBBER RESEARCH INSTITUTE OF SRI LANKA



Soil & Plant Nutrition Department (Rs. Mn. 1.82)

Priority Area : - Improving the productivity of Nutrient Management of rubber growing lands in Sri Lanka via Eco-friendly fertilizer Management approaches

Objectives : - Efficient and effective nutrient management of rubber growing lands in Sri Lanka

S. No.	Project	Activity	KPI No	SDG No.	Source of Funds (CF/GF)	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer Name and Designation	Remarks
						Unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
	Evaluate the effectiveness of environmentally friendly agro-management practices for enhancing fertility in rubber soils (2018 – 2025)	Testing of different organic amendments, organic fertilizer and biofertilizer for soil improvement. Evaluation of eco-friendly slow releasing fertilizer techniques.	No. of organic products evaluated or developed No of sites which applied slow-releasing fertilizer techniques	2	CF	organic and biofertilizers	2	0.60	0.05	-	0.25	1	0.45	-	0.60	2	Mr. L.A.T.S. Liyanaarachchi – Research Officer	
	Developing a fertilizer management system to reduce disease severity of new leaf fall disease. Evaluation the effectiveness micro nutrient fertilizer mixtures on new leaf fall disease.	Development level of the fertilizer management system	2	Develop ment %		100	0.20	0.05	25%	0.10	50%	0.15	75%	0.20	100 %			



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Establishment of site-specific management zones under traditional rubber plantations for variable rate fertilizer (VRF) application via geo-spatial and geo-statistical approaches	Evaluation of areal image capturing devices on rubber canopy status Identification. Identification of the relationship between areal imagery data and ground level soil and leaf data.	No. of areal images capturing devices applied Number of leaf and soil samples collected			Progress level %	100	0.40	0.05	15%	0.15	45%	0.25	80%	0.40	100 %		
Evaluation of newly developed inorganic fertilizer mixtures for rubber	Identification of the effectiveness of newly developed fertilizer mixture on immature rubber at both traditional and non-traditional areas in Sri Lanka. Identification of the effectiveness of newly developed fertilizer mixture on mature rubber at both traditional and non-traditional areas in Sri Lanka.	No. of newly developed fertilizer mixtures No. of sites which applied the newly developed fertilizer mixtures			Fertilizer mixtures	2	0.40	0.05	-	0.10	-	0.15	1	0.10	2		
Issuing certification for land suitability, site specific fertilizer applications and analyzing fertilizer samples	Collection of leaf samples and field parameters at different sites. Evaluation of the land suitability for planting and re-planting of rubber. Collection of soil, observe field parameters and GPS information at different sites. Testing fertilizer, soil, leaf, water and compost samples according to the SLS guidelines	Number of site-specific fertilizer recommendation reports provide Number of land suitability reports provide Number of analytical reports provide Development level of the data base		CF	Reports	50	0.22	0.02 5	5	0.02 5	20	0.10	40	0.06	50		



RUBBER RESEARCH INSTITUTE OF SRI LANKA
Bio Chemistry & Physiology Department (Rs. Mn. 1.14)



Priority Area :- Ensuring the availability of raw materials necessary for the rubber industry by providing encouragement for the development of small and medium scale rubber estate owners

Objectives :- Reduced cost of production in rubber plantations

S. No.	Program	Project	Activities	KPI. No.	SDG No.	Source of Fund (CF/GF)*	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
							unit	No.		Q1		Q2		Q3		Q4			
										F	P	F	P	F	P	F	P		
1	Research, development and commercial introduction of low intensity harvesting strategies	Effective introduction of LIH systems to rubber growers	<ul style="list-style-type: none"> • Introduction of LIH to interested growers on technology refinement basis. • Providing necessary assistance for the growers adopted LIH. • Data collection in experimental fields and analysis. • Introduction of site specific stimulation protocols to improve yield of unproductive or low productive rubber lands on request of growers. 	Fields assisted		CF	fields	20	0.13	0.02	5	0.05	10	0.08	15	0.13	20	Dr. KVVS Kudaligama, Head of the Dept.	



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		Significance of crop loss and circular leaf spot disease incidence in fields under low intensity harvesting systems in RPCs	<ul style="list-style-type: none"> • Identification of crop loss and financial status in CLSD effected fields harvested with LIH 	Fields monitored.		CF	fields	40	0.31	0.05	10	0.10	20	0.20	30	0.31	40		
2	Research and development on biochemical and physiological aspects to improve the sustainability of rubber farming	Supporting the clonal screening activities through physiological and biochemical aspects	<ul style="list-style-type: none"> • Identification of sustainable rubber clones through latex diagnosis. • Identification of yielding capacity of genotypes during the early stages of the screening process. 	Clones/genotypes evaluated.		CF	Clones Genotypes	8 10	0.13	0.05	8 10	0.08 10	8 10	0.10 10	8 10	0.13 10	8 10	Mrs. NPSN Karunaratne, Research Officer	
		Screening of suitable clones for suboptimal climates with physiological and biochemical features	<ul style="list-style-type: none"> • Identification of sustainable rubber clones for the nontraditional rubber growing areas 	Clones evaluated		CF	Clones	8	0.30	0.5	8	0.15	8	0.20	8	0.30	8		
		Identification of yielding capacity of trees under CLSD incidences.	<ul style="list-style-type: none"> • Identification of effect of CLSD on latex diagnosis and yield determinant factors 	Trees evaluated		CF	Trees	320	0.11	0.02	160	0.06	160	0.11	320	0.16	320		0



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	Further improving the quality of locally formulated ethephon formulation to alleviate tapping and stimulation stress to trees	•Improving the locally developed ethephon formulation by incorporating anti-stress compounds	Level improved		CF	Development %	25	0.16	0.03	2%	0.07	10 %	0.12	20 %	0.16	25 %	Dr. KVVVS Kudaligama, Head of the Dept.
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RUBBER RESEARCH INSTITUTE OF SRI LANKA
Adaptive Research Unit (Rs. Mn. 0.74)



Priority Area :-

**Objectives :- To develop suitable agronomic protocols to cultivate rubber in nontraditional areas and assess its socioeconomic and environmental impacts
To enhance the productivity of the rubber smallholdings in Sri Lanka through technology development**

S. No.	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name &	Remarks
						unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
1.	Expansion of rubber cultivation to nontraditional areas	Development of suitable protocols to cultivate rubber in Dry Zone (starting from 99%)	Revised or newly process introduced		CF	No. of technologies refined	100%	0.05	0.01	99%	0.02	99%	0.03	99%	0.05	100%	Dr. E.S. Munasinghe / Principal Research Officer	
		Assessments on socioeconomic impact of rubber cultivation in non-traditional areas (starting from 92%)	No of recommendations/revised recommendations			No. of impact assessments	96%	0.05	0.01	93%	0.02	94%	0.03	95%	0.05	96%		
		Identification of agronomic and socio-economic feasibility for rubber cultivation in new areas of dry zone (starting from 80%)				No. of DS divisions identified	2	0.10	0.02	81%	0.04	82%	0.06	83%	0.10	84%		
		Identification of suitable farming models for new areas (starting from 55%)				No. of farming models established	2	0.10	0.02	0%	0.04	65%	0.08	70%	0.10	75%		
2.	Productivity improvement through technology development	Assessing the adoption rate of recommended agronomic practices in rubber cultivation in non-traditional areas (starting from 0%)	Level of adoption - Rubber		CF	No. of smallholdings assessed	50%	0.24	0.06	10%	0.12	25%	0.183	40%	0.24	50%		



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3	Approaching the voluntary carbon market with rubber cultivation	Payment of subscription fee - Jan – 500US\$ (0.16 Rs. Mn.) Rs. Mn. 0.2 Project monitoring – Jan Project registration – Jan Selection of potential project partner - March offering the project (sale of the carbon credits) - July	-		CF	-	-	0.20	0.16	25%	-	-	-	-	0.20	100%	-	Activities completed
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RUBBER RESEARCH INSTITUTE OF SRI LANKA
Biometry Section (Rs. Mn. 0.44)



Priority Area :- Productivity improvement through reliable recommendation

Objectives :- To improve reliability of findings of research on rubber & Reliable information for stakeholders for climate related actions for better decision making

S.No.	Program/ Project	Activities	KPI.No	SDG No.	Source of Fund (CF/ GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
						unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
01	Improving the reliability of interpretations of research projects through appropriate statistical methods	Research support for research projects conducted by RRISL (Action Plan)	No. of research projects benefitted		CF	Research projects identified for 2024	-	0.07	0.015	25%	0.03	50%	0.05	75%	0.07	100%	Mr. Dilhan Rathnayaka, Research officer	
		Development, modification and application of appropriate statistical methods for agronomic, socio-economic and industrial experiments in the rubber sector	No. of applications/modifications/applications of statistical methods			Development/modification/application and subsequent publications	01	0.07	0.015	20%	0.03	45%	0.05	70%	0.07	100%		



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02	Improving the knowledge base on climate, climate change & variability for better decision making in rubber growing areas	Maintenance of databases on meteorological data in rubber growing areas	No. of databases maintained			No. of databases	05	0.20	0.05	25	0.1	50	0.15	75	0.2	100
		Analysis of climate change and variability indicators	No. of indicators analyzed	13.1.1	CF	No. of indicators	01	0.10	0.02	20	0.05	40	0.07	70	0.1	100



Agriculture Economics Unit (0.39 Mn)



Priority Area :- Productivity improvement/Increase value addition

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Objectives :- Provide guidelines to improve the livelihoods of rubber holdings and formulation of effective policy measures

S. No	Project	Activities	KPI.No	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
						Unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
1	Analysis on Socio-economic implications & sustainability issues of rubber cultivation	Analysis of Rubber Industry	No. of indicators analyzed		CF	Analysis	2	0.025	0.0042	25%	0.0111	50%	0.018	75%	0.025	100%	Mrs. P. G. N. Ishani, Research Officer	
		Analysis of Food Security of Estate workers	No of publication			Publication	1	0.117	0.0195	25%	0.052	50%	0.0845	75%	0.177	100%		
		Sustainability Analysis of Rubber cultivation	No of publication			Publication	1	0.116	0.019	70%	0.051	78%	0.083	86%	0.116	100%		
2	Rubber Industry data management and economic analysis	Update data bases on rubber industry and economic analysis	No. of databases maintained		CF	NA	NA	0.032	0.005	NA	0.014	NA	0.023	NA	0.032	NA	Mrs. P. G. N. Ishani, Mr. J. K. s. Sankalpa, Senior Research Officer	
		Identification of low productive rubber lands through spatial analysis	No. of Maps generated			Map	4	0.050	0.0083	55%	0.0222	68%	0.0361	81%	0.050	100%		
		Analysis of smallholder rubber farmers' resilience and adaptation to climate change	No of publication			Publication	1	0.050	0.0083	35%	0.0222	45%	0.0361	55%	0.050	65%		



RUBBER RESEARCH INSTITUTE OF SRI LANKA
Advisory Services Department (Rs. Mn. 0.56)



Priority Area :- Strategic extension approaches to improve the productivity of the rubber smallholder sector

Objectives :- 1. To enhance the adoption rate of rubber farming practices of immature and mature up keeping to maintain the recommended stand

2.To introduce skilled human resource in a view to enhance the adoption rate of quality of tapping while reducing the TPD rate

3.To reduce the COP of RSS and develop cottage industry in smallholder sector

4.To develop the rubber stakeholder network via cyber extension approaches

S. No	Program	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
							Unit	No.		Q1		Q2		Q3		Q4			
										F	P	F	P	F	P	F	P		
1	Strategic technology transfer approaches to improve the productivity of the rubber small holder sector	Rehabilitation of rubber small holdings	1. Identification of holdings 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (in – situ)	Number of rehabilitated holdings		CF	Rehabilitated holdings	50	0.06	0.01	-	0.02	-	0.04	25	0.06	50	Dr. PKKS Gunarathne (Advisory Officer) And Rubber Extension officers	
2	Strategic technology transfer approaches to improve the productivity of the rubber smallholder sector	Rehabilitation of processing centers	1. Identification of processing centers 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (in – situ)	Number of rehabilitated processing centers		CF	Rehabilitated processing centers	8	0.04	0.01	-	0.02	-	0.03	4	0.04	8		



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3	Strategic technology transfer approaches to improve the productivity of the rubber smallholder sector	Establishment of rain guards demonstration plots Establishment of rain guards demonstration plots	1. Identification of holdings 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ) 4. Facilitation for input supplying	Number of established of rain guards demonstration plots			Established rain guards demonstration plots	10	0.022	0.011	10	0.022	-	-	-	-		
4	Strategic technology transfer approaches to improve the productivity of the rubber smallholder sector	Establishment of intercropping demonstration plots	1. Identification holdings 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ)	Number of established intercropping demonstration plots			Established intercropping demonstration plots	6	0.02	-	-	0.01	3	-	-	0.02	6	
5	Strategic technology transfer approaches to improve the productivity of the rubber smallholder sector	Establishment of new processing centers/ SS drying system	1. Identification of rubber smallholders 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ)	Number of established processing centers		CF	Established new processing centers	4	0.016	-	-	-	-	0.003	2	0.016	4	



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6	Strategic technology transfers approaches to improve the productivity of the RPCs	Rehabilitation of rubber holdings	1. Identification of rubber estates 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ)	Number of rehabilitated holdings/divisions		Rehabilitated holdings/divisions	20	0.01	0.0025	0.05	0.075	10	0.01	20		
7	Advisory and extension service to improve the productivity of the RPCs	Solving the identified issues in the estates	1. Identification of issues 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ)	Number of advisory visits completed/Solved issues		Advisory visits completed/Solved issues	40	0.02	0.005	10	0.01	20	0.015	30	0.02	40
8	Advisory and extension service to improve the productivity of the smallholdings	Solving the identified issues in the smallholdings	1. Identification of issues 2. Conducting practical workshops / Demonstrations 3. Conducting technical advisory visits (In-situ)	Number of advisory visits completed/Solved issues		Advisory visits completed/Solved issues	80	0.03	0.005	20	0.01	40	0.015	60	0.03	80
9	Advisory and extension service to improve the productivity of the smallholdings	Group advisory (Vihidum Sathkara) for selected village/smallholdings	1. Planning the programme 2. Conducting extension programmes	Number of conducted group advisory visits programmes (Vihidum Sathkara)		Conducted group advisory visits programmes (Vihidum Sathkara)	04	0.02	0.0025	01	0.005	02	0.0075	03	0.02	04
10	Advisory and extension service to improve the productivity of the RPCs	Group advisory (STaPT) for selected estate sector	1. Planning the programme 2. Conducting extension programmes	Number of conducted group advisory visits programmes (STaPT)	CF	Conducted group advisory visits programmes (STaPT)	12	0.196	0.0465	03	0.1005	06	0.16125	09	0.196	12



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11	Human resource development of all stake holders of the rubber sector	Upgrading of knowledge & skill development on rubber farming aspects (agronomic, tapping, rubber processing, cottage industries and marketing) - smallholder sector	1. Identification of target groups 2. Conducting practical workshops	Number of introduced skilled stakeholders		Introduced skilled stakeholders	200	0.10	0.025	100	0.05	150	0.075	175	0.1	200		
12	Human resource development of all stake holders of the rubber sector	Upgrading of knowledge & skill development on rubber farming aspects (agronomic and tapping) - estate sector	1. Identification of target groups 1. Conducting practical workshops	Number of introduced skilled stakeholders		Introduced skilled stakeholders	200	0.01	0.025	50	0.05	100	0.075	150	0.01	200		
13	Development of effective extension network in the rubber sector	Introducing cyber extension into the rubber sector	1. Development of e-advisory service 2. Introducing toll-free advisory service 3. Development of the protocol of private and public extension services in the rubber sector 4. Linking the alpha generation for rubber farming	Number of introduced rubber farming videos into the social media platforms Number of extension programmes conducted		Introduced rubber farming videos into the social media platforms	8	0.016	0.0045	2	0.009	4	0.0135	6	0.016	8		



RUBBER RESEARCH INSTITUTE OF SRI LANKA

Rubber Technology & Development Department (Rs. 3.02 Mn)

Priority Area :- Marketing, Trading and Entrepreneurship Development

Objectives :- To contribute to the export income through rubber products by US\$ 2 Bn (short term)

To strengthen the rubber product manufacturing sector including the SME sector

To minimize waste generated by the rubber product manufacturing industries

To add value to locally available natural materials

Market diversification

S.No.	Program	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Target 2024		Annual Financial Targets 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
							Unit	No.		Q1		Q2		Q3		Q4			
										F	P	F	P	F	P	F	P		
1	Promotion of new / novel rubber products	Technical assistance on manufacture of new / novel rubber products for local and foreign markets	Identification of new / novel rubber products for the export market	No. of rubber products	9.2.1., 9.3.1. & 9.b.1.	CF	Rubber products	08	0.4	0.1	02	0.2	04	0.3	06	0.4	08	Dr. (Mrs.) D.G. Edirisinghe, Head, Rubber Technology & Development Dept.	



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			Development of new / novel dry rubber based compounds / products for industries / entrepreneurs	No. of dry rubber based compounds / products			Dry rubber based compounds / products	05	1.1	0.2	01	0.4	02	0.8	04	1.1	05		
			Development of new / novel latex based compounds / products for industries / entrepreneurs	No. of latex based compounds / products			Latex based compounds / products	03	0.40	0.05	-	0.2	01	0.3	02	0.4	03		
			Training entrepreneurs / rubber smallholders on manufacture of rubber products	No. of entrepreneurs / rubber small holders			Entrepreneurs / rubber small holders	150	0.62	0.1	30	0.3	70	0.5	110	0.62	150		
			Testing raw rubber, rubber compounds and products at the request of the industry	No. of tests			test	800	0.50	0.1	150	0.3	375	0.4	600	0.5	800		



RUBBER RESEARCH INSTITUTE OF SRI LANKA
Polymer Chemistry Department (Rs. Mn. 2.42)

Priority Area :- Marketing, Trading and Entrepreneurship Development
Objectives :- To contribute to the export income through value added rubber grades by US\$ 2 Bn (short term)
 To add value to locally available natural materials Market diversification

No	Programme	Project	Activity	KPIs No.	SDG No.	Funding Source (CF/GF)	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks
							Unit	No.		Q1		Q2		Q3		Q4			
										F	p	F	p	F	p	F	p		
		Development of value added special grades of natural rubber	Value addition to natural rubber through modification of its structure	No. of special grades of natural rubber			Special grades of natural rubber	2	0.60	0.10	-	0.20	1	0.40	-	0.60	2	Research Officer Mrs. I. H. K. Samarasinghe,	
2	Client assisted programs	-	Troubleshooting, testing services and training programs	No of Tests		CF	Tests	1000	1.82	0.60	250	1.20	500	1.80	750	1.82	1000		



RUBBER RESEARCH INSTITUTE OF SRI LANKA

Raw Rubber Process Development & Chemical Engineering Department (Rs. 1.82 Mn.)

Priority Area :- Raw rubber processes, Rubber effluent water, Research and Development, Testing services

Objectives :- To introduce new/improved raw rubber processes by conducting research projects

To develop advanced treatment processes for rubber effluent water and use them in a sustainable manner

To cater the rubber manufacturers by providing solutions for their industrial problems through R&D projects

S. No.	Program	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Target 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation
							Unit	No.		Q1		Q2		Q3		Q4		
										F	P	F	P	F	P	F	P	
1	Sustainable Manufacturing processes	1.Manufacture of eco-friendly, value added crepe rubbers 2.Development of auto feeding unit for crepe rubber processing	Identifying suitable processes. Manufacturing the crepe with new processes and materials. Testing the properties Design the unit building the unit Installation Testing and optimization	No. of products		CF	Products	4	0.50		-		2		4		4	Mr. Kasun Adhikari / OIC Raw Rubber Process Development and Chemical Engineering Department
							units	3		0.20	-	0.30	1	0.40	3	0.50	3	



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Novel approaches for the utilization of rubber effluent water	1.Development of a model to utilize biogas generated in the rubber effluent water	Designing and fabrication of the unit, installation and developing the process. Testing and optimization	No. of tests			Tests	03	0.50	0.20	-	0.30	1	0.40	3	0.50	3		
	2.Preparation of a nutrient rich soil bed	Identifying a suitable place. Designing the bed and process. Conducting the process	No. of trials			trials	04	-	-	-	-	-	0	1	3	4		
New test method development	Development of a test method to detect nitrosamine in rubber vulcanizates by using GCMS	Extracting nitrosamines into solvents and injecting into GCMS. Repeating the process with different solvents. Optimization	No. of samples		CF	samples	20	0.30	0.10	5	0.20	10	0.25	15	0.30	20		
Laboratory Accreditation	Obtaining ISO 17025 laboratory accreditation	Fulfilling the requirement as per the ISO guidelines	No. of requirements			Require ments	07	0.20	0.75	3	0.125	5	0.175	7	0.20	-		
Testing and other Services	Testing and other Services	Sample testing	No. of test samples, problems, persons			Test samples	150	0.32	0.10	40	0.20	80	0.30	120	0.32	150		
		Troubleshooting		15	4	8	12			15								
		Technology transfer		120	30	60	90			120								



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Raw Rubber & Chemical Analysis Department (Rs. Mn. 2.02)

Priority Area :- Stakeholder empowerment, Value Chain Development and value addition

Objectives :- Ensure the quality of rubber produced in Sri Lanka

No.	Project	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Unit	Annual Physical Target 2024 No.	Annual Financial Allocation 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation
									Q1		Q2		Q3		Q4		
									F	P	F	P	F	P	F	P	
1	Quality improvement, quality control and quality assurance of latex, dry rubber & rubber processing chemicals	Study the effect of chemical addition to the lab DRC value	No. of chemicals tested	CF		Chemicals	2	0.2	0.05	25%	0.1	50%	0.15	75%	0.2	100%	Dr.(Mrs.) Anusha Attanayake, OIC/RR&CA Department
		Identify alternative method to remove magnesium ion content in field latex	No of techniques developed			Techniques	1	0.3	0.1	30%	0.2	70%	0.25	90%	0.3	100%	
		Effect of PESTA leaf disease for the latex properties (collaborative project with Plant Pathology department)	No. of parameters tested			Parameters	10	0.3	0.1	25%	0.2	60%	0.25	80%	0.3	100%	
		Latex , dry rubber & rubber chemicals related trouble shooting work	No of trouble shooting activities			Problems	5	0.2	0.05	25%	0.1	50%	0.15	75%	0.2	100%	
		Quality control of TSR produced in SL	No. of factories audited			Factories	10	0.2	0.05	25%	0.1	50%	0.15	75%	0.2	100%	
2	Quality analysis of latex, raw rubber and rubber processing chemicals	Client assistance services	No. of test conducted/ No. of reports issued	CF		Tests/ reports	1000 tests/ 350 reports	0.5	0.125	20%	0.25	40%	0.4	70%	0.5	100%	Dr.(Mrs.) Anusha Attanayake, OIC/RR&CA Department
		Conducting training programmes	No. of training programs conducted			Training programs	3	0.1	0.025	-	0.05	20%	0.09	50%	0.1	100%	
		Conducting activities in comply with ISO 17025 laboratory accreditation	No. of parameters accredited			Parameters	7	0.22	0.055	30%	0.11	60%	0.22	90%	0.22	100%	



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MAPI projects - 2024

Plant Pathology & Microbiology Department (Rs. Mn. 10.74)

Priority Area :- Management of Circular Leaf Spot Disease

Objectives :- Studies on the identification, epidemiology, biology and management of circular leaf spot disease of rubber plantations

S. No.	Project	Activities	KPI. No	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Financial Targets (Rs. Mn) (Cumulative)								Responsible Officer Name & Designation	Remarks
						unit	No.		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
1	Studies on the biology and epidemiology of the Pestalotiopsis Leaf fall disease and to develop effective management strategies	Morphological / Molecular identification of the pathogens	No of pathogen isolates identified	CF	No of pathogen isolates	100	1.0	0.25	25%	0.5	50%	0.75	75%	1.0	100%	Dr. (Ms.) T.H.P.S. Fernando Head Plant Pathology & Microbiology Department		
		Studies on the biology of the pathogen population	Knowledge expanded		Publications	04	1.0	0.25	-	0.5	1	0.75	3	1.0	4			
		Identification of effective Fungicides	No of effective fungicides		No of fungicides	03	2.0	0.5	25%	0.1	50%	0.15	75%	2.0	100%			
		Development of integrated management Strategy	No of effective protocols		No of protocols	02	2.0	0.5	25%	0.1	50%	0.15	75%	2.0	100%			
		Screening of the <i>Hevea</i> clones against the pathogen	No of disease resistant clones		No of clones	50	2.0	0.5	25%	0.1	50%	0.15	75%	2.0	100%			
		Approach for Circular Spot Leaf disease in Rubber tree and identification of disease resistant clones with improve latex quality	Raising a Collaborative proposal		Raising a Collaborative proposal	01	2.0	0.5	25%	0.1	50%	0.15	75%	2.0	100%			
		Dissemination of the knowledge	No of training programmes		No of training programmes	20	0.74	0.15	3	0.3	8	0.6	15	0.74	20			



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Genetics and Plant Breeding Department, Development Project (Rs. Mn. 1.51)

Priority Area : - Ensuring the availability of raw materials necessary for the rubber industry by providing encouragement for the development of

cultivations of small and medium scale rubber estate owners

Objectives : -Identify drought/stress tolerant genotypes & develop a molecular marker/s for early identification of such clones



S.No	Program	Project	Activities	KPI.No	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn)	Quarterly Targets (Cumulative)								Responsible Officer Name & Designation	Remarks	
							unit	No		Q1		Q2		Q3		Q4				
										F	P	F	P	F	P	F	P			
1	Screening of drought /stress tolerant Hevea clones for sustainable Rubber cultivation in marginal areas (2021-2024)	Clonal evaluation	Preparation of plants for screening and field establishment / labor	Number of clones prepared	2.5.1 & 2.5.2	CF	No.	10	0.50	0.03	5%	0.12	20%	0.42	70%	0.50	100%	Dr (Mrs) S.P. Withanage, Head/ Genetics & Plant Breeding Dept.		
			Molecular screening of clone	Number of clones selected			No	03		0.17	0.04	10%	0.09	75%	0.14	100%	0.17			100%
			Payments for research Assistant and							0.84	0.21	25%	0.42	50%	0.63	75%	0.84			100%



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Detailed Action Plan for Other Capital (Rs. Mn. 7.50)

S. No.	Program	Activities	KPI	SDG No.	Source of Fund (CF/GF)*	Annual Physical Targets 2024		Annual Financial Allocation 2024 (Rs. Mn.)	Quarterly Targets (Cumulative)								Responsible Officer	Remarks
						unit	No		Q1		Q2		Q3		Q4			
									F	P	F	P	F	P	F	P		
1	HRD Programme	Prioritize the training requirements, identification of the suitable programmes, selection of candidates	No. of programmes		CF	Prog ram mes	15	3.00	0.75	3	1.50	6	2.25	9	3.00	15	SAO	
2	Furniture & Office equipment	Training aids for human resource purchase for development programmes	No. of training aids					1.75	-	-	-	-	0.10	-	1.75	-	SA	
3	Land & Land improvement (R & D)	Rehabilitation of lands and increase of land utility	Acreage of land improved					0.80	0.20	-	0.40	-	0.60	-	0.80	-	Actg. Direct	
4	Monaragla Substation Nursery	Balance work of smoke house	% of work completed					0.80	0.20	-	0.40	-	0.60	-	0.80	-	Dr. Sanjeeva	
5	Establishment of Adaptive Research Trials (Polgahawela)	Establishment of experimental sites	No. of sites established					0.40	0.10	-	0.20	-	0.30	-	0.40	-	DDR (B)	
6	Establishment of Research Trials (North East)	Feasibility assessment for site selection Establishment of Adaptive Research trials	No. of sites investigated					0.75	0.19	-	0.38	-	0.56	-	0.75	-	Dr. Enoka	

		Socio economic & environmental assessment															
Total							7.50	1.44		2.88		3.85		7.50			

Treasury Allocations Requirements for the January to Dec 2024

Month	Recurrent			Capital			Total Recurrent and Capital Allocation
	Rs. Million 383.00			RS. Million 30.00			
	Salaries	Other Recurrent	Total	Research	Other Assets	Total	Rs. Million
January	27.17	5.00	32.17	2.35		2.35	34.52
February	26.17	5.00	31.17	2.35		2.35	33.52
March	26.53	5.00	31.53	2.35		2.35	33.88
April	27.17	5.00	32.17	2.35		2.35	34.52
May	26.17	5.00	31.17	2.35		2.35	33.52
June	28.77	5.00	33.77	2.35	1.00	3.35	37.12
July	26.17	5.00	31.17	2.35	0.75	3.10	34.27
August	29.17	5.00	34.17	2.35		2.35	36.52
September	26.17	5.00	31.17	2.35		2.35	33.52
October	27.17	5.00	32.17	2.35		2.35	34.52
November	26.17	5.00	31.17	2.40		2.40	33.57



December	26.17	5.00	31.17	2.35		2.35	33.52
Total	323.00	60.00	383.00	28.25	1.75	30.00	413.00

Internal Audit Plan for the year 2024

Annex 6

Sri Lanka Rubber Research Institute													
Mission of the Institute		<ul style="list-style-type: none"> - To revitalize the rubber sector by becoming a center of excellence in providing high- quality scientific technologies to the rubber industry and transferring Those technologies to rubber growers through advisory services for economic and environmentally sustainable development. 											
Objectives of the Organization		<ul style="list-style-type: none"> - To support the Government of Sri Lanka by providing the necessary technologies for sustainable development with the aim of making the country's Rubber industry competitive internationally. 											
As per the Action Plan 2023						Audit Plan for the year -2024 (as per circular No- DMA/2009(1))							
(serial No-) ref;- action plan/Bud: Estimate code/procurement plan	Project/ Section- (Area)	Activities under each area identified in the Action plan	Annual provision (Rs. MN.)	Objectives of the activity [Expected result] expected to be achieved by doing the activity]	Areas identified for audit based on achievement of the objective of the annual action plan and risk evaluation (Internal Audit Activity)	Risk Rating %	Time frame for internal Audit Operation				Human days to be used	Remark	
							QTR 1	QTR 2	QTR 3	QTR 4		Expected No. of reports	Nature of Audit
Code -2001 And 2024 action plan	Capital Expenditure 1. Rehabilitation & improvement	Building s	0.1062	Identify resource ability and capability of unit	Procurement rules	50%	√				07	01	Compliance audit
Code no-2105 - 023 Act: plan page no 42	2. Monaragala sub-station	Nurseries established	4.8	Cultivation improving	Physically checking	10%			√		06	01	Management audit

do		3. Polgahawela sub-station-	ARU Trail established	0.20	Cultivation improving	Physically checking	0%	√				05	01		Management audit
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1405 & Action plan page no 36	Recurrent Expenditure 1. contractual services for research support		24000.	Identifying What are the activities they have done	how much support by those activities for research work	50%			√		10	01	Performance audit
Order by chairman 2023/09/07	Internal control system- 1. Administration Dept.:	Salary increment – E.B.test	-					√	√	46	01	Compliance audit	
	2. work section	Cost analysis of job card	-			50%		√		30		Management audit	
	Upgrading the Modern technology	DPC(minor) Plant & machinery purchasing –audio visual & research dept.	2.5	Measure/analyze of optimal situation of transaction		75%	√			50	03	Management audit - Continue with last year	
13	Board AMCOM							√	√	√	04		
14	Gratuity							√	√	√			accuracy checking
15	Tree up rooting							√	√	√	10		Pre- audit
	Total										168		