



# Agrarian Newsletter

Approach to  
Minimized  
Pesticide Usage

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## Eco-friendly Remedies for Polythene



Ministry of  
Agriculture



Hector Kobbekaduwa Agrarian  
Research and Training Institute

# Minister Visits HARTI



**T**he newly assigned Minister of Agriculture, Rural Economic Affairs, Livestock Development, Irrigation and Fisheries and Aquatic Resources Development, Hon. P. Harrison visited Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI) on January 16, 2019.

The objective was finding out the progress of institutional research. He met research officers and staff officers of HARTI while holding that agrarian research should be a bridge of solutions for the practical problems of rural farmers.





## Mr Kotagama as the New Director

**H**ector Kobbekaduwa Agrarian Research and Training Institute is delighted to announce the appointment of Mr. Keerthi Bandara Kotagama as the new director, beginning January 1, 2019. He is a professional executive in the Agri-business Management field, holds a Bachelor of Science Degree in Agriculture (Hons) from the University of Peradeniya and Master of Business Administration (Finance and Management of Technology) from the Asian Institute of Technology, Thailand.

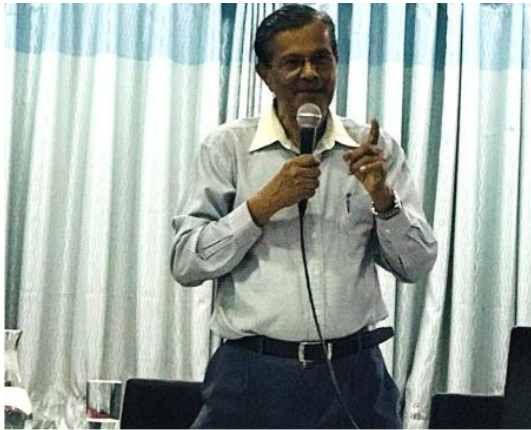
Mr. Kotagama was the Founder Managing Director/CEO of CIC Agri Businesses, the only “Seed to Shelf” agriculture company in Sri Lanka and Director CIC Holdings PLC (2014 – 2017). Further, he served as an Executive Director, Member of Board of Directors, Chairman, Board

Mr. Kotagama has been awarded and recognized for his professional services and contribution by several Local and International Organizations.

Member, Committee Member and Advisor/Consultant to number of leading government related institutions such as Lanka Hospitals Ltd, the National Film Corporation and Ceylon Tea Museum.

Mr. Kotagama has been awarded and recognized for his professional services and contribution by several Local and International Organizations. This includes the “Responsible Business Leader Award” 2012, presented by the Enterprise Asia, Malaysia and the “Outstanding Entrepreneurship Award” 2012, presented by the Enterprise Asia, Sri Lanka.

All the research officers and staff officers of HARTI congratulate Mr. Keerthi Bandara Kotagama whilst supporting him in his new role and wishing him great success.



## Commemorating the Past Celebrating the Present Creating the Future

### Celebrating the 47<sup>th</sup> Anniversary of HARTI

**H**ector Kobbekaduwa Agrarian Research and Training Institute celebrated the 47<sup>th</sup> anniversary on February 21, 2019.

Agrarian Research and Training Institute; a pioneering institute in the field of socio-economic research in Sri Lanka commenced on February 21, 1972. Late Mr. Hector Kobbekaduwa did a tremendous service for the development of the agrarian sector in Sri Lanka and he was a forefront member in commencing this Institute. Hence, the name of the Institute was changed as Hector Kobbekaduwa Agrarian Research and Training Institute on February 21, 1995 to respect these invaluable service rendered by him.

A timely lecture on “Public Policies and Research Investments” organized parallel to the anniversary was held by the Senior Professor S. T. Hettige, Faculty of Social Sciences, the University of Colombo at 2 pm at New Hall of the Institute on the same day.

All staff members participated in the lecture.



## Welfare Shop Opened

**W**elfare shop was opened by the welfare society of Hector Kobbekaduwa Agrarian Research and Training Institute to buy essential commodities for an affordable price for the staff members of the institute.

The shop opened by the Director of the Institute on January 28, 2019. There had a welfare shop earlier and, it had gradually become inactive. But, members of the welfare society could re-open the shop on their commitment and assistance.





## Approach to Minimized Pesticide Usage

**P**esticides contribute to the productivity and quality of a cultivated crop. Although it has become the most essential input in the modern agriculture, excessive usage leads to many problems. Hence, current society eager on agriculture with minimized pesticide usage.



Further, the indiscriminate usage of pesticide causes detrimental effects and it has resulted in a major concern by medical and environmental sector in Sri Lanka. Consequently, Agricultural Policy and Project Evaluation Division of the Institute conducted a study on “Possibilities to Minimize Pesticide Usage in Sri Lankan Paddy Cultivation: An Emphasis on Risk Management” with the prime objective of identifying the possibilities to minimize existing pesticide use in paddy cultivation based on technical aspect of pesticide use, farmer perception of risk of crop loss due to pest damage, risk of health due to pesticide use and other socio-economic factors. Research Officers believe that this study will benefit not only farmers but also policymakers who give hands for the development of sustainable agriculture.

Data collected in nine districts with the participation of 330 farmers. Research Officer Ms. A. K. A. Dissanayake coordinated the research and Research Fellow Dr. W. A. R. Wickramasinghe, Research Officers Ms. Dilini Perera and Ms. U. D. R. Udari were co-researchers of the study.

# Dry Zone Vegetable Cultivation under Protected Agriculture

**Study on Vegetable Cultivation under Protected Agriculture as Adaptive Response to Climate Change**

**D**ry Zone is the highest vegetable production area in the country. But, the most vulnerable area to water scarcity and unexpected extreme climatic events such as drought and flood is also the dry zone. To increase vegetable production under limited water and other resources and also to protect vegetable cultivation from adverse climatic events, Protected Agriculture identified as an effective adaptation method. Hence, this study was conducted to find out the potentials and constraints of using Protected Agriculture for vegetable cultivation in dry zone as an adaptive response to extreme climatic events and increase the year-round quality vegetable production to cater the demand.



Research Officer Ms. Nadeesha Dias, Environmental and Water Resources Management Division coordinated this study with the main objective of identifying the farmer level potentials and constraints of vegetable cultivation under Protected Agriculture in the dry zone.

Data collection centred on Anuradhapura and Matale districts with the participation of both types of farmers who are practicing vegetable cultivation under Protected Agriculture and traditional methods.

Senior Research Officers Mr. Sidath Bandara and Research Officer Ms. Thilani Padmajani of Environmental and Water Resources Management Division contributed as co-researchers of the study.

## Possible Eco-Friendly Remedies to Polythene Products

Sri Lankan government banned the use of high density polyethylene (HDPE) shopping bags, polyethylene lunch sheets and polystyrene boxes effect from 1st of September 2017 onwards. Many parties rose their sound against the ban but, the government stepped forward to implement this action while taking the adverse polythene and plastic usage of the country into consideration.

The main objective of this study is to identify the difficulties faced by different aspects of the society due to the ban of high density polyethylene (HDPE), shopping bags and polyethylene lunch sheets and possible eco-friendly alternatives for them while finding sustainable remedies to polythene waste.

A workshop would be held in the future to launch findings and recommendations of the study conducted in the Western Province and take opinions of relevant stakeholders in the profile of polythene and waste management. The coordinator of the study is Research Officer Mr. S. P. Fernando of Human Resource and Institutional Development Division of Hector Kobbekaduwa Agrarian Research and Training Institute.



## Expedite Insurance Scheme for Farmers

### Study on Assessing the Performance of Weather Index Insurance Scheme in Sri Lanka

**A**griculture is highly vulnerable to risk and uncertainty. Sri Lanka frequently suffers from natural disasters including water-induced disasters such as flood, drought and landslides. Agricultural risk is unavoidable but manageable. Hence, insurance can be introduced as a salient role for risk management of agriculture.

This study was mainly focused on assessing the performance of Weather Index based crop (paddy) Insurance scheme (WII) in Sri Lanka. Other specific objectives were, assessing the existing mechanism of WII and indemnity based crop insurance scheme comparatively with institutional perspective, studying the farmer response to WII and suggesting measures to improve the existing crop insurance schemes in Sri Lanka.

Coordinator of the study Senior Research Officer Ms. Roshini Rambukwella holds the opinion that farmers as well as policymakers will become beneficiaries of this study when making decisions as developed countries are currently practicing this scientific agrarian insurance scheme worldwide. Marketing Food Policy and Agri-Business Division conducted this study and Senior Research Officers Ms. Ruvini Vidanapathirana and Mr. Duminda Priyadarshana and Research Officer Ms. P. A. J. Champika were the co-researchers of this study.

## Status and Empowerment Needs of “සිතලු” Women Farmers’ Organizations

“සිතලු” Women Farmers’ Organizations (WFOs) initiated in 2016 to empower farmwomen in each village in Sri Lanka as well as this proactive measure upgrades finance and social status, health, nutrition, education, spiritual condition, equity and prosperity among rural farm women.

The main objective of this study is to guidance for policy formulation revelation of structural and functional diversity of “සිතලු” WFOs empowerment of farm women in Sri Lanka. The research team categorized “සිතලු” WFOs as rational, stable, ordinary, unstable and idle based on organizational, managerial and financial features of the organizations in order to guide required interventions. The research recommends to restructure the concept of “සිතලු” WFOs as a well empowerment programme, avoid inadequacies while operating the programme and review progress efficiency.

The coordinator of this research is Research Officer Ms. Rifana Buhary, principal researcher is Research Fellow Ms. Renuka Weerakkody and co-researchers are Research Officers Ms. Thushara Dharmawardhana, Ms. Dinusha Rathnayake and Mr. Amal Dissanayake of Agriculture Resource Management Division of Hector Kobbekaduwa Agrarian Research and Training Institute.



## A Crisis Like No Other

**A** lecture on “Chronic Kidney Disease of Unknown Cause” was held on February 7, 2019 at Subasinghe Conference Hall of Hector Kobbekaduwa Agrarian Research and Training Institute. The lecture was conducted by Dr. Kamal Gammanpila who holds an MPhil in Biophysics from Brunel University, UK and a Ph.D. in Physiology from the Faculty of Medicine, Imperial College, London.

According to the finding of his five-year research, Cadmium in the hill-country water is the prime reason for the people suffer from chronic kidney disease in North Central, North Eastern and North Western districts. Further, he held that people in Uva and Central provinces are free from this disease due to cultivating under the rain water.

This led to think twice about the cause of kidney disease to the staff members of the institute who participated in the lecture.

## Printing, Publishing and Distributing of Agrarian Newsletter

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## Tripitaka as a World Heritage

**‘T**ripitakabhivandana’ Week has been declared by the government to mark the occasion of initiating the process in order to declare the *Theravada Tripitaka*, the sacred script of Buddhists, as a World Heritage; the next phase after declaring *Theravada Tripitaka* as a National Heritage. The national ceremony to announce the proposal made by Sri Lanka to the UNESCO to declare the *Theravada Tripitaka* as a World Heritage held under the state patronage.

All the public institutions were announced to perform religious activities parallel to the National Ceremony and Hector Kobbekaduwa Agrarian Research and Training Institute also organized a *Dhamma Deshana* on March 22, 2019. The *Dhamma Deshana* held by Vevila Mahanama Thera added a spiritual tinge to the institute as well as the National Ceremony.

## AGRARIAN NEWSLETTER

HARTI Newsletter is a quarterly publication published by the Publication Unit of the Hector Kobbekaduwa Agrarian Research and Training Institute. It reports new findings and policy issues pertaining to research and action programmes of the Institute and other organizations concerned with agrarian development.

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