

HARTI



ANNUAL REPORT

2019



Hector Kobbekaduwa Agrarian Research and Training Institute
No 114, Wijerama Mawatha
Colombo 07

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ESTABLISHMENT

Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) originally established in 1972 under the Agrarian Research and Training Institute Act No. 05 of 1972 functions as a statutory body under the Ministry of Agriculture. It was established mainly for the promotion of policy-oriented research and addressing training needs of the agrarian and rural sector. Being a pioneer in agrarian research in the country, HARTI has a wealth of experience of over four decades in conducting socio-economic research and training and also providing information for the formulation of agrarian sector development policies since its establishment.

Mandate

Under the provisions of Section 3 (1) of the above Act, the general mandated objectives of the institute are as follows:

- i. To foster, assist, encourage and co-operate in agrarian research.
- ii. To co-ordinate agrarian research undertaken by government departments, local authorities, public corporations and other institutions.
- iii. To carry out investigations and research relating to institutional factors affecting the development of agriculture.
- iv. To undertake investigations, research and studies relating to economical use of land for agricultural purposes.
- v. To carry out socio-economic research relating to agricultural and rural development.
- vi. To provide, undertake and implement training activities and programmes relating to agrarian research either alone or in association with other institutions in Sri Lanka or abroad and to award diplomas, degrees, prizes and distinctions in connection therewith.
- vii. To sponsor and conduct conferences, seminars and workshops at local, regional and international levels.
- viii. To carry out such research relating to problems of agrarian structure in co-operation with Asian countries to serve their regional needs and provide a centre for the collection and dissemination of information on agrarian related issues.
- ix. To relate such research to problems connected with agrarian development and modernization with special reference to Sri Lanka and other Asian countries in general.

Vision

Be the leader in generating and disseminating knowledge for sustainable agrarian and rural development.

Mission

To strengthen agrarian and rural sector through conducting research and training activities

Goals

- i. To be a centre of excellence in socio-economic research in agrarian issues.
- ii. To liaise closely with planners and policymakers in the government and business and research communities.
- iii. To make the policy formulation and implementation process more effective through generation and timely dissemination of knowledge.
- iv. To keep the public informed by providing independent assessments on national policy issues.
- v. To strengthen the capacity for socio-economic policy analysis by investing in the capacities of its staff and the institute's knowledge base.
- vi. To increase the capacity of rural development stakeholders through training.

BOARD OF GOVERNORS – 2019

Mr. K.D.S. Ruwanchandra	-	Secretary, Ministry of Agriculture and Chairman of the Board of Governors
Mr. Neel Bandara Hapuhinna	-	Secretary, Ministry of Agriculture and Chairman of the Board of Governors (From 28 th November 2019)
Mr. Karunadasa Udage	-	Director/CEO (January 2019)
Mr. Keerthi B. Kotagama	-	Director/CEO (from February to Sept.)
Mr. W.H.D. Priyadarshana	-	Director/CEO (Acting) – October .2019
Dr. (Mrs.) P.W. Alahakoon	-do-	Addl. Secretary (Agri. Dev.) Ministry of Agriculture (From May)
Mrs. E.A.R. Renuka	-do-	Addl. Secretary (Development), Ministry of Lands and Parliamentary Reforms (From September)
Mr. M.R.V.R. Meepura	-do-	Director, Public Enterprises Department, Ministry of Finance Planning (Jan.2019)
Mr. Wasantha Dharmasena	-do-	Director, Ministry of Finance and Mass Media (from February 2019)
Mr. U.G. Ratnasiri	-do-	Addl. Secretary (Economic Affairs) Ministry of National Policies & Economic Affairs (From March 2019)
Mrs. K. Piyaratne	-do-	} Addl. Secretary (Restructuring), Ministry of Industries & Commerce (March)
Mr. N.G. Panditharatne	-do-	
		} Addl. Secretary (Admin.) Ministry of Industries & Commerce (from June to October)
Mrs. Aruni S. Ranasinghe	-do-	Addl. Secretary (Admin) Ministry of Plantation Industries (From March to October)

Mrs. B.L.D. Balasuriya	-do-	-	Director of Education (Agri. & Environmental Education Branch) Ministry of Education (From March to October)
Mrs. H.N.N. Gunasekera	-do-	-	Addl. Secretary (Admin) Ministry of Mahaweli Development and Environment (From March to April)
Mrs. H.G.J.P. Wijeyasiriwardena	-do-	-	Senior Asst. Secretary I (Admin) Ministry of Mahaweli Development and Environment (From July to October)
Mr. S. Senanayake	-do-	-	Addl. Secretary (Dev. & Planning) Ministry of Rural Economy (From March to October)
Dr. Chandranath Amarasekera	-do-	-	Addl. Director Economic Research Department Central Bank of Sri Lanka (From March to October)
Dr. W.M.W. Weerakoon	-do-	-	Director General Dept. of Agriculture
Mrs. R.M.C.M. Herath	-do-	-	Land Commissioner General Dept. of Land Commissioner
Mr. W.M.M.B. Weerasekera	-do-	-	Commissioner General Dept. of Agrarian Development
Mr. (Eng.) S. Mohanarajah	-do-	-	Director General of Irrigation Dept. of Irrigation
Mr. S.L. Naseer	-do-	-	Commissioner of Co-operative Development (January to May) Dept. of Co-operative Development
Mr. Suwinda S. Singappuli	-do-	-	
			Commissioner of Dept. of Co-operative Development and Registrar of Co-operative Societies Dept. of Co-operative Development (From June to October)
Dr. D.B.T. Wijeratne	-do-	-	Assistant FAO Representative (Programme)
Mr. B.R.C. Bandara	-do-	-	Secretary, Board of Governors

Board of Governors Meetings - 2019

<u>Date of the Meeting</u>	<u>No. of Members Attended</u>
1. 03 rd January 2019	07
2. 21 st February 2019	06
3. 28 th March 2019	14
4. 30 th April 2019	09
5. 23 rd May 2019	12
6. 20 th June 2019	11
7. 25 th July 2019	12
8. 22 nd August 2019	15
9. 19 th Sept. 2019	17
10. 24 th October 2019	11

Audit and Management Committee

Mr. Wasantha Dharmasena (Chairman)	-	Director Ministry of Finance and Mass Media
1. Mr. S.L. Naseer (Member)	-	Commissioner of Co-operative Development, Dept. of Co-operative Development (February/June)
2. Mr. Suwinda S. Singappuli (Member)	-	Commissioner of Dept. of Co-operative Development and Registrar of Co- operative Societies, Dept. of Co- operative Development (October)
3. Mr. W.M.M.B. Weerasekera (Member)	-	Commissioner General Dept. of Agrarian Development
4. Mr. U.S.L. Kumara (Observer)	-	Chief Internal Auditor Ministry of Agriculture
5. Ms. S.A.D.N. Perera (Observer)	-	Audit Superintendent Auditor General Department

Meetings of the Audit and Management Committee

Date of the Meetings

28th February 2019
06th June 2019
11th October 2019

Overview

Agriculture, though its contribution to the GDP being dismal, continues to occupy a prime slot in the country's socioeconomic setting due the livelihood of nearly 70 percent of the population being directly or indirectly based on agriculture.

Minimizing pesticide usage, promoting organic agriculture while boosting production, issues relating to land use, climate change impacts on agriculture, upgrading the quality of agricultural inputs and lack of coordination between research and development are among the challenges the agrarian sector encounters today. When the national food security is a priority concern the above challenges need to be resolved urgently.

Being a pioneer in agrarian research HARTI incorporated the above concerns in 19 research studies and seven training programmes in the year. Five research and training divisions took up the task. The Agricultural Policy and Project Evaluation Division in a study reviewed investments in agricultural research and development activities while another focused on minimizing pesticide use based on risk management, highlighting the risk dimension. In addition, an evaluation study was conducted on the performance of *Hela Bojunhal* and women entrepreneurs while another evaluation study on Good Agricultural Practices (GAP) in Sri Lanka, an agricultural development project that promotes safe food and its production, was completed. A value chain analysis on Sri Lankan milk industry and a review of state policies on paddy production in the past two decades were also conducted. A research on fruit and vegetable consumption patterns has also revealed vital findings.

Meanwhile the Agricultural Resource Management division in a study assessed the level of consistency of current land use practices with the purpose of land alienation under the Land Development Ordinance. An action research on minimizing crop damages by pest and disease via early detection is progressing.

At the same time, the Environment and Water Resource Management Division undertook two studies based on climate change vulnerability of farming communities and the importance of protected agriculture as an adaptive measure for climate change. Studies on water governance issues of central highland regions of Sri Lanka to assess the effect of land tenure system on land productivity and the impacts of awarding minor irrigation contracts are in progress.

Marketing, Food Policy and Agribusiness Division conducted a research on quality seed potato production in Sri Lanka and a study on assessing performance of Weather Index Insurance Scheme (WII) in Sri Lanka that revealed vital findings. In another study the challenges and difficulties faced by officers in the Departments of Agriculture and Agrarian Development in implementing agricultural projects were explored. Identifying determinants of farmers' decision on vegetable production in Sri Lanka, paddy/rice value chain in Sri

Lanka and issues related to OFC cultivation in intermediate season are a few studies that are progressing.

Human Resource and Institutional Development division in a study on the polythene ban in Sri Lanka assessed the current situation on polythene bags and lunch sheets ban in Sri Lanka and the possible path forward. In another research, the potential of promoting rainwater as a protective source of safe water consumption was examined. Home garden coconut cultivation was the focus in a separate study. The training programmes conducted in the year mainly centered on women empowerment, leadership, social mobilization and Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA).

Of the funded studies: “Baseline Study for Strengthening Value Chain for Banana, Mango and Pineapple Crops in Selected Regions in Sri Lanka” is completed. In addition, Agriculture Market Information Service (AMIS), a project by which price data is collected and disseminated through mobile phone and weekly and monthly bulletins is also in operation.

In line with the main objective of HARTI — promoting policy-oriented research and addressing training needs of the agrarian sector—the work plan of the institute has been carried through successfully in the year 2019. The Annual Report 2019 sums up the tasks and the academic work performed within the year towards the growth of the institute as well as for the advancement of the agrarian sector of Sri Lanka.

Keerthi B. Kotagama
Director

AGRICULTURAL POLICY AND PROJECT EVALUATION DIVISION

COMPLETED STUDIES

1. Review of Investments on Research and Development in Agriculture

Research Team:

Mrs. Rasika Wijesinghe	- Coordinator
Mr. Prasanna Wijesinghe	- Co-researcher
Mrs. Malathi Rambodagedara	- Co-researcher

Source of funding: Consolidated Fund

Scope and Objectives:

From the annual capital expenditure agriculture is allocated around seven percent out of which a major proportion is reserved for research and development of the sector. However, the country's annual food imports amount to over Rs.200 billion and the productivity levels of most of the sub-sectors in agriculture are much below the potential. Therefore, the objectives were to review the research and development programmes of selected organizations in the sector to understand the actual contribution of the investments made for the R&D initiatives for the development of the sector and the agrarian community and to find out the ways and means to improve the effectiveness of agriculture related R&D process.

Three main research institutes functioning under the Ministry of Agriculture and their R&D activities of five years (2012-2016) were reviewed in the study.

Findings

In terms of the number of research studies, research expenditure and number of training programmes the three institutes have shown a varied pattern; one following an upward trend while another showing a fluctuating pattern. The form of research output also varied in the three institutes; research reports with policy recommendations, setting up business units to provide awareness and consultation on technology adoption and projects developing new seed varieties that reduce the production cost. Absence of strong two-way communication between research and policymaking level led to creating negative impacts that deprive the community of the desired benefits.

Recommendations:

- Prioritization of research programmes based on national and sectorial development needs to identify the key issues which are worth resolving through research interventions.
- Strengthen the link between national policymaking bodies and research institutes.
- Strengthen coordination between research and extension.
- Establish a national level mechanism to incorporate research output in the development process.

- Establish more meaningful and systematic method for progress reviewing, monitoring and evaluation of research projects.

2. Possibilities to Minimize Pesticide Usage in Sri Lankan Paddy Cultivation: An Emphasis on Risk Management

Research Team:

Ms. A.K.A. Dissanayake	- Coordinator
Dr. W.A.R. Wickramasinghe	- Co-researcher
Mrs. Dilini Perera	- Co-researcher
Ms. U.D. R. Udari	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Indiscriminate use of pesticides and its detrimental effects are now a major concern in the medical and environment sector in Sri Lanka. Therefore, minimizing pesticide usage is a timely move. This study mainly focuses on identifying possibilities to minimize pesticide use in paddy cultivation based on the technical aspect of pesticide use, farmer perception on risk of crop loss due to pest damage, the health risk and other socioeconomic factors.

Findings:

Herbicide is the major category of pesticide used in the Sri Lankan paddy cultivation irrespective of climatic zone and irrigation method. The farmers applied herbicides as a routine procedure and insecticides upon appearance of pest population. Farmers showed risk-averse behaviour and a great majority was aware that they are exposed to high health risk and environmental risk when using pesticides.

Recommendations:

- The risk dimension of pest management and farmer risk averse behaviour need to be considered to design pesticide application thresholds consistent with farmer management goals.
- Implementing of extension and training programmes that take into account the risk averse behaviour of paddy farmers.



3. Evaluation Study of the Present Performance on Hela Bojunhal and Women Entrepreneurs in Department of Agriculture

Research Team:

Mrs. M.D. Susila Lurdu	- Coordinator
Mrs. Sagarika Hitihamu	- Co-researcher
Mrs. Dilupa Bamunuarachchi	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objective:

The *Hela Bojunhal* programme was initiated and conducted by the Women Extension Unit of Extension and Training Center of DOA to train women attached to the programme as entrepreneurs to increase their family income while promoting local cuisine free from artificial substances. This study aimed at evaluating the current status of the programme and propose recommendations to expand the *Hela Bojunhal* Programme.

Findings:

The initiative renders a significant contribution to the income of the families of the women entrepreneurs and has a positive impact on the socioeconomic development of those families. The concept is gaining popularity among the consumers due to low food rates.

Recommendations:

- The trained should be attached to each center and encouraged to start collective or individual business ventures.
- Training should be provided on credit literacy and attitudinal development to the entrepreneurs and a recognized certificate to the trained should be issued.
- The outlets should be established in the Department of Agriculture and other ministry /department premises.





4. Good Agricultural Practices (GAP) in Sri Lanka: Status, Challenges and Policy Interventions

Research Team:

Mrs. B.A.D.S. Bamunuarachchi	- Coordinator
Mrs. Sagarika Hitihamu	- Co-researcher
Mrs. M.D. Susila Lurdu	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

With growing awareness on safe food and its production GAP initiative (Good Agricultural Practices) is in the forefront to achieve the above end. However, slow progression of GAP programme is a challenge which needs to be resolved urgently and it is vital to identify the factors that hinder the GAP programme. This study was aimed at finding out the factors that enable and hinder successful implementation of GAP Programme in Sri Lanka and providing policy directives regarding sustainability of the programme.

Findings:

It found that the farmers were not much satisfied with the returns and they encounter several issues while exporting GAP crops such as difficulty in finding buyers. Lack of steady demand and expected price were other reasons. Less recognition for the GAP Certificate is the main constraint for successful continuation of the programme.

Recommendations:

- GAP certification needs to be given more recognition through consumer awareness programmes and advertising campaigns. Frequent farmer awareness programmes by way of Farmer Business Schools and field demonstrations need to be implemented. This would add business elements to GAP farming enhancing adoption of good practices and linking to markets assistance.
- This should be linked to the Government strategy to increase the export potential of the country.
- Introducing a crop insurance scheme for GAP farmers would minimize the risk of crop loss due to pests and diseases damages.
- Establishing special outlets for GAP should be carried out in urban cities where the purchasing power is high.



5. Value Chain Analysis of the Milk Industry in Sri Lanka

Research Team:

Mrs. Sagrika Hitihamu	- Coordinator
Mrs. M.D. Susila Lurdu	- Co-researcher
Mrs. B.A.D.S. Bammunuarachchi	- Co-researcher

Financial Allocation - Consolidated Fund

Scope and Objectives:

Dairy development is a significant component in the rural economy of Sri Lanka for its income generation and employment generation ability as well as for ensuring food security. Nevertheless, several constraints in developing the Sri Lankan dairy sector were identified. The study was conducted to analyse the value chain of milk and dairy products from producers to the processor or even consumer level and present suggestions to improve chain efficiency.

Findings

1. The study found that Frisian, AFS, Jersey and crosses of Jersey Frisian and Jersey Sahiwal produce more than 8 liters per day. The average herd size was 5.4 animals and 44% of the sample own less than 5 animals in the herd.
2. Further, study found that due to high prices of concentrate feed (Prima - RS 60/kg), farmers are unable to provide correct amount of concentrate feed and due to land restrictions farmers were unable to maintain their own improved grasslands. Mostly animals are fed with low quality road side grasses in addition, during dry period of the year farmers are unable to provide required amount of feed and water.
3. Finding Good quality dairy animals is one of the major problems and absence of responsible institute to buy a guaranteed dairy animal.
4. Cost of production of milk with and without family labour was calculated as Rs. 59.63 and Rs. 29.73 respectively. The price of neat cattle milk ranges from RS. 65 to Rs 70 in the study area and buffalo milk price was Rs. 85-95.
5. The small scale yoghurt producers are facing difficulties to sell their dairy products with the competition of the multinational companies. However, production of iced milk packets is the most famous and profitable in the small scale processing.
6. Lack of grazing lands to maintain traditional buffalo rearing systems for curd production.
7. Lack of dairy farmer and dairy animal insurance scheme

Recommendations

1. It is important to introduce low cost concentrate feed with locally available resources and establish regional level input market such as feed,
2. Provide lands for grass cultivation is important and encourage farmers to maintain common grasslands by strengthening dairy farmer managed societies.
3. educate farmers on new equipment such as grass cutter, grass chopper and technologies such as feed mixing and feed presentation also increase the milk production efficiencies and reduce the feed wastage.
4. Provide facilities and training for grass preservation such as hay and silage production.
5. Improve the private breeding farms as an entrepreneurship to provide improved dairy animals.
6. Provide facilities to establish twenty-four-hour mobile veterinary service unit in dairy dominant areas to enhance the efficiency of Artificial Insemination and provide holiday service to the required dairy farmers.
7. Encourage small scale yoghurt producers and other dairy producers by combining with large scale domestic producers and provide marketing support. Frequent quality check of the dairy products of both large scale and small scale producers.
8. Encourage traditional buffalo farmers to managed their herds with semi intensive systems with increased milk production.
9. Introduce affordable dairy farmer and dairy animal insurance scheme and provide social benefits such as dairy farmer pension.





ON GOING STUDIES

1. An Evaluation of the Impact of Government Policies on Paddy Production in Sri Lanka

Research Team:

Mrs. Dilini Perera	-	Co-ordinator
Dr. W.A. R. Wickramasinghe	-	Co-researcher
Ms. A.K.A. Dissanayake	-	Co-researcher
Ms. U.D. R. Udari	-	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Since Independence every successive government took measures to enhance paddy production in the country. Policymaking plays a key role in achieving self-sufficiency in food crops including rice and stabilizing prices at the open market. Hence, this study attempts to evaluate government policies implemented during the last two decades in Sri Lanka towards formulating better policies to achieve self-sufficiency in rice.

Current Progress:

Data collection and analysis have been completed. The report writing is in progress.

2. Patterns and Determinants of Fruit and Vegetable Consumption in Sri Lanka

Research Team:

Ms. U.D.R. Udari	-	Co-ordinator
Ms. A.K.A. Dissanayake	-	Co-researcher
Mrs. Dilini Perera	-	Co-researcher
Dr. W.A. R. Wickramasinghe	-	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Fruit and vegetables (F&V) in the diet are vital components that help prevent micronutrient deficiencies and incidence of non-communicable diseases. The recommended minimum daily intake of F&V for an adult is 400 grams. However, in Sri Lanka this requirement is not met for majority of its population. Hence, the study focuses on identifying F&V consumption and purchasing patterns, contributory factors of low consumption and constraints and potentials for enhancing per capita F&V consumption.

Current Progress:

Data collection from 450 households in 14 districts representing urban, rural and the estate sector has been completed. Data analysis and report writing are in progress. This study started in March 2019 will be completed in September, 2020.

AGRICULTURAL RESOURCE MANAGEMENT DIVISION

COMPLETED STUDIES

1. Consistency between Purpose of Alienation and Current Practices of Alienated Lands under Land Development Ordinance

Research Team:

Mrs. Dinusha Rathnayake	- Coordinator
Mrs. Thushara Dharmawardhana	- Co-researcher
Mr. Amal Dissanayake	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The land alienation programmes implemented based on the Land Development Ordinance (LDO) of 1935 have benefited many landless people in Sri Lanka. Though the lands were granted for residential and agricultural purposes, it is skeptical whether those lands are utilized for intended purposes. This study attempted to explore the present land use pattern of alienated up lands distributed from 2012 to 2018 in Anuradhapura, Kurunegala and Galle districts.

Findings:

The majority of the original grantees retain the allotments where their children, relations or other non-related people utilize the rest. Land utilization has been categorized into residential, agricultural and barren. It found that the key objective of the LDO to provide lands for residential occupation is largely achieved. Perennial crops such as coconut, cashew, mango, lime, orange and banana have been cultivated in agricultural lands in Anuradhapura and Kurunegala districts where paddy, black gram, groundnut, long bean, sesame, cucumber, snake gourd are in small scale. Fewer lands have been used for other income generating ventures such as small businesses and self-employment activities.

Recommendations:

- Land suitability should be determined when distributing agricultural lands for effective land utilization.
- A follow-up mechanism on effective land utilization and the problems encountered should be in place.
- Awareness should be created in grantees on the LDO regulations on land utilization and importance of nominating successors to avoid family disputes over ownership.

ON-GOING STUDIES

2. User-centric Mobile Based Solution for Pest and Disease Management in Food Crops Sector

A Collaborative Research Project by Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) Western Sydney University (WSU) and Department of Agriculture (DOA)

HARTI Research Team:

Mrs. Rifana Buhary	- Coordinator
Mrs. Renuka Weerakkody	- Co-researcher
Mrs.Thushara Dharmawardhana	- Co-researcher
Mr. Amal Dissanayake	- Co-researcher
Mr. Virajith Kuruppu	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Pest and disease (P&D) management in agricultural crops plays a pivotal role in obtaining a bountiful harvest and an enhanced farmer income. Other than conventional means Sri Lankan farmers have limited access to accurate and comprehensible information to deter P&D incidence particularly on possible outbreaks and preventive measures should be taken in such events. Such communication lapses can lead to intense crop losses. Hence the main objective of this project was to develop community-based approaches to minimize the crop damages by P&D via early detection of P&D incidences and possible outbreaks utilizing smart computing techniques, participatory sensing and event detection.

Current Progress

The study sample consisted of 180 paddy farmers selected from the Polonnaruwa, Kurunegala and Matara districts and the baseline survey has been completed. A multi-disciplinary team of scientists from WSU, DOA and HARTI worked together to develop this mobile application, 'Ladybird', which is currently on a trial. Further development of the application is underway for Big onion with a sample of 120 farmers from Matale and Anuradhapura districts and deployment will be undertaken before 2020 Yala season.



ENVIRONMENT AND WATER RESOURCE MANAGEMENT DIVISION

COMPLETED STUDIES

1. **Climate Change Vulnerability of Farming Communities under Selected Crop Production Systems in the Dry Zone of Sri Lanka**

Research Team:

Mrs. Geethani Samarasingha	- Coordinator
Mr. W.H.A. Shantha	- Co-researcher
Mr. Sidath Bandara	- Co-researcher
Mrs. Thilani Padmajani	- Co-researcher
Mrs. Malathi Rambodagedara	- Co-researcher
Mrs. Nadeesha Dias	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Vulnerability assessment is a useful tool in adaptation planning with regard to mitigating ghastly effects of climate change. The Dry Zone, the food production basket of the country, has a higher proportion of agricultural labour. Therefore, this study focused on understanding the comparative vulnerability of farming communities associated with certain other field crops cultivated in the dry zone of Sri Lanka using vulnerability assessment.

Findings:

Education level of the household head, access to information help reduce farmer level vulnerability. Increased land extent cultivated with a particular field crop and being fulltime farmers lead to increased farmer vulnerability to climate change. The level of vulnerability varies significantly based on the geographical location. Farmers in the Hambantota district are the most vulnerable community. The factors causing the differences in vulnerability among communities under different crop production systems in the dry zone are largely similar irrespective of the geographical location and socioeconomic differences.

Recommendations:

- More funds need to be allocated to develop irrigation infrastructure, supplementary irrigation facilities and strengthening the water management to increase availability and efficiency of irrigation water to farmers.

- Promotion of high-efficiency irrigation systems should be promoted to increase irrigation efficiency and water productivity in combatting climate change impacts as well as increasing the profitability of the farming activities.
- Conducting training programmes to introduce and promote potential livelihood options available in the area that are less sensitive to impacts of climate change and climate extremes is suggested.
- Farmers should be trained on receiving and utilization of updates on climate and weather parameters, availability of and access to agricultural inputs and novel and improved technologies.

2. Vegetable Cultivation under Protected Agriculture as Adaptive Response to Climate Change

Research Team:

Mrs. M.P.N.M. Dias	- Coordinator
Mr. M.A.C.S. Bandara	- Co-researcher
Mrs. T.P. Munaweerage	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Seasonality of vegetable production is a major problem in vegetable cultivation sector as production peaks in major seasons while it lowers in off seasons. A year round vegetable production is desired to fulfill the demand, thus the dry zone, being the highest vegetable production area, has huge potential to carry this out in increasing the vegetable production. Protected Agriculture is identified as an effective adaptation method to increase the vegetable production under limited water and other resources— the major constraints of dry zone production — while mitigating the impacts of adverse climatic events. Hence this study was aimed at finding out the farmer level potentials and constraints of using Protected Agriculture for vegetable cultivation in the dry zone under limited resources and extreme climatic conditions to increase the year round vegetable production.

Findings:

Rain shelters are the major type of protected agriculture systems used by dry zone vegetable farmers to gain a higher income during the rainy seasons. It found that lack of technical knowledge on protected agriculture, funds for construction of protected agriculture systems and a proper marketing channel for the products are the major constraints for vegetable farmers.

Recommendations:

- Research should focus on designing suitable protected agriculture systems for dry zone areas.

- Use of micro irrigation techniques, use of low cost techniques for control environmental factors and reduce the construction cost are the major factors that should be considered when designing the protected structures.
- Training programmes on protected agriculture technologies should be conducted.

ON-GOING STUDIES

1. Study on Water Management and Governance Issues in Eastern Slopes of Central Highland Region

Research Team:

Mr. W.H.A. Shantha	- Coordinator
Mrs. G.G. de L.W. Samarasingha	- Co-researcher
Mr. M.A.C.S. Bandara	- Co-researcher
Mrs. T.P. Munaweera	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Absence of an institutional set up to regulate water allocation among different users and an established mechanism to resolve disputes on water resource is a leading cause for escalation of such disputes in the climate vulnerable eastern slopes of the central highland region. Research has highlighted the requirement of institutional arrangements for water conflict resolution while establishing a mechanism for fair allocation of water among different users. Hence this study investigates the water management issues in the climate vulnerable eastern slopes of central highland region and will propose a sustainable mechanism for allocation of water among different user groups. It will also identify different water user groups with different interests and assess the expansion/decline of land extent in different crop production systems. Further, examining the impact of water shortage on livelihood and household food security of disadvantaged water user group/s and deriving a sustainable water allocation mechanism acceptable for different stakeholders are other objectives.

Current Progress:

Data collection and analysis have been completed. The report writing is in progress.

2. Effects of Present Traditional Land Tenure System (*Thattu – maru and Katti – maru*) on Agricultural Productivity in the Wet Zone of Sri Lanka

Research Team:

Mrs. T.P. Munaweera	- Coordinator
Mrs. G.G. de L.W. Samarasingha	- Co-researcher
Mr. M.A.C.S. Bandara	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Thattumaru-Kattimaru is a regional phenomenon concentrated in the low and mid-country wet zone paddy lands. A very few studies have been conducted on the subject and have generated strong and conflicting views about the value of the system. The nature and consequences of the *Thattumaru - Kattimaru* system largely vary from one area to another. Therefore, the focus of this study is to examine the impacts of *Thattumaru and Kattimaru* tenure systems on the productivity aspects of the paddy lands in the wet zone of Sri Lanka and to highlight the extent of this problem while seeking possible solutions to resolve the issues.

In achieving the objective, the study will also identify the characteristic features of *Thattumaru and Kattimaru* tenure system and the extent and the nature of the impact of the tenure system on the agriculture productivity. Attitudes of the peasantry towards this system in the existing agricultural/agrarian set up will be explored and remedial measures to solve the productivity problem associated with particular land tenure system will also be suggested.

Three districts - Ratnapura, Kalutara, and Galle - where the *Thattumaru* and *Kattimaru* land tenure system prevails were selected as the study area of this research.

Current progress:

A questionnaire survey on selected 150 farmer households practising the *Thattumaru and Kattimaru* system in 2018/2019 Maha and 2019 Yala season was conducted.





3. Assessment of Awarding Minor Irrigation Rehabilitation Contracts to Farmer Organizations: An Analysis of Impacts for Sustainable Minor Irrigation Development in Sri Lanka

Research Team:

Mr. M.A.C.S. Bandara	- Coordinator
Mrs. M.T. Padmajani	- Co-researcher
Mr. W.H.A. Shantha	- Co-researcher
Mrs. G.G. de L.W. Samarasingha	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Awarding MIR contracts to farmer organizations was initiated with the Circular issued under MNPEA 3/2003. This study was designed to answer two basic questions related to the above programme: whether the Department of Agrarian Development (DAD) has achieved its objectives of awarding contracts of Minor Irrigation Rehabilitation (MIR) to Farmer Organizations (FO) without following a competitive bidding procedure and whether that move is sustainable. Studying these impacts of MIR through FO will benefit the DAD to revisit the circular and make necessary amendments towards sustainability of minor irrigation systems in Sri Lanka

Following discussions with the Department of Agrarian Development 40 MIR projects implemented in last five years (20015-2019) in five districts; Kurunegala, Anuradhapura, Nuwara Eliya, Badulla and Vavuniya were randomly selected as the survey sample.

Current progress:

Field data collection was completed and data coding, editing and entry are in progress.

4. Effects of Agricultural Heritage Systems on the Sustainability of Rural Agriculture in Sri Lanka

Research Team:

Ms. J.A.U.P. Jayasinghe	- Coordinator
Mrs. R.M.M.H.K. Rambodagedara	- Co-researcher
Mrs. R.D. Wijesinghe	- Co-researcher

Source of Funding: Consolidated fund

Scope and Objectives:

Sri Lanka has a rich agriculture history with a wealth of knowledge on locally evolved farming, farm management techniques and systems that can be considered as the National Agricultural Heritage Systems of Sri Lanka. However, with the rapid evolution of commercial intensive agriculture these systems are dying out even when there is a possibility to use them as a favourable base to develop sustainable modern agriculture systems in the absence of a national policy and mechanism to define, recognize, collect and conserve these systems. Hence on a request of the Department of Agrarian Development, HARTI is conducting this study to examine the effects of agricultural heritage systems on the sustainability of rural agriculture in Sri Lanka. It aims at identifying Nationally Important Agricultural Heritage Systems (NIAHS) of Sri Lanka, their applicability and conservation.

Current Progress:

In the process of developing the selection criterion, reviewing literature and defining the methodology for the identifying NIAHS.

FUNDED PROJECTS

1. Building the Basis for Implementing the Save and Grow Approach (FAO Study) Regional Strategies on Sustainable and Climate Resilient Intensification of Rice based Cropping Systems

Research Team:

Mr. W.H.A. Shantha	- Coordinator
Mr. M.A.C.S. Bandara	- Co-researcher
Mrs. G.G. de L.W. Samarasingha	- Co-researcher
Mrs. T.P. Munaweera	- Co-researcher
Mrs. R.M.M.H.K. Rambodagedara	- Co-researcher
Ms. J.A.U.P. Jayasinghe	- Co-researcher

Source of Funding: Food and Agriculture Organization (FAO)

Scope and Objectives:

The *Save and Grow* approach of sustainable intensification of crop production launched by FAO aims to achieve the highest possible productivity by unit of production input within the ecosystem's carrying capacity. Further, the project formulated strategies for the sustainable and climate-smart intensification and diversification of crop production in smallholder farm systems. Initially, the project expects to launch its activities in Zambia in Africa for maize–

based crop production while in Sri Lanka, it aimed at intensification of crop production in rice-based system.

In Sri Lanka, HARTI served as the national level service provider while the project activities were initiated in selected study sites in Anuradhapura district in partnership of different government institutes.

The objective was to facilitate project implementation at the national level. Implementing and assessing different agronomic technologies for lowland paddy sector and upland maize and other field crop sector as well as promoting new technologies among farming communities through training and demonstrations were also aimed at.

Findings:

The Alternate Wetting and Drying (AWD) method of water management is highly effective for saving water in minor irrigation tanks while recording a significant incremental change in the paddy yield. Nitrogen fertilizer application based on Leaf Colour Chart can reduce more than 40 percent of nitrogen fertilizer requirement without compromising the crop yield. The *Parachute* method of paddy establishment resulted in multiple advantages for the farming communities such as reducing the seed paddy requirement and water requirement and finally the increased crop yield.

It also found that the mechanization of maize seeding with Fiterelli Seeder can significantly cut down the labour requirement for crop establishment and deep placement of seed by the planter prevents seed picking-up by peacocks and other birds and animals.

2. The Water/Energy Baseline Assessment for Micro Irrigation Technologies for Selected Crop Varieties in Sri Lanka

Research Team:

Mr. W.H.A. Shantha	- Coordinator
Mr. M.A.C.S. Bandara	- Co-researcher
Mrs. M.T. Padmajani	- Co-researcher
Mr. W.A.N. Wijesooriya	- Co-researcher
Mr. R.A.C.J. Perera	- Co-researcher

Source of Funding: The Global Climate Partnership Fund (GCPF)

Time Period: September 2019 – January 2020

Scope and Objectives:

The conventional types of irrigation (flood irrigation, furrow irrigation and watering plant hills) are being widely practiced by farmers across different cropping systems and different geographical locations. The micro irrigation systems (sprinkler and drip irrigation systems) were first introduced to promote this technology as a water and labour saving initiative. The crop diversification strategies of the government institutes were well supported by the initiatives that emerged later in introducing and promotion of micro irrigation systems. For popularization and further promotion of micro irrigation systems in a more systematic manner investigating, auditing and documenting the actual water and energy savings of this technology for different crops and different localities is needed.

Hence this study explores the types of major irrigation systems applied by selected farming communities for specific crop varieties. It also investigates the volume of water used by farmers for cultivating selected crops under different irrigation systems in different localities and examines the differences in energy consumption for irrigating selected crops with different irrigation systems.

Current Progress:

Data collection and analysis have been completed. The report writing is in progress.

3. Building Evidence on the Impact of Improved Agricultural Extension Services on Rice Production in Anuradhapura District, Sri Lanka

Research Team:

Mr. M.A.C.S. Bandara	- Coordinator
Mr. W.H.A. Shantha	- Co-researcher
Mrs. M.T. Padmajani	- Co-researcher
Mrs. G.G. de L.W. Samarasingha	- Co-researcher

Source of Funding: Food and Agriculture Organization

Scope and Objectives:

The Government plans to revise its fertilizer subsidy programme while continues to make great strides on its national rice self-sufficiency and rural poverty reduction objectives. Further, to improve subsidy delivery the Ministry of Agriculture has requested information to understand the impact of different subsidy modalities as well as farmers' subsidy preferences and challenges faced in accessing the current subsidy programme.

Hence the objective of the study is to conduct a household-level survey among rice producers to elicit information on the adoption and the performance of sustainable agricultural practices in use. This survey builds upon a previous collaboration between FAO and HARTI in Anuradhapura District initiated under the Save and Grow Project. Under the Save and Grow project, a household survey of 1,100 rice farmers from 110 Farmer Organization collected data in the District in October 2018 and February 2019. This dataset serves as the foundation for the current project.

In achieving the above study assesses the drivers of adoption of different practices and their effects on welfare outcomes and analyses the impact of different fertilizer subsidy modalities on household welfare and productivity, as well as farmer preferences.

The study is to implement the second round of survey data collection to all 1,100 households in the Save and Grow survey in September and October 2020. The survey will replicate the previous Save and Grow survey while adding additional questions related to fertilizer subsidy preferences. The addition, the second round of survey data will help compare the two subsidy implementation modalities and utilize panel data econometric techniques that can improve impact analysis and causal inference.

MARKETING FOOD POLICY AND AGRIBUSINESS DIVISION

COMPLETED STUDIES

1. Public-Private Partnership Prospects for Quality Seed Potato Production in Sri Lanka

Research Team:

Mr. I.V. Kuruppu	- Coordinator
Ms. A.R.W.M.M.D. Amarakoon	- Co-researcher
Mr. S.P. Fernando	- Co-researcher

Source of Funding: Consolidated Funds

Scope and Objectives:

Potato is a major food crop and the principal livelihood of farming communities in Badulla and Nuwara Eliya districts in Sri Lanka and its cultivation suffers heavily due to issues in obtaining seed. Most of the seed production is met through self-seed production by the farmers compromising the quality as a result. There is greater potential to strengthen the quality seed potato production via Public-Private Partnerships (PPPs). The main objective of this study was to determine the prospects in initiating PPPs to improve quality seed potato production in Sri Lanka. Studying the structure-conduct-performance (SCP) paradigms of formal and informal seed potato production systems and PPPs in seed potato production in Sri Lanka and proposing strategic guidelines for a viable PPP model for quality seed potato production were among other objectives.

Findings:

Around 35 percent of the annual requirement is fulfilled via local production. Sri Lanka has imported seed potato from six countries since 2013. The local production is provided through informal production by farmers, formal production by government and private farms, and importation. Around 1,000mt. – 2,000mt. of seed potatoes are produced in government farms, while another 1,000 – 1,500mt. are imported. The study also found that none of the farmers acting as commercial seed sellers was registered under the current Seed Act No 22 of 2003.

Recommendations:

- The Seed Act should be strengthened with clear approach and strategic guidelines to form a public-private partnership in the seed sector.
- G0 production should be mainly carried out by the government sector.
- Private entities could enter local production by focusing on G1 seed potato production. The Build-Operate-Transfer (BOT) is the ideal model for this proposal.

- The private entity should utilize the land to strengthen the production of G1 seed potatoes in poly tunnels under the aeroponic system.
- Seed potato importation should be kept as it is as Sri Lanka has authority to multiply only one variety (Granola) for commercial purposes.

2. Performance of Weather Index Insurance (WII) Scheme in Sri Lanka

Research Team:

Mrs. Roshini Rambukwella - Coordinator
 Mrs. Ruvini Vidanapathirana - Co-researcher
 Mrs. P.A.J. Champika - Co-researcher
 Mr. Duminda Priyadarshana - Co-researcher

Source of Fund: Consolidated Funds

Scope and objectives:

The conventional agricultural insurance scheme which has been in operation for over five decades have several drawbacks as well as is not popular among the farming community. Hence, introducing an effective crop insurance schemes to protect the farmers from the risks associated with natural calamities is timely. Weather Index Insurance (WII) is part of the new powerful instrument to manage weather related risks in agriculture effectively.

The research was designed to study the performance of weather Index insurance (WII) scheme for paddy in Sri Lanka. The present status, drawbacks and opportunities of existing WII scheme in institutional perspective were also examined and farmer responses to WII scheme were observed.

Findings:

The farmer participation ratio with regard to WII scheme is below 0.5 percent which indicates that the WII scheme is not popular among the paddy farmers in Sri Lanka. About 90 percent of the farmers have no proper awareness about WII scheme as well 65 percent of the farmers still not satisfied with this scheme. Major hurdles found out in WII in supply side perspective were basic risk due to micro climatic variations, huge startup cost, and low density of weather stations, lack of quality and updated weather data and lack of institutional integrations and a mechanism for data sharing.

Recommendations:

- Community based participation mechanism should be in place to improve the WII scheme.
- For minimizing the basis risks, measures should be taken to update the network of collecting rainfall data by automated equipment for receiving real-time rainfall data and product design should be improved.
- Government intervention in WII scheme is vital to provide infrastructure and services.
- Farmer awareness programmes and training are needed to be conducted through farmer organization. A strong awareness campaign through mass media, posters and leaflets is needed to promote WII.

- It is vital to see the possibilities to use mobile phone technology. Farmer enrolments, premium collection, claim settlement, and other regular communication such as how index performs, the progress of the index, when claims become payable can be provided on the phone.
- Improved, nationally reliable and internationally comparable agriculture and weather data, weather stations should be well managed and community based and automated weather stations should be installed.
- It is very important to integrate weather information available from various sources into a national centralized data base. It will help both government and private insurers to provide better insurance schemes for farmers.
- The weather station density should be increased to reduce the square kilometer radius from weather stations. It is better to reduce the radius from 15 to 5 square kilometers from the relevant weather stations. It will represent the situation accurately and it will help minimize the basis risk.
- Accurate and timely weather data is the key to successful index insurance products. Possibility of using new technology innovations and other remote sensing techniques and introduced satellite imagery based data and computer models for WII should be taken into account. If possible to use satellite data, it solves the backup data problems in WII scheme and it can provide information across a larger area and on different crops, which can make scaling up possible in an efficient manner.

3. Project Implementation Challenges: With Reference to Departments of Agriculture and Agrarian Development

Research Team: Ms. Indika Edirisinghe - Coordinator

Source of Funding: Consolidated Fund

Scope and Objectives:

Project management is vital to successfully achieve the intended objectives and meet targets in time. On the request of the Ministry of Agriculture to identify the challenges faced by the Department of Agriculture and the Department of Agrarian Development in implementing the projects and to make appropriate recommendations for effective and efficient project implementation HARTI undertook this study.

Findings:

It was found that challenges were mostly in the areas of planning, financing, human resources, financial management, time management, consistency in policies, rules and regulations, transport facilities, documentation, monitoring and follow-up activities, capacity development of officers, coordination within the national, provincial and district plans, coordination among different ministries and departments and coordination between political representation and officials.

Recommendations :

The study proposes the following main recommendations for effective and efficient project management:

Planning with consultation of all the relevant stakeholders where possible; provisioning of funds in sufficient amounts mainly at the right time; taking actions to maintain sufficient staffs; paying attention in implementing projects at the right time of the calendar; initiating a dialogue with different stakeholders to identify and correct inconsistencies in policies; making appropriate strategies to provide logistics facilities at a satisfactory level; implementing smooth and regular monitoring and follow up activities; strengthening the capacity development component of the staff.

ON-GOING STUDIES**1. Determinants of Farmer's Decision on Vegetable Production in Sri Lanka****Research Team**

Mr. Prasanna Wijesinghe	- Coordinator
Dr. Ranjith Wickramasinghe	- Co- Researcher
Dr. E. M. C. Priyankara	- Co- Researcher
Mr. Virajith Kuruppu	- Co- Researcher

Source of funding: Consolidated Fund

Scope and objectives:

Price fluctuation of the vegetable market is a common phenomenon in Sri Lanka leading to welfare losses of both producer and consumer. Oversupply and insufficient supply of some vegetables in certain months are the causes for this market disparity. In this context accurate information plays a vital role in making sound economic decisions. In Sri Lanka a mismatch of demand and supply leading to volatile price movements and farmers ending up with prices that may not even cover his expenses often occur due to poor understanding of consumer preference and estimation errors.

Thus the study attempts to identify prevailing imperfect information of the vegetable sector and measures required for reducing the information asymmetry of the vegetable sector in Sri Lanka and thereby to formulate strategies to enhance the efficiency of resource allocation in the vegetable sector of Sri Lanka.

Primary data was collected from Anuradhapura, Kurunegala, Puttalam, Kandy, Nuwara Eliya, Badulla, Ratnapura and Hambantota districts by interviewing 480 farmers cultivating vegetable for the marketing purpose.

Current Progress:

Primary data collection has been completed. Data analyzing and report writing is in progress.

2. An Analysis of Paddy/Rice Value Chain in Sri Lanka: A Case of Major Rice Milling Zone, Polonnaruwa

Research Team: Mr. W.A.N. Wijesooriya - Coordinator
 Mr. Duminda Priyadarshana - Co-researcher
 Mr. Virajith Kuruppu - Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Paddy/rice industry experiences a constant price fluctuation during harvesting and off season periods inconveniencing both farmers and consumers. The government intervenes in paddy/rice marketing in numerous ways to minimize adverse fluctuations. Therefore, examining the efficiency of farmer to consumer paddy/rice value chain would be a plausible measure to reach more precise decisions to minimize future fluctuations.

The study primarily conducts a detailed Value Chain Analysis (VCA) of the paddy/rice value chains in the Polonnaruwa district which is the largest milling zone in the country. Estimating the gross margins and returns received by different actors throughout the paddy/rice and rice bran value chains and discovering strengths, weaknesses, opportunities and threats of key value chain actors throughout the VC are among other objectives. .

Current Progress:

Data collection (Farmer, Collector and Rice Miller Surveys) has been completed. Data analysis is in progress.

3. Issues in Cultivating Other Field Crops (OFCs) in Intermediate Season

Research Team

Dr. N.P.G. Samantha - Coordinator
 Dr. E.A.C. Priyankara - Co- researcher

Source of Funding: Consolidated Fund

Scope and Objectives

With the drastic decline of national production of OFCs in the last four decades the import bill of OFC has risen significantly (Eg. Rs. 41,734 million in 2018). Hence increasing production of OFC is a major concern at present in economic as well as food security terms. Increasing cropping intensity by cultivating an extra season has been identified a plausible solution in this effort.

On a request by the Department of Agriculture (DoA) HARTI initiated this study to examine the issues impeding the expansion of OFC in a third season. Further, problems and constraints faced by farmers in cultivating OFC in third season will be identified and agronomical, environmental and institutional issues hindering OFC cultivation in third season will be reviewed.

Hambantota and Anuradhapura districts were selected for the study based on DoA recommendations for OFC cultivation in third season. Both primary and secondary data were collected.

Focus group discussions were conducted to collect primary data and information from farmers. Fifteen focus group discussions were conducted with the participation of 150 farmers from Hambantota and Anuradhapura districts.

Current Progress

Report writing is in progress.

4. Agriculture Market Information Service (AMIS)

Agriculture Market Information Service (AMIS) is a project by which price data (wholesale, retail and farm gate price) is collected. Wholesale and retail price data is collected from nine market places (Pettah, Wellawatta, Kirulapona Nugegoda, Narahenpita, Dematagoda, Thotalaga, Kadawatha and Kiribathgoda). Producer prices are collected from major producing areas. There are 28 field officers deployed in 28 locations and 11 casual investigators collecting information from Colombo markets. In addition, there is a Mobitel dialing service called 6666 providing daily wholesale prices of vegetables from eight dedicated markets in Sri Lanka. These prices are disseminated in weekly and monthly bulletins.

COMPLETED STUDIES - FUNDED

1. Mystery Customer Survey on Regional Development Bank (RDB)

Research Team:

Mr. I.V. Kuruppu	- Coordinator
Mr. I.P.P.M. Wijesinghe	- Co-researcher

Source of Funding: RDB

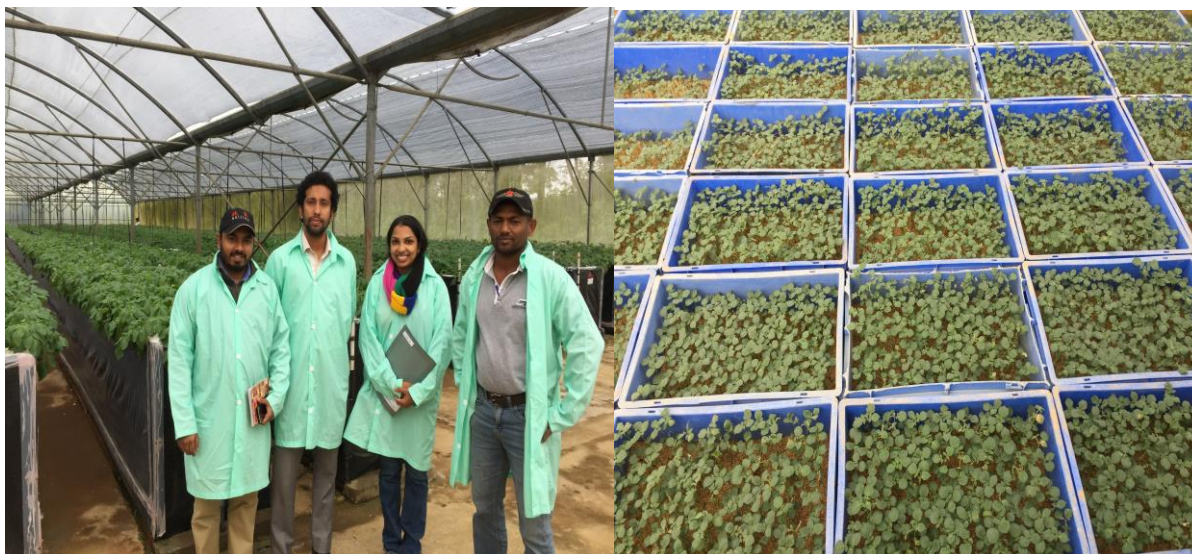
Scope and Objectives:

Regional Rural Development Banking network established as a fully state bank (Licensed Specialized Bank) has financial strategies that are designed to be a major force behind the micro, small and medium scale industries, women as well as agriculture, livestock and fisheries industries that contribute to the economic development of the country. However, the bank's operations are becoming increasingly challenging with the sheer scale and size. In this context RDB has requested HARTI to conduct a rapid survey to assess its branches around the country to benchmark RDB branches for future developments. Obtaining expertise and contemporary picture for the level of branch performance and customer service and examining possible advantages and efficiencies to improve bank operations and customer service are other objectives.

A total of 60 branches were evaluated island wide. Primary data was collected through a structured questionnaire.

Current Progress:

The study is completed. The report followed by a presentation was presented to the Board of Directors of the RDB.



2. Baseline Study for Strengthening Value Chain for Banana, Mango and Pineapple Crops in Selected Regions in Sri Lanka

Research Team:

Mr. W.H.D. Priyadarshana	- Coordinator
Mrs. Ruvini Vidanapathirana	- Co-researcher
Mr. W.A.N. Wijesooriya	- Co-researcher
Mrs. Roshini Rambukwella	- Co-researcher

Source of Funding: Food and Agriculture Organization, Sri Lanka (FAO)

Scope and Objectives:

The FAO-China SSC project on “Strengthening value chain for banana, mango and pineapple in selected regions in Sri Lanka” aimed at improving efficiency and competitiveness of the pineapple, banana and mango fruit value chains leading to increased incomes for the value chain actors to attract medium-to-large scale investments in fruit orchards and processing. HARTI was assigned to conduct a baseline study including all stakeholders targeted by the project specified in selected geographical regions in the country to provide an independently assessed information base relevant to the existing situation to ensure the prompt operationalization of the project.

The overall objective of this study is to carry out a detailed value chain analysis of the banana, mango and pineapple, with a specific target geographic locations.

Findings:

The highest net margin is earned by the retailer followed by the wholesaler. The cost components varied by the fruit (Ex: for banana the highest component was the labour while for pineapple it was the planting). Difficulty in accessing herbicides and mineral fertilizers, water shortage during the dry season and limited access to improved agronomic practices in mango production identified as the main constraint in mango production. The Fruit Processors

and Exporters face challenges such as high residue levels in fruits, inadequate supply of raw materials to meet export orders to produce value added products (pineapple and mango) and lack of processing and cold storage facilities.

Recommendations:

- Market integration and efficiency can be improved by marketing up-to-date market information available to all participants through various means. Encouragement of proper transport and packing systems may reduce the high transaction cost with high wastage.
- Strengthening public-private dialogue to pursue a medium and long term strategic vision and plan for expanding the current market base of these fruits.
- The supply chain should be developed and strengthened to help small farmers to link with larger producers and processors to access expanded distribution.
- Implementing training programmes in proper handling techniques, grading and standardization and pack house operations to address harvesting and post-harvest issues, educating farmers on building up linkages with buyers, product quality improvement, new improved agronomic and management practices.

HUMAN RESOURCES AND INSTITUTIONAL DEVELOPMENT DIVISION

The objective of the training programmes conducted by HARTI is to develop knowledge, attitudes and skills of adults involve in agrarian and rural development activities, and thereby improving the socioeconomic standing of the farming community in Sri Lanka.

The clients of HARTI's training programmes belong to a broad range including field officers, higher officials of Government and Non-Governmental Organizations engaging in development activities in the rural sector and farming community in Sri Lanka.

The training programmes conducted across the country during the year 2019 by the division are as follows.

1. Farmer Organization Empowerment

Training Team

Mr. S.M.A.Samarakoon	- Coordinator (Head / HRID)
Mr. H.M.J.K. Herath	- Resource Person (Head/GIS unit)
Mr. Sangeeth Prasad Fernando	-Assistant Coordinator/Resource Person (RO/HRID)
Mr. B.D.M.R.B. Dissanayake	- Retried Headquarter Divisional Officer

Source of Funding: Consolidated Fund

Despite its significance to facilitate national agricultural development and its broad legal base most farmer organizations do not function with its full strength. Poor coordination between the organizations and the farmers has been a major barrier in effective realization of this goal.

This programme was designed to achieve that propose by improving their organizational skills. It also aimed at strengthening farmer organizations through developing knowledge, attitudes and skills of the farmer leaders and making them active partners of the agrarian development process.

This programme was conducted in the Anuradhapura district covering Kahatagasdigiliya, Parangiyawadiya, Horoupathana, Rathmalgahawewa, Plugaswewa, Muriyakadawala, Shiwalakulama, Yakalla, Kekirawa, Elayapaththuwa, Thanthirimale, Rannorawa, Nochchiyagama, Pemaduwa, Gambirigaswewa, Medawachchiya, Mihintale, Epalogama, Nagampaha, Adiyagala, Thirappane Agrarian services centers. Around 1880 women farmer leaders were trained. District office of the Agrarian Development Department in Anuradhapura and the Agrarian Development Officers from Agrarian Development Centers assisted the programme.



2. ‘Agriculture for a Healthy Generation’

Training Team

Mr. Sangeeth Prasad Fernando	- Coordinator (SRO/HRID)
Mr. S.M.A.Samarakoon	- (Head / HRID)
Mrs. Norica Aiome	- Assistant Coordinator (RO/HRID)
Mr. H.L.L. Salinda	- Coordinating Assistant
Provincial and Inter Provincial Council Agriculture Department Resource person	

Source of Funding: Consolidated Fund

Increased use of agro chemicals has led to a grave health and environmental hazard today. Chronic kidney disease and certain other unidentified diseases are rapidly spreading in most part of the country, leading to greater socioeconomic issues.

The main objective of this one-day awareness programme was to educate the farmer leaders on agro chemical usage, impact of agro chemicals on human health and early symptoms of the kidney disease and strengthening farmer organization in creating a healthy generation while reaping maximum benefits from agriculture.

The programme was conducted in the Anuradhapura district covering Rabawa, Punawa, Ethakada, Madawachchiya, Kallanchiya, Kebethigollewa, Kahatagasdigiliya, Padaviya, Galenbidunuwewa, Horoupathana, Rathmalgahawewa, Konwewa, Parangiyawadiya, Elayapaththuwa, Nochchiyagama, Ranorawa, Gambirigaswewa, Pemaduwa, Mihinthale and Thantirimale Agrarian Service Centers respectively. A total of 1803 farmer leaders were trained. The District Office of the Agrarian Development Department in Anuradhapura and Agrarian Development Officers from Agrarian Development Centers assisted.



3. Women Farmer Empowerment

Training Team

Mr. Sangeeth Prasad Fernando	- Coordinator (RO/HRID)
Mr. S.M.A.Samarakoon	- Resource Person(Head / HRID)
Mr. H.M.J.K.Herath	- Resource Person (SRO/HRID)
Mr.H.L.L. Salinda	- Coordinating Assistant
Provincial and Inter Provincial Council Agriculture Department Resource person	

Source of Funding: Consolidated Fund

Empowering farmer women is considered an essential part in transforming the farmer community into a prosperous one.

However, due to poor leadership and management skills as well as many other issues this has been delayed. Therefore, this programme was designed to evoke their organizational and management skills. Enhancing their ability on decision making and strengthening women farmer organizations to get maximum benefits from the organization to the family community were other objectives.

The programme was conducted in the Kurunegala district covering Madahapola, Ganewaththa, Mahananneriya, Ehetuwewa, Kubukgate, Moragollagama, Dodangaslanda, Galgamuwa, Karadagolla, Pothuhera, Ibbagamuwa, Maharachchimulla, Wellawa, Polgahawela, Rabe, Kotawehera, Mawathagama, Nikaweratiya, Mahawa, Rajanganaya Agrarian Service Centres. A total of 2028 women farmer leaders were trained. The district office of the Agrarian Development Department in Kurunegala and Agrarian Development Officers of Agrarian Development Centers assisted the programme.

4. Workshop on Application of Agri Business and Marketing Extensions

Training Team

Mr. W.H.A. Shantha	- (Coordinator / Head/EWRM)
Mr. Sidath Bandara	- (SRO/EWRM)
Mr. Duminda Priyadarshana	- (Head / MFPA)
Mr. S.M.A. Samarakoon	- (Head / HRID)

Source of Funding: Consolidated Fund

In the agriculture sector in Sri Lanka small scale subsistence farming sub sector plays a vital role, thus development of agro-based business ventures at all levels came to the fore since the latter part of the last century.

This programme was formed to provide a theoretical and practical overview on application of agri- business and marketing extensions to final year undergraduates of the Faculty of Agribusiness and Management of the Jaffna University.

The two-day workshop was conducted in the Hector Kobbekaduwa Agrarian Research and Training Institute with the participation of 88 students from the Agribusiness and Management Faculty of the Jaffna University.



5. Participatory Techniques (RRA, PRA & PCM) for Planning & Management of Rural Community Development Projects

Training Team:

Mr. S.M.A. Samarakoon	- Coordinator/Head/HRID
Mr. R.L.N. Jayatissa	- Additional Director
Mr. H.M.J.K. Herath	- Research Fellow/GIS Unit
Mr. Sangeeth Prasad	- Research Officer/HRID
Mr. Virajith Kuruppu	- Research Officer/MFPA
Mr. Amal Dissanayake	- Research Officer/ARM
Mr. H.L.L. Salinda	- Coordinating Assistant

Source of Funding: Consolidated Fund

Rapid Rural Appraisal (RRA) and Participatory Rural Appraisal (PRA) are relatively new techniques used to collect accurate and up-to-date data and information on rural conditions rapidly at a low cost. These methods are being successfully used in completing various stages of development projects including project identification, planning, implementation monitoring and evaluation.

The main objective of this training programme was to educate the participants about the value of people's participation. It also aimed at enhancing their knowledge, skills and ability to carry out PRA/RRA techniques in terms of local level planning and management of development projects.

In 2019 two programmes were conducted for the officers attached to the Department of Agriculture, Department of Agrarian Development and Divisional Secretariats. Sixty-one subject specialists and Agriculture Instructors from the Department of Agriculture and Divisional Officers, Development Officers and Agriculture Research Production Assistants from the Department of Agrarian Development were trained.

6. Social Mobilization (Extension Methodology)

Training Team:

Mr. S.M.A. Samarakoon	- Coordinator/Head/HRID
Mr. R.L.N. Jayatissa	-Additional Director (HARTI)
Mr. H.M.J.K. Herath	-Research Fellow/GIS Unit
Mr. W.H.A.Shantha	-Senior Research Officer/EWRM
Mr. Sangeeth Prasad	- Assistant Coordinator/ Research Officer/HRID
Mr. Virajith Kuruppu	- Research Officer/MFPA
Mr. H.L.L. Salinda	- Coordinating Assistant
Mr. B.D.M.R.B. Dissanayake	- Retried Headquarter Divisional Officer

Source of Funding: Consolidated Fund

Active participation of beneficiaries is key to achieve higher community participation in any development venture. The training programme was mainly designed for the Extension Officers engaged in agrarian and rural development activities as social mobilizers to enhance

and strengthen participants' theoretical and practical knowledge on social mobilization and extension methodology. Two such programmes were conducted in 2019. This programme was conducted for the officers attached to the Department of Agrarian Development and 93 Agrarian Development Officers, Development Officers and Agriculture Research and Production Assistants attended.

COMPLETED STUDIES

1. Ban on Polythene Bags and Lunch Sheets (PBLS) in Sri Lanka: Impact, Challenges and Alternatives

Research Team:

Mr. S.P. Fernando	- Coordinator
Mrs. G.V. Norica Aiome	- Co-researcher
Mr. I. V. Kuruppu	- Co-researcher
Mr. P. C. J. De Silva	- Co-researcher
Mr. S. M. A. Samarakoon	- Co-researcher
Mr. H. M. J. K. Herath	- Co-researcher

Source of Funding: Consolidated Funds

Scope and Objectives:

A total ban on polythene came into effect in September 2017 considering the detrimental effects of polythene waste on the environment. The move met with much antagonism for lack of alternatives and loss of livelihoods of many in the industry. The main objective of the study was to identify the current situation of PBLS in Sri Lanka and evaluate the possible path forward.

About 1400 individuals connected to the subject in different ways were interviewed in this study which largely focused on the Western Province.

Findings:

The Act on polythene itself encourages excessive use of polythene. The public had been largely misinformed regarding the PBLS ban as their bag usage increased after the ban due to inferior quality of the bags introduced later. The amount of plastic waste generated per year by an individual is around 11 kilograms, indicates an underlying grave environmental hazard as well as a potential raw material for recycling.

Recommendations:

- Amendment of legal acts binding polythene production and usage.
- Adopting the approach: 'polluter pays, by way of extended producer responsibility' to hold producers responsible for the plastics and packaging they manufacture or use through the entire time the products exist.
- Encouraging manufactures of eco-friendly polythene alternatives.

2. Potential of Promoting Rainwater as a Source of Safe Water Consumption in North Central Province

Research Team:

Ms..G.V.N.Aiome	- Coordinator
Mr..P.C.J.Silva	- Co-researcher
Mr..S.P.Fernando	- Co-researcher
Mr..S.M.A.Samarakoon	- Co-researcher
Mr..H.M.J.K.Herath	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Absence of safe water sources for drinking purposes and the Chronic Kidney Disease of unknown etiology (CKDu) are the major issues in the North Central Province. Madawachchiya and Kabithigollawa were selected from the Anuradhapura District and Madirigiriya and Dimbulagala were selected from the Polonnaruwa District as study locations. The main objective is to look into the potentials of promoting rainwater as a source of safe water consumption in the North Central Province. Analyzing the quality of existing water sources and the quality of harvested rainwater from the study area are among other objectives.

Findings:

Based on weather data, collecting rainwater during the rainy season is vital for the province as the rainfall during the Maha and Yala season is minimum. It was also found consumption of rainwater is more time saving, economical and healthy for the people in the province. The size of the storage tank depends on the family size and the initial cost at tank installation stage was high for most of the households.

Recommendations:

- A government subsidiary or a credit facility scheme should be developed to encourage those cannot afford the facility. Also the initial cost of the system can be lowered by using a low cost alternative material for tank construction.
- Effectiveness can be enhanced if the rooftop catchment can be improved by proper maintenance of catchment area, gutter system and the first flush system and appropriate maintenance of the tank system. Further to this, the initial cost of the system can be lowered by using a low cost alternative material for tank construction.
- Right direction, training and awareness should be provided to beneficiaries on the health and economic benefits of the rain water consumption as well as maintenance practices of the tank system.
- Implementing the rainwater policy is also needed.
- An app or a communication system (SMS alert system) to inform the rain water tank users about the rainwater collection time can be developed in coordination with Regional Agrarian Development offices and the Meteorology Department.

ON-GOING STUDIES

1. Impact of Home Garden Coconut Cultivation on Coconut Kernel based Industries in Sri Lanka

Research Team:

Mrs..G.V.N. Aiome	- Coordinator
Mr..S.P. Fernando	- Co-researcher
Mr..S.M.A. Samarakoon	- Co-researcher
Mr. Virajith Kuruppu	- Co-researcher
Mr..P.C.J. Silva	- Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Low coconut production in the country has created issues in supplying the market requirement as well as the industrial requirement. Therefore, the study explores possibility of using home garden to increase the coconut production in the country.

Current Progress:

Data collection (Questionnaire survey, focus group discussions and key informant interviews) is completed. A questionnaire survey on the coconut kernel based industries registered under the Coconut Development Authority has been completed. The report writing is in progress.

STATISTICS AND DATA PROCESSING DIVISION

Statistics and Data Processing Division (SDPD) was established to make a concerted effort towards HARTI becoming a centre for collecting, updating, analyzing and dissemination of information on the agrarian sector. It is also responsible in storing and analyzing of data gathered in socioeconomic surveys conducted by the institute while ensuring the quality of research and training activities through application of statistics and information technology.

The division comprises two units: Data Development and Data Processing. Later a computer Technology Unit was added.

Data Development Unit

An agrarian data bank established at the unit to facilitate access to information of relevance in agrarian development and related fields functions as a repository, collection agency and service bureau. It is specially designed to play the role of a comprehensive source of statistical information to government officials, policymakers, researchers and other interested parties and coordinate the dissemination of information in a useful manner.

Food commodity prices were collected from Marketing and Food Policy Division of HARTI. Following information was collected during the year.

- Imports - 2017, 2018
- Exports - 2017
- Retail prices - 2018
- Producer prices - 2018
- Wholesale prices - 2018
- Extent - 2018
- Production - 2018
- Cost of production - 2017 Yala

The computerized database was updated with following indicators during the year.

- Paddy statistics - extent and production
- Producer prices - 2018
- Retail prices - 2017 & 2018
- Extent and production in Maha, Yala and total in 2018

The database was updated with 106,154 number of record belonging to the above indicators.

Provision of data on request

A total of 143 requests for agricultural information was made from internal and external users: 100 were internal while 43 were external requests.

Books referred to collect data

- Economics and Social Statistics of Central Bank – 2018
- Statistical Abstract of Department of Census and Statistics -2018
- Cost of cultivation of paddy and other field crops- 2017 Yala
- External trade statistics of Department of Customs – 2017/2018

Data Processing Unit

The Data Processing Unit was established for manipulating of agricultural database and data coming from sample surveys. Once the data is coded and verified from the data development unit technical support is provided by the Data Processing Unit. During the year the unit provided its services for updating agricultural information in the database.

Computer Technology Unit

The unit is established for providing technical support to the institution with regard to computers, networks and related peripherals and support on software tools needed for operation of computer systems. A workshop has been set up to undertake all repairs and troubleshooting.

The unit was actively engaged in the following tasks during the year.

- Preparation of technical specifications.
- Technical evaluation committees.
- Software installations and troubleshooting.

07

LIBRARY

The main objective of the library is to collect, compile, retrieve and disseminate information related to the agrarian sector for the benefit of HARTI Research Staff and other interested persons/ organizations. During the year the staff borrowed 634 books, 17 reference books and 50 issues of journals for reference. The number of visitors to the library during the year were 260.

Acquisition of Books, Journals and Reports

During the year 114 books — 37 purchased books and 77 books received on complimentary basis and under the publication exchange programme — were added to the book collection. A large number of periodicals, newsletters, annual reports from foreign and local institutions were also received either on complimentary or exchange basis. The library also subscribed to eight foreign journals titles (which included 96 issues) and two local journal titles during the year.

Library Services

Requests for information and documentation services such as literature search, reference services, current awareness services and photocopying services were provided to the internal research staff as well as to outside users.

Access to internet based information facilities has been further extended for the research staff with the Wi-Fi facility being set up in the library. Collection of newspaper articles on various subjects and indexing of the articles for quick reference continued for the use of HARTI research staff and outside users.

Inter Library Cooperation (ILC)

Facilities are available to obtain required library material from the HARTI Library through inter-library loan, provided it is not available in a particular library. Loaning of library materials is only for the requesting libraries and not for individuals. Inter-library loans are being carried out between university and special libraries at present. The libraries requesting inter-library loans have to sign the inter-library loan agreement before obtaining the publications on loan. Also via email specially with the Universities e documents were shared for research purposes.

To update the National Union Catalogue for year 2018 bibliographical references were supplied from the library database to the National Library and Services Board.

Digitization of Institute Publications

HARTI publications have been successfully digitized under the National Digitization Project of the National Science Foundation (<http://harti.nsf.ac.lk/>).

The aim of this project is to establish an institutional e-repository and provide a fast and enhanced online access to institute's publications.

HARTI Publications	Collection Name	Collection Views
Journals	Annual Reports	78
	Annual Reports (Tamil)	48
	Acts	44
	Sri Lanka Journal of Agrarian Studies	72
	ගොවි කටයුතු අධ්‍යයනය	110
	ගොවි ජනතා	94
	ගොවි ජනතාව	116
Research reports	Monographs(English)	130
	Monographs(Sinhala)	118

Country Name	No. of Views
Japan	249
Sri Lanka	478
United States	224
Germany	51
Russia	137
France	41
South Korea	4
Côte d'Ivoire/ Ivory Coast	5
EU	22
Australia	5
India	6
Italy	5
United Kingdom	8
China	10
United Arab Emirates	3
Switzerland	3
Japan	249
Sri Lanka	478

Library Promotional Activities

A promotional video and a leaflet produced about the HARTI library were distributed among the University students and uploaded to the Institute's website.

Publication Exchange Programme

Fifty-eight HARTI publications (books/journals) were sent to the under mentioned libraries on exchange basis.

1. Socio Economics and Planning Center of Department of Agriculture
2. Department of Census and Statistics.
3. National Library & Services Board
4. National Science Foundation
5. Jaffna Public Library
6. International Water Management Institute
7. Mahaweli Authority of Sri Lanka
8. University of Colombo
9. University of Kelaniya
10. University of Ruhuna
11. University of Sri Jaywaradenapura
12. University of Peradeniya
13. University of Jaffna
14. University of Uva Wellassa
15. University of Rajarata
16. University of Sabaragamuwa
17. The Eastern University of Sri Lanka
18. University of Moratuwa
19. University of Wayamba
20. Bihikshu University, Anuradhapura
21. Buddhist and Pali University

We received 42 publications from the above libraries.

PUBLICATION UNIT

The Publication Unit functions under the purview of the Head, Statistics and Data Processing / Publication / Library and Geographic Information System Units. The main functions of the unit are editing and publishing of research reports, occasional reports, journals, newsletters, bulletins, manuals, brochures and other informational material in all three languages.

In the year 2019 six research reports and two working papers were released in Sinhala and English. Details of the publications are given below.

Research Reports

1. Sustainability-related Issues and Improvement Opportunities in Small-scale Maize Cultivation in Dry Zone of Southeastern Sri Lanka
2. Sustainability of Crop Production System in South East Dry Zone of Sri Lanka: With Special Reference to Groundnut Green Gram and Sugarcane
3. Potentials of Farmer Interactive Action to Remedy Vegetable Marketing Problems: Relevant to selected Locations
4. Home Garden Fruit Cultivation in Sri Lanka: Determinants and the Role of Government Intervention
5. A Review of the Fertilizer Cash Grant Programme in Sri Lanka
6. A Study on Absorption of Agriculture Graduates and Diploma Holders into the Agricultural Sector of Sri Lanka

Working Papers

1. Potentials and Constraints of Bio Pesticides and Bio Fertilizer Usage in Sri Lankan Agriculture
2. Lessons to be Learnt from Ancient Water Management Techniques of Sri Lanka for the Development of Integrated Water Resources Management Concepts

In addition, the following periodicals were also published.

1. Govi Janatha - Volume 20, Fourth Issue, 2018
2. Govi Janatha – Volume 21, First Issue, 2019
3. Govi Janatha – Volume 21, Second Issue, 2019
4. Govi Janatha – Volume 21, Third Issue, 2019
5. Govi Janatha – Volume 21, Fourth Issue, 2019
6. Kamanalam(Tamil) – Volume 34, Third and Fourth Issues 2018
7. Govi Katayuthu Puwath Hasuna, Volume 42, No. 03, 2018
8. Govi Katayuthu Puwath Hasuna, Volume 42, No. 04, 2018
9. Govi Katayuthu Puwath Hasuna, Volume 43, No. 01, 2019

10. Govi Katayuthu Puwath Hasuna, Volume 43, No. 01, 2019

11. Govi Katayuthu Puwath Hasuna, Volume 43, No. 01, 2019

During the period the publication Unit organized a workshop. Details are given below.

One - Day Workshop on Photography

The focus of the event was to train and provide an insight into the research staff and the interested persons of the institute in professional photography, a skill required for them in their research activities undertaken at field level.

The workshop conducted by veteran photographer and visiting academic Indranatha Thenuwara on December 16, 2019 at HARTI comprised both theoretical and practical aspects of photography and was a learning opportunity on capturing more subtle and descriptive pictures as relevant to the research studies. Research officers, Statistical Assistants and Casual Investigators attended the programme.

OTHER ACTIVITIES

Paper Presentations

1. Ms. D.T.P.S. Dharmawardhana-Research Officer presented a full paper titled ‘Role of Participatory Approaches in Wetland Management: Evidence from the Bundala Wetland of Southern Sri Lanka’ at the Ninth Pan Commonwealth Forum, Edinburgh, Scotland from 9th to 11th September 2019.
2. Ms. D.T.P.S. Dharmawardhana-Research Officer presented and published an abstract titled ‘Economic Valuation of Wetland Attributes using a Choice Experiment: A Case of Bundala Wetland in Sri Lanka’ at the International Symposium on Agriculture & Environment, Faculty of Agriculture, University of Ruhuna on 28th February 2019.
3. Mr. D.M.A.C. Dissanayake-Research Officer presented a paper titled ‘Do Sri Lankan Farmers have Adequate Knowledge on ICT Usage?’ at the Seventh International Conference of Sabaragamuwa University of Sri Lanka (ICSUSL 2019) on 14th November 2019.
4. Mr. D.M.A.C. Dissanayake- Research Officer presented a research paper titled ‘Potentials and Challenges of Electric Fences as a Mitigation Measure for the Human Elephant Conflict in Sri Lanka: A Case of Moneragala and Ampara Districts.’ at the Fifth Ruhuna University International Conference on Humanities and Social Sciences (RUICHSS) – 2019 organized by the Faculty of Humanities and Social Sciences, University of Ruhuna on 26th September 2019.
5. Ms. R.M.D.H. Rathnayake-Research Officer, a paper titled ‘Spacing and Fertilizer Levels on Physical and Chemical Yield of Different Parts of *Pogostemon heyneanus* Benth (Lamiaceae),’ for the World Journal of Agricultural Research, Vol 7, No 3, 45-55 on 05th March 2019.
6. Ms. Ruvini Vidanapathirana-Senior Research Officer published a full paper titled ‘Safety Issues in Fruit and Vegetable Supply Chains in Sri Lanka: A Review’ at the International Conference on Agriculture, Food Security and Safety (AgroFood 2019), held at Galle Face Hotel from 07th to 08th November 2019.

Publications (Journal Articles etc.)

1. Ms. Ruvini Vidanapathirana-Senior Research Officer prepared the Feasibility Report on ‘Establishment of Dedicated Economic Centre in Thelulla area of the Moneragala District’ for the Ministry of Fisheries and Aquatic Resource Development and Rural Economy (December 2018 to March 2019).

2. Ms. Ruvini Vidanapathirana -Senior Research Officer published an article in the Book of Abstracts – International Conference on Agriculture, Food Security and Safety (Agro Food 2019) (Safety Issues in Fruit and Vegetable Supply Chains in Sri Lanka: A Review), published by iConference.
3. Ms. Ruvini Vidanapathirana-Senior Research Officer published an article titled “Recent trends in milk production and consumption” in the *Daily News* on 05/04/2019. , Link: <http://www.dailynews.lk/2019/04/05/features/182279/recent-trends-milk-production-and-consumption>.
4. Ms. Ruwini Vidanapathirana-Senior Research Officer, published an article titled “රට කිරිපිටි හැඳීමේ නව කිරීම” in the Dinamina newspaper on April 17, 2019. - Link: <http://www.dinamina.lk/2019/04/17/.../රට-කිරිපිටි-හැඳීම-නව-කිරීම...>
5. Ms. G.V. Norica Aiome-Research Officer submitted an article titled “Rainwater as a Source of Safe Water in North Central Province” for Govijanatha Magazine, 2019 July-September, Volume 21- HARTI.
6. Ms. G.V. Norica Aiome-Research Officer published an article titled “Potential of Promoting Rainwater as a Source of Safe Water Consumption in North Central Province of Sri Lanka”, for the *Daily News*, on 27th August 2019.

Services for Committees, Seminars & Workshops

1. Mr. D.M.A.C. Dissanayake - Research Officer attended the meeting on ‘National Committee for Managing Crop Damages by Wild Animals in Agriculture Sector’ organized by the Ministry of Agriculture in 2019.
2. Mr. W.H. Duminda Priyadarshana - Senior Research Officer conducted one- day workshop for Researchers and High Officers of the Special Research Unit of the Parliament of Sri Lanka on data collection and analysis of Sri Lanka's major food crops. He also served as a Resource Person.
3. Mr. W.H. Duminda Priyadarshana - Senior Research Officer attended the weekly Cabinet Sub-Committee on Cost of Living and provided an analytical review on essential food crops in the market.
4. Mr. W.H. Duminda Priyadarshana - Senior Research Officer served as a member of the Board of Directors of the Food Promotion Board and the Technical Evaluation Committee of the National Programme on Import of Maize.
5. Mr. W.H. Duminda Priyadarshana - Senior Research Officer served as a member of the National Committee for the Management of Paddy and Rice Stocks of the Ministry of Economic Affairs.
6. Mr. W.H. Duminda Priyadarshana - Senior Research Officer served as the Acting Director/CEO of the Institute from 29th September 2019 to 29th January 2020.
7. Ms. G.G. de L.W. Samarasinha - Senior Research Officer served as a member of the Steering Committee of Sri Lanka Water Partnership (Lanka Jalani).

8. Ms. G.G. de L.W. Samarasinha- Senior Research Officer served as a member of the Project Advisory Committee for the South Asia Capacity Building Agricultural and Water Pollution Project- Sri Lanka, jointly implemented by the Arthacharya Foundation Sri Lanka, Caritas Switzerland and the Government of the United States.
9. Ms. G.G. de L.W. Samarasinha- Senior Research Officer served as a committee member for the National Committee on Natural Resources Management, Sustainable Agriculture and Climate Change of Sri Lanka Council for Agricultural Research Policy(CARP).
10. Ms. Ruvini Vidanapathirana-Senior Research Officer served as a Committee member of the National Committee on Floriculture Research and Development in Sri Lanka.

Contributions to Television and Radio Programmes

1. Mr. W.H.D. Priyadarshana - Senior Research Officer, participated in two “Aswenna” live TV programmes by Sirasa TV.
2. Mr. W.H.D. Priyadarshana - Senior Research Officer, participated in the “Boradiya Mankada” Programme and four “Agriculture Navodaya” programmes of Rangiri FM of SLBC.

Staff Positions as at 31st December 2019

	No. of Positions as at 31.12.2018	Termination, Resignation during the year	Appointments	No. of Positions as at 31.12.2019
Director	1	1	-	-
Additional Director	1	-	-	-
Heads of Divisions	6	-	-	6
Research Staff	30	-	-	30
Administrative Staff	8	-	1	9
Senior Staff of Library	2	-	-	2
Data Development Bank	2	-	-	2
Computer Unit	1	-	-	1
Publication Unit	5	-	-	5
Statistical Staff	29	7	-	22
Technical Staff	5	2	-	3
Clerical, Secretarial & Parallel Grades	49	3	2	48
Operative & Allied Grades	46	1	1	46
Total	185	15	4	174

STAFF DEVELOPMENT

In 2019, the institute invested Rs. 2.1 million on staff development, from which 45 staff grade officers and eight non-staff members received local training. Nine staff grade officers participated in foreign training.

The following Research Officers were engaged in Post -Graduate studies:

- | | | |
|------------------------|---|---|
| Mr. H.J.C. Jayasooriya | - | Postgraduate Studies (Master) Australia 08 th January 2019 – 31 st December 2020 |
| Ms. P.A.J. Champika | - | Postgraduate Studies (Master) Australia 08 th January 2019 – 31 st December 2020 |
| Mr. P.C.J. de Silva | - | Doctoral Degree on “Community Development at the Graduate School” in the Philippines, from 19 th February 2019 – 01 st February 2022. |

Participation in International Training

Programmes/Seminar/Workshops/Conferences/Meeting etc.

1. Ms. M.D. Susila Lurdu - Senior Research Officer attended the Training Course: “National Institute of Rural Development & Panchayati Raj (NIRD-PR)” held in Hyderabad, India from 21st January – 17th February 2019.
2. Ms. I.K. Edirisinghe - Research Officer attended the Training Programme: “Participatory Planning for Poverty Reduction and Sustainable Development” held in India, from 18th February – 17th March 2019.
3. Mr. R.L.N. Jayatissa - Additional Director attended the CIRDAP - NIRD & Collaborative International Training Programme: “Food Waste to Wealth: Post – Harvest to Market” held in Vietnam, from 01st March – 10th March 2019.
4. Ms. P.R. Weerakkody - Research Fellow attended the “Thirty Fourth Meeting of CIRDAP Technical Committee (TC-34)” held in India, from 25th June – 28th June 2019.
5. Ms. Thilani Padmajani - Senior Research Officer attended the 04th International Conference on “Bio Fertilizer and Bio Pesticides: Integrated Pest Management” held in China from 19th August to 24th August 2019.

6. Mr. Sidath Bandara- Senior Research Officer participated in “Regional TOT Programme on Water Pollution in Agriculture, Livestock and Forestry Management” jointly organized by LiBird, Nepal and DHAN Foundation India. The programme was held at Pokhara, Nepal from 28th August to 30th August 2019.
7. Mr. M.A.C.S. Bandara - Senior Research Officer attended the workshop on “Agricultural Transformation” held in Bali, Indonesia, from 30th September –4th October 2019.
8. Mr. H.M.J.K. Herath - Research Fellow attended the CIRDAP – NIRD International Training Programme on “Geo informatics and Modern Survey Techniques for Planning and Management” held in Hyderabad- India, from 20th November – 29th November 2019.

Participation at Local Training – Staff Officers

1. Mr. S.P. Fernando and Ms. G.V.N. Aiome - Research Officers, attended the Certificate Programme on “Rain Water Harvesting and Ground Water Recharging” held in Rain Centre from 14th - 16th March 2019.
2. Ms. J.A.U.P. Jayasinghe - Research Officer attended one-day workshop on “Emergence of a Toxic Algal Bloom in Rajangana Reservoir in Kaka Oya Basin” held in the Fisheries and Aquaculture Training Institute on 20th June 2019.
3. Dr. N.P.G. Samantha - Senior Research Officer attended the “Home Grown School Feeding Modality in Sri Lanka” held in Jetwing Blue Hotel from 6th – 7th June 2019.
4. Ms. D.T.P.S. Dharmawardhana - Research Officer attended the International Workshop on “Responsible Financial Inclusion” held in the Centre for Banking Studies from 23rd - 24th July 2019.
5. Ms. H.M.T.G.L. Herath - Librarian attended the Seminar on “Role of Libraries in a knowledge Society” held at the Bandaranayake Centre for International Studies on 07th August 2019.
6. Ms. N.P. Jayanetti - Data Analyst attended the seminar on “Census of Population and Housing - 2021. Data Users’ Suggestions / Requests” held at the Department of Census and Statistics on 17th September 2019.
7. Ms. Ruvini Vidanapathirana and Ms. R.N.K. Rambukwella - Senior Research Officers attended the Seminar on “Food Quality, Society and Regulations” at the Institute of Chemistry Ceylon on 17th September 2019.
8. Ms. A.K.A. Dissanayake - Research Officer attended the International Conference on “Agriculture, Food Security and safety” held at Galle Face Hotel from 7th to 8th November 2019.

9. Dr. W.A.R. Wickramasinghe-Additional Director (Cover up) and Ms. Chandrika Dahanayake - Assistant Registrar (Programme) attended the Lecture on “Changing Role of the Public Servant” held in the Sri Lanka Institute of Tourism & Hotel Management on 24th September 2019.
10. Ms. Sagarika Hitihamu, Ms. Susila Lurdu, Ms. Dilupa Bamunuarachchi - Senior Research Officers and Ms. Malathi Rambodagedara, Ms. Norica Aiome, Ms. R.D.Wijesinghe – Research Officers attended the Pre-DACUM Workshop on “Establishment of a National Vocational Training Institute under the Polonnaruwa Integrated Development Programme” held at Hotel Janaki , from 26th to 27th September 2019.
11. Ms. A.K.A. Dissanayake - Research Officer attended the International Conference on “Social and Cultural Nexus of Science and Technology Development (SCST)” held in Hilton - Colombo on 03rd October 2019.
12. Ms. I.K. Edirisinghe and Ms. Dinusha Rathnayake - Research Officers, Mr.S.A.C.U.Senanayake – Senior Information & Publication Officer attended the programme on “Research Paper Writing” held in the Disaster Management Centre on 10th December 2019.
13. Ms. Munaweera - Senior Research Officer served as a resource person of the Workshop on ‘Application of Agri-Business Concepts and Marketing Extension’ for undergraduate students of Faculty of Agriculture, University of Jaffna held at HARTI from 13th to 15th of December 2019.
14. Research Staff and Statistical Staff participated in the training programme on ‘Field Photography’ conducted by Mr. Indranatha Thenuwara – External Lecturer, University of Kelaniya held at HARTI on 16th December, 2019.
15. Dr. W.A.R. Wickramasinghe-Additional Director (Cover up), Dr. E.A.C. Priyankara and Ms.G.G.de L.W. Samarasinghe- Senior Research Officers, Ms. L.A.K.C. Dahanayake-Asst. Registrar (Programme), Ms. G.W. Thushari-Accountant and Ms. R.A.D.N. Rupasinghe - Admin. Officer (Programme) attended the Training Workshop on “Monitoring and Evaluation of Research Projects” organized by Sri Lanka Council for Agricultural Research Policy (CARP) on 19th December 2019 held at CARP.
16. Ms. D.T.P.S. Dharmawardhana, Mr. D.M.A.C. Dissanayaka, Ms. R.M.D.H. Rathnayake and Ms. M.B.F. Rifana - Research Officers participated in the training programme on ‘Online Data Entry’ organized by HARTI on 09th July 2019.
17. Ms. R.M.D.H. Rathnayake- Research Officer participated in the programme titled ‘The United Nations Global Campaign on Sustainable Nitrogen Management’ organized by the International Nitrogen Management System, UN, on 24th October 2019.

18. Mr. SACU Senanayake, Senior Information and Publication Officer and Mrs. Wasanthi Rajapaksa, Information and Publication Officer participated in a two-day workshop on 'Basic Methods in Editing' at the National Library Services and Documentation Board on 17th and 18th December 2019.

Local Training - Non-Staff

1. Mr. A.D. Jayan – Transport Assistant attended the programme on “Transport Management” held at the Construction Industry Development Authority from 28th February to 01st March 2019.
2. Mrs. Kaveesha Sathsarani– Management Assistant attended the “Leave for Public Officers” held at SDSL from 11th March to 12th March 2019.
3. Mrs. Mangalani Jayalath – Book Keeper attended one-day programme on “Official Bank Accounts and Cheques” held at PRAG on 14th March 2019.
4. Mr. Saman Pethaliyagoda - Driver attended “Safe Driving for Drivers” held at Construction Industry Development Authority, Ministry of Urban Development on 29th June 2019.
5. Mrs. Mangalani Jayalath – Book Keeper attended one-day programme on “Preparation of Final Accounts” held at PRAG on 24th October 2019.
6. Mr. Pubudu Niroshan - Management Assistant attended the programme on “Improving Cost and Payment Procedures and Financial Regulations” held at PRAG on 10th December 2019.
7. Mr. Saliya Dharmadasa and Ms. Nirosha Dissanayake – Management Assistants, participated in one-day training programme on “Office Systems and Efficiency” held at PRAG on 24th December 2019.

**Hector Kobbekaduwa
Agrarian Research & Training Institute**

FINAL ACCOUNTS

2019



**114, Wijerama Mawatha
Colombo 07.
Sri Lanka.**

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Hector Kobbekaduwa Agrarian Research & Training Institute

Statement of Financial Position as at December 31, 2019

LKR

ASSETS	Notes	2019	2018
Current assets			
Cash and cash equivalents	2	15,616,183.49	15,595,046.24
Receivables-Debtors	3	32,520,745.31	31,356,972.15
Receivables-Deposits	4	613,070.00	613,070.00
Inventories	5	5,229,254.96	6,698,505.97
Prepayments	6	35,067.01	24,559.73
Other current assets	7	23,500.00	224,312.40
		54,037,820.77	54,512,466.49
Non-current assets			
Other financial assets	8	3,900,922.99	3,691,021.00
Infrastructure, plant and equipment	9	22,573,958.85	23,651,616.46
Land and buildings	10	37,697,130.51	39,294,336.79
Work in Progress	11	1,539,951.30	386,568.36
		65,711,963.65	67,023,542.61
Total assets		119,749,784.42	121,536,009.10
LIABILITIES			
Current liabilities			
Payables	12	19,063,151.63	17,334,089.64
		19,063,151.63	17,334,089.64
Non-current liabilities			
Employee benefits	13	57,562,752.50	52,241,966.50
		57,562,752.50	52,241,966.50
Total liabilities		76,625,904.13	69,576,056.14
Net Assets		43,123,880.29	51,959,952.96
NET ASSETS/EQUITY			
Government Grant - Capital	14	44,971,154.73	51,821,985.57
Capital contributed by Ministry			-
Reserves	15	3,376,906.90	3,342,461.37
Revaluation Reserve		26,450.20	26,450.20
Incentive and Training Fund	16	8,611.38	-
Accumulated surplus/(deficits)	17	(5,259,242.92)	(3,230,944.18)
Total net assets/equity		43,123,880.29	51,959,952.96

The accounting policies on pages 5 to 8 and Notes on pages 9 to 14 an integral part of these financial statements. I certify that the financial statements have been prepared in compliance with the requirements of Public Sector Accounting Standards.

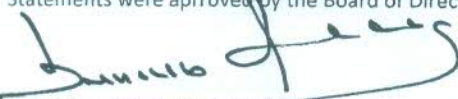

Thushari Wedage

ACCOUNTANT

Date: 23-06-2020


Professor Ranjith Preshal De Silva
DIRECTOR

The Board of Directors is responsible for the preparation and presentation of these Financial Statements. These Financial Statements were approved by the Board of Directors and signed on their behalf.



Sumedha Perera WWV RWP RSP USP NDU

Major General (Retired)

CHAIRMAN



Board Member

23/06/2020

Hector Kobbekaduwa Agrarian Research & Training Institute
Statement of Financial Performance for the year ended December 31, 2019

LKR

Revenue	Notes	2019	2018
Funds from government Treasury		175,000,000.00	157,730,000.00
Funds from Outsiders for Research and Training Activities		9,014,545.91	8,370,512.07
Capital Grant received for Research and Training Activities		15,694,578.53	17,134,027.29
Other revenue	18	32,082,932.97	31,708,971.91
Bad Debt over Provision		332,395.78	291,988.43
Total Revenue		232,124,453.19	215,235,499.70
Expenses			
Wages, salaries and employee benefits	19	(168,108,417.15)	(154,888,834.37)
Research and Training Activities		(15,694,578.53)	(17,134,027.29)
Funds to Outsiders for Research and Training Activities		(9,014,545.91)	(8,370,512.07)
Depreciation		-	(971,637.00)
Other expenses	20	(41,274,563.20)	(36,084,825.77)
Bank Charges		(97,700.00)	(86,795.00)
Total expenses		(234,189,804.79)	(217,536,631.50)
Surplus / Deficit for the period		(2,065,351.60)	(2,301,131.80)


ACCOUNTANT


DIRECTOR

Hector Kobbekaduwa Agrarian Research & Training Institute
Cash Flow Statement for the year ended December 31, 2019

2018		Notes	2019 (LKR)	
	Cash flow used in operating activities			
(2,301,131.80)	Net deficit / Surplus for the year			(2,065,351.60)
	Adjustment for			
20,162,404.00	Depreciation		8,741,252.31	
(19,190,767.00)	Amortization		(8,741,252.31)	
10,533,630.50	Provision for Gratuity		10,802,680.00	
(1,237,847.79)	Investment Income		(1,190,841.12)	
(688,635.19)	Prior year adjustment		37,052.86	
(47,865.00)	Profit on Disposal Items		308,502.09	
	Bad debt Provision		(332,395.78)	9,624,998.05
7,229,787.72	Operating profit before working capital changes			7,559,646.45
	Working Capital Changes			
(5,026,074.21)	Receivables		(1,163,773.16)	
(671,235.81)	Inventories		1,469,251.01	
(105.86)	Prepayments		(10,507.28)	
(25,486.90)	Other current assets		200,812.40	
7,090,737.95	Payables		1,729,061.99	2,224,844.96
8,597,622.89	Cash used in operating activities			9,784,491.41
(3,954,919.50)	Payment of Gratuity			(5,481,894.00)
4,642,703.39	Net cash used in operations			4,302,597.41
	Cash Flow from Investing Activities			
4,029,389.58	Other financial assets		(209,901.99)	
(7,424,820.07)	Infrastructure, plant and equipment		(6,391,287.37)	
(2,050,973.21)	Land and buildings		(1,637,646.71)	
	Palwehera Circuit Bungalow		1,962,545.66	
1,237,847.79	Investment Income		1,190,841.12	
(254,068.36)	Work in Progress		(1,153,382.94)	
(4,462,624.27)	Net cash used in investing activities			(6,238,832.23)
	Cash Flow from Financing Activities			
25,200,000.00	Government Grant - Capital Received		17,585,000.00	
(17,134,027.29)	Capital Grant received for Research and Training Activities		(15,694,578.53)	
(915,614.55)	Incentive Fund Institute Share 40%		34,445.53	
47,865.00	Sale of disposal items		(308,502.09)	
(151,098.25)	Incentive Fund Institute Share 10%		8,611.38	
	Bad debt Provision		332,395.78	
7,047,124.91	Net cash from financing activities			1,957,372.07
7,227,204.03	Net Increase in Cash & Cash equivalents			21,137.25
8,367,842.21	Cash & Cash Equivalent at the Beginning of Period	I		15,595,046.24
15,595,046.24	Cash & Cash Equivalent at the End of Period	II		15,616,183.49
	Notes:			
	Cash & Cash Equivalent		1	11
			01.01.2019	31.12.2019
15,487,296.20	Cash at bank		15,487,296.20	15,595,513.49
107,750.04	Cash in hand		107,750.04	20,670.00
15,595,046.24	Total		15,595,046.24	15,616,183.49

Hector Kobbekaduwa Agrarian Research & Training Institute
Statement of Changes in Net Assets/Equity
for the year ended December 31,2019

LKR

	Government Grant Capital	Reserves	Revaluation Reserve	Incentive and Training Fund	Accumulated Surplus/(Deficits)	Total
Balance as at January 01,2019	51,821,985.57	3,342,461.37	26,450.20	-	(3,230,944.18)	51,959,952.96
Funds received from Treasury	17,585,000.00					17,585,000.00
Amotization for the year	(8,741,252.31)					(8,741,252.31)
Accounting institute share 40% & 10%		34,445.53		8,611.38		43,056.91
Prior Year Adjustments					37,052.86	37,052.86
Capital Grant received for Research and Training Activities	(15,694,578.53)					(15,694,578.53)
Income & Expenditure					(2,065,351.60)	(2,065,351.60)
Balance as at December 31,2019	44,971,154.73	3,376,906.90	26,450.20	8,611.38	(5,259,242.92)	43,123,880.29

Notes to the Financial Statements
For the year ended 31st December 2019

1. Accounting Policies

1.1 General

The Financial Statements are prepared under the historical cost basis in accordance with Sri Lanka Public Sector Accounting Standards (SLPSAS) laid down by the Institute of Chartered Accountants of Sri Lanka and the provisions of the Finance Act No.38 of 1971. Adjustments have not been made for inflationary factors in these financial statements. The accounting principles are applied consistently on accrual basis.

1.2 Comparative information

The Accounting Policies have been consistently applied by the Institute with these used in the previous year, Previous year figures have been rearranged wherever necessary to confirm to the current year presentation.

1.3 Events occurring after the Balance Sheet date

All material post Balance Sheet events have been considered and where appropriate adjustments or disclosures have been made in the financial statements.

1.4 Valuation of Assets

(i) Property, Plant & Equipment

The cost of property, plant & equipments are at their cost of purchase or construction together with any incidental expenses thereon. Expenditure incurred for the purpose of acquiring, extending or improving assets of a permanent nature by means of which to carry on the institute or for the purpose of increasing the capacity of the institute has been treated as capital expenditure. Cost of maintenance and repairs are expensed as incurred. The property, plant & equipment are recorded at cost (or revaluation) less accumulated depreciation which is provided for on bases specified below

a) Depreciation is provided on the straight-lines method at the following rates per annum.

Buildings	2 ½ % per annum
Equipment/Furniture	10% per annum
Computer	20% per annum
Welfare Equipment	10% per annum
Books	10% per annum
Vehicles	20% per annum

A full year's depreciation is charged in the year of purchase.

b) Amortization amount is recognized & accounted on other method of LKAS 20

c) Palwehera bungalow building

Palwehera bungalow had been transferred to Divisional Secretarial office - Dambulla during the year that transfer approved by the board of governors.

1.5 Debtors

i) Scholarship Debtors

Presently seven scholarship debtor balances are continued. According to SLIPSAS 08 this year adequate provision has been made on risk and uncertainties.

ii) Other Debtors

Other debtors are stated at the amounts which they are expected to realize. Adequate provision has been made for bad and doubtful debts as follows

1. Debtors balance over 5 years	-	100%
2. Debtors balance over 01 to 05 years	-	5%

III) Unrecorded Hostel Income

Unrecorded hostel income was Rs. 8,895,470/- that amount was created on hostel operation activities from 2015 may to 2018 July. This amount was identified by special committee that appointed by Director HARTI.

1.6 Stocks

Stocks of consumable items are valued at cost. Other stocks are valued at lower of cost or net realizable value. Cost of the stocks is valued using FIFO method.

1.7 Investment

Fixed Assets deposits had re-invested on same banks.

1.8 Liabilities and Provision

1.8.1 Gratuity

Provision has been made in Financial Statements for Gratuity payable under the payment of Gratuity act No. 12 of 1983.

In the year 2019 gratuity has been calculated base on Basic Salary and Cost of Living Allowance.

1.8.2 Contingent Liabilities

A provision for contingent liabilities has been made on pending court decision. At end of year Mr.J.Chandrawansa's case is pending at the District Court Moneragala.

1.8.3 Contingent Assets

Contingent Assets has been made on pending legal cases for recovering to scholarship debtors that details given below

Mr.P.D.J.Ananda

Court case is laid due to non availability at the given address. Even though a sum of Rs 1,250,000.00 has been charged from the guarantors. The balance amount of Rs 2,759,754.28 is to be recovered from Mr.P.D.J.Ananda.

Mr.M.S.Gowrisanker

His address has not been found to send the letter of demand. However, the guarantors have already paid Rs 1,250,000.00. The balance amount of Rs 3,634,110.07 is pending to recover from Mr.M.S.Gowrisanker.

Dr. Gamini Wickramasinghe

He has appealed two times. A judgment received in favour of the HARTI. Finally a letter has sent to the Attorney General Department for Writ of Certiorari. Follow up fiscal action in progress.

Ms.S.D.Abeyrathne

The balance amount of Rs 501,392.00 is to be recovered from Ms.S.D.Abeyrathne but the case could not be proceeded due to the person being not available at the given address.

Ms.R.Athukorala

Ms.R.Athukorala had a bond value of Rs 2,181,521.00. The guarantors paid a sum of Rs.1,250,000.00. The balance amount of Rs 931,521.00 could not be recovered. His address has not been found to send the letter of demand.

Mr.P.D.R.Kumarasiri

The value of Mr.P.D.R.Kumarasiri's bond is Rs 499,302.00. The guarantors have been charged Rs 166,436.00. The balance of Rs 332,866.98 has to be recovered from other two guarantors decided by the court. However, the address of one guarantor cannot be found.

Ms.A.C.K.Sepala

Ms. A.C.K.Sepala has a bond value of Rs 1,249,641.11. A court judgment ordering to pay a sum of Rs 1,200,000.00 has been received. She was settled Rs. 900,000.00 to date.

1.8.4 Defined Contribution Plan

Institute contributes 15% and 3% of employees monthly salary to Employee's Provident Fund (EPF) and Employee's Trust Fund (ETF) respectively. These contributions are recognized as expenses in the Statement of Financial Performance on current circulars issued by Department of Management Service.

1.9 Statement of Financial Performance

The statement of financial performance is stated after;

- a. Providing bad and doubtful debts and all expected future expenses in day - to- day operation of the institute and maintaining the property plants and equipment in a state of efficiency.
- b. Revenues are included Funds of Government Treasury, income of hostel charges, conference hall charges & others.

2.0 Transport and Printing cost

Transport and printing expenditures have to be accounted for all divisions and research and training. Therefore that expenditure has been valued at an approved rate and that cost is adjusted to a percentage between those relevant expenditures.

2.1 Capital Grants received for Research and Training Activities

The treasury was allocated the funds for research & training activities on head of government capital grants. According to LKAS -38, Research & Training cost can be treated as Intangible assets but institute's research & training cost can't be treated as intangible assets. Because output of institute's research was not comply with requirements of LKAS 38. Therefore total research & training cost are debited to the "statement of financial performance" that cost treated as recurrent expenses and above mentioned government capital grants also transferred to the institute's "statement of financial performance" for the year.

2 Cash and cash equivalents

	2019	2018
Cash in hand	20,670.00	107,750.04
Cash at bank - A/c No 2323292	8,463,976.86	6,704,465.78
Cash at bank - A/c No 2323293	2,446,820.21	2,004,324.49
Cash at bank - A/c No 2323315	203,895.78	107,518.91
Cash at bank - A/c No 2323317	4,480,820.64	6,670,987.02
	15,616,183.49	15,595,046.24

3 Receivables

Staff Debtors

Housing Loan	401,321.55	521,526.93
Consolidated loan	22,894,203.34	22,877,445.15
Festival Advance	6,675.12	12,042.71
Auditorium Income Receivable	509,875.00	787,625.00
Hostel Income Receivable	907,145.07	591,617.75
Hostel Income Receivable (Unrecorded)	-	-
Scholarship debtors	13,486,273.49	15,387,897.86
Salary Advance	-	282,860.09
	38,205,493.57	40,461,015.49

Other Debtors

Investment income receivable	50,612.38	53,743.26
Receivable from - Ms.B.A.D.S.Bamunuarachchi	48,000.00	160,000.00
Recoverable from resigned employees	564,378.12	574,515.55
Recoverable from medical insurance	100.00	-
Debtors - Mobitel Pvt Ltd	250,002.51	129,801.74
G-97- Climate -smart crops and mechanization scaling	325,924.33	-
Receivable from Digi House	230.00	-
Recoverable from Metropolitan Office (Pvt) Ltd	70.00	-
Receivable from Ministry of Public Administration	117,800.00	117,800.00
R-481 Jaffna Lagoon and Contribution of the lagoon to the livelihood og periheral villages	111,921.59	111,921.59
Receivable from SMIB	47,028.07	53,617.28
Divisional secretariat Dambulla	1,962,545.66	-
R-540 Building the basis for impementing the "Save and Grow" Approch Reginal strategies on sustainable and climate resilient intensification of cropping systems	809,686.06	-
	4,288,298.72	1,201,399.42
	42,493,792.29	41,662,414.91
Less:		
Provision for Bad & Doubtful Debtors	(519,542.01)	(305,134.51)
Provision for scholarship	(9,453,504.97)	(10,000,308.25)
	32,520,745.31	31,356,972.15

4 Receivables

Deposits

Fixed - Caterer	70,000.00	70,000.00
Sundry - Sri Lanka Telecom (Internet facility)	3,125.00	3,125.00
Sundry - Post Master General	24,945.00	24,945.00
Sundry - Colombo Gas and Water Co.	4,750.00	4,750.00
Sundry - Water supply and Drainage Board	500.00	500.00
Sundry - Celltel Lanka Ltd.	3,500.00	3,500.00
Sundry - Ceylon Electricity Board	406,250.00	406,250.00
Sundry - Fuel Deposit	100,000.00	100,000.00
	613,070.00	613,070.00

LKR

5 Inventories	2019	2018
Publication and journals	2,758,249.00	2,746,259.00
Consumables	1,538,084.96	3,000,271.97
Sales Center	932,921.00	951,975.00
	<u>5,229,254.96</u>	<u>6,698,505.97</u>

6 Prepayments		
Service Agreement Photocopy	10,500.00	-
Building Insurance	24,567.01	24,559.73
	<u>35,067.01</u>	<u>24,559.73</u>

7 Other current assets		
Purchase Advance	23,500.00	224,312.40
	<u>23,500.00</u>	<u>224,312.40</u>

8 Other financial assets		
Call Deposits	1,500.00	1,500.00
Fixed Deposits at State Mortgage & Investment Bank	1,500,000.00	1,500,000.00
Fixed Deposits at State Mortgage & Investment Bank-Housing Loan Scheme	2,399,422.99	2,189,521.00
	<u>3,900,922.99</u>	<u>3,691,021.00</u>

9 Infrastructure, plant and equipment

Schedule of Depreciation of Assets - December 31, 2019

LKR

Particulars	Cost as at 01.01.2019	Additions / (Disposals) during the Year 2019	Total Cost as at 31.12.2019	Acc/Dep as at 01.01.2019	Dep. for the year 2019	Accu/Dep. ended 31.12.2019	Net Value as at 31.12.2019
Equipment/Furniture	56,963,747.67	3,256,777.30	60,220,524.97	42,836,088.14	2,856,910.09	45,692,998.23	14,527,526.74
Computer Installation	31,788,012.58	2,193,840.72	33,981,853.30	28,277,764.39	1,270,708.14	29,548,472.53	4,433,380.77
Motor Vehicles	71,864,147.00	24,500.00	71,888,647.00	68,335,514.40	2,711,196.40	71,046,710.80	841,936.20
Books	15,081,368.00	916,169.35	15,997,537.35	12,596,292.86	630,130.35	13,226,423.21	2,771,114.14
Welfare Equipment	3,734.55	-	3,734.55	3,733.55	-	3,733.55	1.00
Total	175,701,009.80	6,391,287.37	182,092,297.17	152,049,393.34	7,468,944.98	159,518,338.32	22,573,958.85

10 Land and buildings

Schedule of Depreciation of Assets - December 31, 2019

Particulars	Cost as at 01.01.2019	Additions / (Disposals) during the Year 2019	Total Cost as at 31.12.2019	Acc/Dep as at 01.01.2019	Dep. for the year 2019	Accu/Dep. ended 31.12.2019	Net Value as at 31.12.2019
Land	1,716,667.00	140,720.00	1,857,387.00	-	-	-	1,857,387.00
Buildings	56,799,674.45	1,496,926.71	58,296,601.16	19,222,004.66	1,272,307.33	20,106,806.05	35,839,743.51
Pelwehera Bungalow	-	(2,350,051.60)	-	(387,505.94)	-	-	-
	58,516,341.45	(712,404.89)	57,803,936.56	18,834,498.72	1,272,307.33	20,106,806.05	37,697,130.51

11 Work in Progress

1,539,951.30

Payables		2019	2018
12	Accrued expenses	8,621,848.58	9,380,068.54
	Payable Research & Training Expenses	1,216,781.39	2,999,702.29
	Tender deposit refundable	133,462.20	133,462.20
	Canteen deposit refundable -Upatissa Paranamana	50,000.00	50,000.00
	Salary Advance	-	-
	Unpaid expenditure	267,135.56	97,215.00
	Payable to Resigned Employees	189,150.61	220,725.04
	Stamp Fees Payable	16,225.00	17,600.00
	Retention	136,526.06	22,769.79
	Creditors	1,720,160.05	1,078,781.48
	Welfare Society	-	3,197.00
	Gratuity Payable	126,912.50	126,912.50
	Payable to Ministry	94,358.05	94,358.05
	Management Development Book	10,000.00	-
	Special Advance	-	400.00
	Payable to tea research institute	84,000.00	-
	Payable to Mr.Narayanasamy	9,000.00	-
	Hostel income received in advance	43,528.00	-
Creditors against projects			
	Rapid food Security & need Assessment	7,774.28	7,774.28
	R-512 Capacity Development of Agrarian Research -Technology personnel in Sri Lanka on Global Change and sustainability	22,831.18	22,831.18
	R-530 Baseline study for strengthening value chain for Banana,Mango and pineapple corp in selected regions in Sri Lanka	2,716,082.09	1,973,590.33
	R-535 Addressing climate change inpmacts of Marginalized agricultural communitites living in the Mahaweli river basin of Sri Lanka	440,981.34	440,981.34
	R-540 Building the basis for impementing the "Save and Grow" Approch Reginal strategies on sustainable and climate resilient intensification of cropping systems	-	417,818.74
	Service Contract 03-2017	245,901.88	245,901.88
	R-559 Energy/water baseline assessment for drip irrigation technologies for various crops in sri lanka	695,062.86	-
	R-561 Building evidence on the impact of improved agricultural extension services on rice production in Anuradhapura district Sri Lanka	1,799,880.00	-
	Service Contract 01-2019	415,550.00	-
		19,063,151.63	17,334,089.64
Employee benefits			
13	Balance as at January 01,	52,241,966.50	45,663,255.50
	Payments during the year	5,481,894.00	3,954,919.50
	Provision for the year	10,802,680.00	10,533,630.50
	Balance as at December 31,	57,562,752.50	52,241,966.50
Government Grant - Capital			
14	Balance as at January 01,	51,821,985.57	58,021,062.86
	Capital Contribution During the year	17,585,000.00	25,200,000.00
	Capital Grant received for Research and Training Activities	(15,694,578.53)	(17,134,027.29)
	Amotization for the year	(8,741,252.31)	(11,360,926.00)
	Depreciation adjustment vehicle purchased	-	(2,904,124.00)
	Balance as at December 31,	44,971,154.73	51,821,985.57
Reserves			
15	Project Capital Fund	-	-
	Capital Reserve	1,675,000.00	1,675,000.00
	Incentive Fund - Institute share	1,701,906.90	1,667,461.37
		3,376,906.90	3,342,461.37
Incentive and Training Funds			
16	Incentive Fund 10% from project	8,611.38	-
		8,611.38	-

LKR

Accumulated deficits		2019	2018
17	Balance as at January 01,	(3,230,944.18)	(9,927,540.39)
	Adjustment on revaluation reserve vehicle purchased on institute funds	-	2,586,363.20
	Vehicle purchased on treasury grant received 2014 depreciation adjustment	-	7,100,000.00
	Training Funds Project trf of balance	-	0.01
	Prior year adjustment - for the year	37,052.86	(688,635.18)
	Expenditure over income as at December 31,	(2,065,351.60)	(2,301,131.80)
	Balance as at December 31,	<u>(5,259,242.92)</u>	<u>(3,230,944.18)</u>

Other Revenue			
18	Hostel charges	13,303,731.02	14,266,583.83
	Conference hall charges	15,997,250.00	13,791,868.75
	Income From Mobitel Customer service	120,200.77	110,821.63
	Sales of publications	80,309.00	146,151.00
	Interest on investments	256,888.99	337,963.68
	Interest on staff loan	933,952.13	899,884.11
	Recurrent contribution from projects	846,932.77	1,567,814.13
	Bungalow fees and room rent	91,619.95	172,099.64
	Palwehera Room rent	28,950.00	70,500.00
	Computer income	-	2,002.00
	Tender fees	-	2,000.00
	Manpower Income	64,002.43	6,173.34
	Other income	129,975.91	83,244.80
	Supplier's Registration	177,000.00	175,000.00
	Advertising Income	32,250.00	29,000.00
	Excess Stock	19,870.00	-
	Scrap Item Disposal	-	47,865.00
		<u>32,082,932.97</u>	<u>31,708,971.91</u>

Wages, salaries and employee benefits			
19	Salary -Permanent staff	86,888,993.04	76,921,443.04
	Salary - Investigators	12,932,062.53	8,913,439.37
	Cost of Living Allowance, Special Allowance & other	31,451,303.22	36,484,917.91
	EPF	17,485,167.32	15,640,443.47
	ETF	3,497,032.27	3,139,553.66
	Overtime	5,051,178.77	3,255,406.42
	Gratuity	10,802,680.00	10,533,630.50
		<u>168,108,417.15</u>	<u>154,888,834.37</u>

Other expenses		2019	2018
20	Local subsistence & Local transport	1,746,142.18	1,163,236.16
	Foreign Travel Allowance	67,772.77	382,218.00
	Stationery and office requisites	3,034,873.17	1,952,737.17
	Fuel and lubricants	1,212,026.39	1,493,393.50
	Uniforms	415,708.42	509,134.31
	Vehicle repairs	1,553,772.54	1,749,011.14
	Maintenance of Building	2,048,644.33	1,885,429.98
	Plant machinery and equipment repairs	1,835,323.58	1,984,938.14
	Telephone charges	3,295,188.47	2,640,531.75
	Electricity	5,162,274.02	5,264,241.90
	Water bills	1,156,255.88	1,140,656.40
	Taxes to local authorities	579,456.00	354,913.20
	Postal charges	609,870.00	413,870.00
	Transport	594,560.00	570,110.00
	Technical Advice for Vehicles	90,000.00	90,000.00
	Technical Advice for Construction	90,000.00	60,000.00
	Newspapers	271,796.00	197,960.00
	License and insurance	1,061,870.63	1,198,986.99
	Security charges	3,036,000.00	3,050,650.00
	Cleaning services	1,240,080.49	975,319.47
	Laundry services	435,520.00	527,330.00
	Audit fees	986,000.00	900,000.00
	Medical Insurance	1,015,500.00	957,000.00
	Canteen charges	109,034.00	102,762.00
	Miscellaneous expenses - Others	368,447.00	174,768.00
	Legal charges	591,716.00	8,970.00
	Welfare	200,475.00	388,325.00
	Advertisement	1,908,253.01	877,565.00
	Interview charges	68,801.00	51,027.00
	Board of governors	608,435.00	559,068.00
	Printing & Publication	1,915,540.02	1,374,437.90
	Entertainment	-	16,232.00
	Dissemination of information	669,675.00	454,242.50
	Cost of Sales - Publications	80,059.00	146,366.00
	Withholding Tax	13,881.79	21,871.07
	Audit & Mgt Committee	63,721.00	68,150.00
	Staff Development	2,101,080.92	1,829,373.19
	EB Examination Fees & Other	478,500.00	-
	Workmen's Compensation	-	550,000.00
	Translation Fees	150,547.50	-
	Technical Advice for Equipment & Others	89,500.00	-
	Loss on printed books	1,560.00	-
	Stock shortage	8,200.00	-
	Scrap Disposal item loss (consumable)	308,502.09	-
		41,274,563.20	36,084,825.77

Consumable Scrap Disposal Loss

20.1	Cost	314,402.09	-
	Revenue	(5,900.00)	-
	Scrap Disposal item loss (consumable)	308,502.09	-

Report of the Auditor General on the Financial Statements of the Hector Kobbekaduwa Agrarian Research and Training Institute for the year ended 31st December 2019 in terms of section 12 of the National Audit Act, No. 19 of 2018

1. Statements of Finance

1.1 Opinion

The audit of financial statements of the Hector Kobbekaduwa Agrarian Research and Training Institute for the year ended December 31st 2019 comprising the statement of financial position as at 31 December 2019 and the statement of financial performance, statement of changes in equity and cash flows statement of the year then ended and a summary of significant accounting policies was carried out under my direction in pursuance of provisions of the National Audit Act No. 19 of 2018 and Finance Act No. 38 of 1971 to be read in conjunction with Article 154 (1) of the Sri Lanka Democratic Socialist Republic. In terms of Article 154 (6) of the Constitution my report will be tabled at the Parliament in due course.

Exclusive of the effects of the facts described in the section on the basis for expressing my opinion, I am of the opinion that the financial position of the Hector Kobbekaduwa Agrarian Research and Training Institute as at 31st December 2019 and its financial performance and the cash flows reflect a true and fair situation in terms of Sri Lanka Public Sector Accounting Standards.

1.2 Basis for the opinion

- (a) No provision has been made in the financial statements for the rest of Rs. 1,000,000 payables for the period from December 2011 to 12 December 2019 for taking over Palwehera circuit bungalow on long-term rent basis from the Divisional Secretary, Dambulla for maintaining a circuit bungalow.
- (b) Although the money received from the disposal of goods was Rs. 5,900, the sum of Rs. 308,502 which is the sales loss of disposal of goods was indicated in the cash flow statement as a cash flow under financial performances.
- (c) The sum of Rs. 1,962,545 borne by the Institute for maintenance costs of the Palwehera circuit bungalow was accounted as payable from the Divisional Secretary Palwehera, but the Institute has not received this money. However, in the cash flow statement it was indicated as a cash flow under investment performances.

Audit was carried out by me in accordance with the Sri Lanka Accounting Standards. My responsibility under the standards is in further explanation in the section about the section about the auditor's responsibility of the audit of financial statements in this report. I am assured that audit evidence I have obtained for basis for my opinion is adequate and appropriate.

1.3 Responsibilities of the management and administration on statements of finance

Preparation of these statements of finance in accordance with Sri Lanka auditing standards and make a fair presentation and deciding on the internal controls required for the presentation of the financial statement free from material misstatements whether due to farced or error is the responsibility of the management.

In the preparation of financial statements, it is responsibility of the management to decide on the ability for the continued maintenance of the Institute and except in the case of the management intending to liquidate the Institute or arrange to cease the operation in the absence of any other alternative, keeping accounts on the basis of untimed existence and disclosing the reasons related to the continued existence of the Institute is the responsibility of the management.

The responsibility of the financial reporting process is held by the controlling parties.

In accordance with sub-section 16 (1) National Audit Act No. 19 of 2018, documents and reports on the Institute's revenue, expenditure, assets and liabilities should be properly maintained to enable the preparation of the Institute's annual and timely financial statements.

1.4 Auditor's responsibility of the auditing of the financial statements

As a whole my aim is to give a fair assurance that the financial statements are free from material misstatements due to fraud or error and to issue the auditor's report that includes my opinion. Fair assurance is an assurance of higher level but in carrying out the audit in accordance with Sri Lanka auditing standards it is not an assurance that material misstatements are disclosed. Because of the pressure of frauds and errors singly or collectively material misstatement can occur and it is expected but it can affect the economic decisions taken by users on the basis of these financial statements.

Audit was carried out by me in accordance with Sri Lanka auditing standards with professional judgment and professional suspicion.

- In the identification and assessment of the risks of national statements whether due to fraud or error to avoid risks arising out of frauds or errors by planning timely appropriate audit procedures, obtaining adequate and appropriate audit evidence is the basis for my opinion. The influence caused by a fraud is stronger than the influence exerted by material misstatements and collusion, forgery, deliberate avoidance or disregarding internal contract can lead to a fraud.

- Despite getting an understanding about the internal controls of the Institute for preparing timely appropriate audit procedures, it is not intended to express an opinion on the effectiveness of their internal controls.
- Fairness of the accounting policies and the accounting estimates used and the appropriateness of the related disclosure made by the management was appreciated.
- On the basis of audit evidence obtained whether there is sufficient uncertainty about the contained existence of the Institute by reasons of events and situations, relevancy of using the basis of continued existence for auditing was decided. If I conclude that there is a sufficient uncertainty, my audit report should pay attention the disclosures about that in the financial statements and if such disclosures are insufficient my opinion should be disclaimed. However, the continued existence may cease on future events and situations.
- Presentation of the financial statements inclusive of disclosures the structure and contents appreciated and the basis of such dealings and events appropriately and fairly included in the financial statements was appreciated.

The controlling parties were made aware of the important audit findings, weaknesses of the main internal control and other matters identified during my audit.

2. Report on other legal and regulatory needs

Special provisions are included in relation to their followings needs in National Audit Act No.19 of 2018.

- Exclusive of the effects of the facts described in the section on the basis for expressing my opinion, in accordance with the needs of section 12 (A) of the National Audit Act No. 19 of 2018, I obtained all the information and explanation needed for the audit and as it appears in my investigation the Institute has maintained proper financial records.
- According to the needs referred to in section 6 (1) (C) (iii) of the National Audit Act No.19 of 2018, the financial statements of the Institute correspond with the previous year.
- According to the needs mentioned in the section 6 (1) (C) (iv) of the National Audit Act, the recommendations I made in the previous year are included in the financial statements presented.

On the actions followed and the evidence obtained and within the limits internal facts nothing received my attention to make following expressions.

- According to the need referred to the section 12 (d) of the National Audit Act 19 of 2018, any member of the Board of Governors, in connection with some agreement with Institute involvement, has a connection outside the general business situation directly or otherwise.
- In accordance with the need refer to the section 12 (e) exclusive of the following observations, acting not in accordance with any relevant written law or other common or special provisions issued by the Board of Governors of the Institute.

Regulations/Reference to the order

Description

Financial Regulation code of the Sri Lanka
Democratic, Socialist Republic

- | | |
|---|---|
| (i) FR 756 | No stock taking survey had been done about the library books for the year 2019. |
| (ii) FR 757(2) (A) | If the survey report indicated any differences, No action has been taken under this FR about excesses and deficits identified in stock-taking surveys in the years 2011, 2017 and 2018 or about responsible officers. |
| (iii) Government Business Circular No. PED 55 dated 14 th December 2010. | Despite the need to conduct audit committee meetings at least once in 03 months, the Institute had conducted only 03 meetings each for the years 2017, 2018 and 2019. |
- In accordance with the need of section 12 (G) action taken not in compliance with the Institute's tasks and functions.
 - According to the need mentioned in Section 12(H) of the National Audit Act No. 19 of 2018 the assets of the Institute have not been procured and used economically, efficiently and effectively, within the time limit and in accordance with relevant rules and regulations.

3. Other Audit Observations

- A. No effective action has been taken to recover a sum of Rs. 13,486,273 being the cost of bonds payable as at 31st December 2019 by 07 officers who have gone abroad on scholarships and not returned to the country.

- B. Security officers of the Ministry of Agriculture had rented out 05 rooms of the Institute hostel from May 2015 to 2018. But the relevant rent for the period, Rs. 8,895,470 had not been recovered.
- C. In the debit balance, there were 05 balances for a sum of Rs. 484,529 outstanding for over a period of 05 years, receivable for library books and periodicals, money that should be received for goods obtained from the Institute and overpayments of salaries and allowances. This should have been recovered from the officers who have retired after completing their service in the Institute.
- D. The bio-gas unit set up at the Institute at a cost of Rs. 1,031,020 during the period 2012 – 2015 has not been functioning since 2016 and because of the state of disrepair for a long period of time its accessories have become dysfunctional and not reusable.
- E. Of the provision of Rs. 2.73m. allocated for publications through the action plan 2019 for the purpose of transmitting the findings and recommendations of the research projects to the policy makers and the other stakeholders on the basis of the identified agricultural development needs, only Rs.o.775m. have been utilized. No action has been done using the provisions allocated for media and exhibitions.
- F. It was observed that identified programmes for the transmission to the stakeholders, the research findings and the new knowledge generated from conducting research which is a major role of the Institute are not put into effect annually or once within certain time limits. Provisions also have not been allocated through action plans for releasing research reports during the years 2017, 2018 and 2019. Similarly, 02 research projects commenced in 2016 at a cost of Rs. 1,801,264 should have been completed before 31st December but have not been finalized. For this reason, recommendations emanating from research programmes based on timely needs, have not been received by the relevant stakeholders within to specified time limits.

W.P.C. Wickramaratne
Auditor General

Report of the Auditor General on the Financial Statements of the Hector Kobbekaduwa Agrarian Research and Training Institute for the year ended 31st December 2019 in terms of section 12 of the National Audit Act, No. 19 of 2018

Explanation relevant to the above report dated 13.08.2020 is submitted herewith.

1.2

(a) Agreed

Action is taken to disclose through future financial statements.

(b) Agreed

This is not the loss of disposal of Fixed Asset but the loss of the sales of consumer items. This loss of Rs. 308,502/= is indicated as a cash flow under financial performances because this transaction is also adjusted under operational performances. As indicated, information of the cash flow statement is submitted.

(c) Despite the non-receipt of money on behalf of the Pelwehera Circuit Bungalow, this money was accounted as a due payment. As this payment is the value after cutting of the depreciation of the asset named Pelwehera Circuit Bungalow it is presented under investment performances in the cash flow statement.

2. (A) i. In terms of instructional circular No. 2004/ප්‍ර.ස./01, of the National Library and Documentation Board, the misplaced books should be accounted once in every 2 years. But in accordance with ER 756, the library books survey will be conducted in the future. However, in 2019, the Library Division along with the Finance Division extracted information book shelf wise in the library, and computerized the information in a way easily identifiable separately.

ii. Despite the fact that a library books survey was conducted by the Institute no action was taken about excesses and shortages of books. However, since 2019 necessary action is being done, clearly identifying the excesses and shortages. Following a library books survey in 2020 steps are in place to resolve all these issues.

(B) In 2019, 03 Audit Committee meetings were held; it was scheduled to hold the last meeting in the first week of December in that year. Nonetheless, with the new government coming into power after the presidential election in November 2019, the Boards of Directors were rendered void making it impossible to appoint Board Members for audit meetings.

In the absence of a permanent Registrar in the Institute in the years 2017 and 2018, it appeared impossible to hold audit meetings by the Directors,

3. (A) At the commencement of the year 2019 the debit balance in respect of foreign scholarship holders was 15,387,897.91 and a sum of Rs.1,901,629.37 had been recovered. Accordingly, as at 31 December 2019, the debit balance of foreign scholarship holders was 13,486,273.54. In the year 2019, this recovery was rendered possible resultant on the strategic course of action resorted to by the Institute. Formal action is in place to recover the balance outstanding. Further in the year 2020, a sum of Rs. 596,392/- has been recovered. By now the debit balance of foreign scholarship holders stands at Rs. 12,889,881.54.

(B) The director appointed a committee with regard to the above subject and a report containing the recommendations of this committee referred to the Board of Governors (No. 379). The Board of Governors has approved the auditing subject to the recommendations of the Audit Management Committee. But the Audit and Management Committee, having studied this report in-depth, has instructed that the report be referred again to the Board of Governors before auditing, for approval for a suitable decision to pursue further action to recover this income.

Accordingly, this report will be referred to the Board of Governors presently, and action will be taken to audit and recover this payment according to relevant approvals.

(C) The balance outstanding for over 05 years from officers who have served and retired from the service of the Institute amounts to Rs. 484,529.87. This balance constitutes as follows.

1. Mr. M.G.M. Razak - Rs. 212,819.90. Mr. Razak is a surety for a foreign scholarship holder debtor. Legal action is being taken against him under foreign scholarship holder debtors.
2. The money overdue from Mr. H.K.S. Premalal up to 03.09.2011 on his leaving the service is Rs. 152,525.25. But the distress loan included in this balance is being recovered from the sureties now in service at the Institute. Balance outstanding as on 31.12.2019 is Rs. 26,382.35. Referred for legal action.

3. Mr. L.K. Jayasekara – A Director who served at the Institute. The balance due from Mr. Jayasekara to the Institute as on 09.01.2015 is Rs. 29,086.38. Referred for legal action.
 4. Mr. Rangana Athukorala – Rs. 19,474.50.
The balance due from him who left the service on 03.06.2014 is Rs. 19,474.50. Referred for legal action.
 5. Mr. A.M.D.N. Tennakoon
The balance due from Mr. A.M.D.N. Tennakoon is Rs. 196,767.29. Action is being taken to recover this balance.
- (D) A committee comprising the Director of the Institute, Additional Director, Accountant, Internal Auditor and a Senior Research Officer reviewed the present situation of this project on 04 March 2019 and decided that the continuation of this project is not economically profitable and not to make a further investment in this network. Similarly, management of the food carbonic waste daily released from the canteen then (2012) posed problems, but now this waste is sold as animal feed and the canteen earns an additional income. In the circumstances, inability to get sufficient quantities of carbonic waste for generating bio-gas has resulted in a drop in the motivation to maintain the bio-gas unit. In the same way, with the depreciation of the network over a period of time it is not economically profitable to bring it back to normal or updating the networks in line with presently available new technology. By now it has a lifespan of 8 years.
- (E) Under the vote, seminars, workshops and public lectures a sum of Rs.mn.0.75 was allocated for 2019, but expenses as on 31 December 2019 amounted to Rs.mn. 0.253.
- The major for this was that the planned activities of seminars and workshops and programmes to assemble people could not be put in place with the unprecedented Easter Attack.
- (F) Seminars for launching research publications were not planned for the period from 2017 to 2019. Necessary instructions for relevant activities in this respect will be issued and action will be taken to hold workshops and seminars.

R – 513 Research Report

This research exercise which got under way in 2016 is in its final phase. Similarly, it has been informed to prepare the research report of this study as a working paper by the end of June 2019. However, because of the very busy schedule of work of the Research Officer who coordinated the research this work has been held off. Steps will be taken to accelerate the work.

R – 511

This research proposal was included in the 2016 research programme but at the board meeting on 15.09.2016 it was instructed to study the entire Ellanga network instead of one single tank and to do an engineering and soil survey about the silting of the bottom of the tank. Accordingly, the research proposal and the methodology had to be changed.

The socio-economic study was done by our Institute but the relevant technical knowhow had to be obtained from an external party. This involved a considerable delay.

In the absence of necessary financial provisions, to do the study, the necessary information had to be obtained through digital data and by now the study is completed and is ready for English language editing after which the printing process will commence. The findings of the research had been presented to the relevant parties at workshops on policy formulation.

Further our Institute provided our participation in the task of revisions the Irrigation Act by the Irrigation Department. Information extracted from this study too made a contribution in addition on the basis of this study. A paper required for policy formulation was referred to the State Ministry of Finance.