HARTI

ANNUAL REPORT
2012

Hector Kobbekaduwa Agrarian Research and Training Institute

No 114,Wijerama Mawatha,
Colombo 07.

Hector Kobbekaduw Agrarian
Research and Training Institute,
114, Wijerama Mawatha,
Colombo 07.

6 August 2013

The Hon. Minister of Agriculture,
Ministry of Agriculture
"Govijana Mandiraya",
80/5, Rajamalwatta Avenue,
Battaramulla.

Administrative and Accounts Report 2012

In terms of section 14 (2) of the Finance Act No. 38 of 1972, I submit herewith on behalf of the Board of Governors, the following documents for the year ended 31st December 2012.

(1) The Annual Report
(2) The Audited Statement of Income and Expenditure
(3) The Audited Balance Sheet
(4) The Observations made by the Auditor General on Accounts
(5) The Report of Replies on the Auditor General's Report

Chairman
Board of Governors

Contents

ESTABLISHMENT

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

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 economic use of land for agricultural purposes.
v. To carry out socio-economic research relating to agricultural and rural development.
vi. To provide or undertake or 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 hold 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 in order to serve their regional needs and provide a centre for the collection and dissemination of information on agrarian problems.
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 for 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 into agrarian questions.
ii. To liaise closely with planners and policy makers in the government and with business and research communities.
iii. To make policy formulation and implementation process more effective through knowledge generation and timely dissemination.
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 - 2012

Mr. Wijerathne Sakalasooriya	Chairman -	Secretary, Ministry of Agriculture and Chairman of the Board of Governors (from January)
Mr. Lalith Kantha Jayasekera	Director-	Director, HARTI
Mr. P.L. Nandasiri	Board Member	-Addl. Secretary (Admin), Ministry of Agriculture (until August)
Mr. A.L.A. Asoka Siriwardena		-Addl. Secretary (Admin), Ministry of Agriculture (from September)
Mrs. P.M. Shanthi Fernando	-do- -	Director, Department of Land Use Policy Planning
Mr. D.C.A. Gunawardena	-do- -	Director General, Dept. of Census & Statistics
Mr. M.C. Gamage	-do- -	Director, Ministry of Traditional Industries & Small Enterprises Development (from November)
Mr.G.D.W. Jayawardena	-do- -	Addl. Secretary, Ministry of Plantation Industries
Mr. N.H.M. Chithrananda	-do- -	Addl. Secretary (Administration & Finance), Ministry of Education
Mr. D.D. Ariyaratne	-do- -	Director (Planning), Ministry of Irrigation & Water Resources Management
Mr. Priyantha Mayadunne	-do- -	Addl. Secretary, Ministry of Trade (Until September)
Mr. H. Amaratunga	-do- -	Director, Provincial Offices Monitoring Dept., Central Bank of Sri Lanka (from October)
Dr. K. Samarasinghe	-do- -	Dean, Faculty of Agriculture, University of Peradeniya
Mr. K.N. Mankotte	-do- -	Director General of Agriculture (until April)
Mr. K.G. Sriyapala		Director General of Agriculture (from May)
Mr. R.P.R. Rajapaksha	-do- -	Land Commissioner General
Mr. Ravindra Hewavitharana	-do- -	Commissioner General of Agrarian Dev. (until April)
Mr. M.A.S. Weerasinghe	-do- -	Commissioner General of Agrarian Dev. (from May)
Eng. Dr. G.G.A. Godaliyadde	-do- -	Director General of Irrigation (until June)
Eng. Mrs. Badra Kamaladasa		Director General of Irrigation (from August)

Mr. P.A. Ananda	-do-	-	Commissioner General of Co-op Development (until January)
Mr. W.H. Karunaratne			Commissioner General of Co-op Dev. & Registrar of Co-op Society (from February)
Dr. Premalal Kuruppuarachchi	-do-	-	Asst. Representative (Prog), FAO (from April)
Mrs. A.I. Pathirana		-	Actg. Secretary, Board of Governors

MEETINGS OF THE BOARD OF GOVERNORS

	Date of the Meeting	No. of Members Attended
1.	18 April 2012	10
2.	23 May 2012	13
3.	27 June 2012	12
4.	16 August 2012	10
5.	27 September 2012	10
6.	13 December 2012	15

AUDIT & MANAGEMENT COMMITTEE

Mr. D.C.A. Gunawardena – Chairman	-	Director General, Dept. of Census and Statistics
Mr. P.L. Nandasiri – Member	-	Additional Secretary, Ministry of Agriculture
Mrs. P.M. Shanthi Fernando – Member	-	Director, Dept. of Land Use Policy Planning
Mr. A.I.A. Asoka Siriwardana – Member	-	Additional Secretary, Ministry of Agriculture
Mrs. N.C. Ekanayaka	-	Internal Auditor

MEETINGS OF THE AUDIT & MANAGEMENT COMMITTEE

Date of the Meeting	No. of Members Attended
5 April 2012	03
1 June 2012	03
29 November 2012	03

OVERVIEW

The major challenge facing agricultural sector is transformation into a self sustained viable business activity. This requires an increased farm income in relation to costs. Rather than technical problems, socio - economic problems are the major reasons for slow growth in agriculture. In fact a second agricultural revolution led by socio-economists is necessary to transform agriculture into agribusiness. In this background, socio- economic research plays a key role in agricultural development and such research has to generate knowledge required to make wise decisions on producing, processing, marketing and policy planning.

Since the establishment in 1972, HARTI has become widely recognized as key contributor to development issues of Sri Lanka. The institute proudly serves and collaborates with the government, development partners, academic institutions, civil society organizations, the media and private sector. This year's annual report is the third progress report of my office tenure.

In the year 2012 HARTI has implemented 38 research studies. They include 07 evaluation studies (4.1Mn) requested by the secretary, Ministry of Agriculture, 10 evaluation studies (3.5 Mn.) signed with Dry Zone Livelihood Support & Partnership Programme. (DZLiSPP) and treasury funded 18 research studies formulated according to the research issues identified in 2011. Another 02 research studies were completed as per national priority during the year. These were impact of donor aid on agricultural livelihood in Northern Province and rapid assessment survey on use of plastic crates in transportation of vegetable and fruits. Out of that the institute was able to complete 25 studies. The progress of the rest is over 60 percent. A total of five special studies were completed in 2012. Some of these reports addressed the Politicization of Farmer Organizations and Training need Assessment Study, Impact of Fertilizer Subsidy Implemented in 2005, Policy Note on Fruit and Vegetable Sector Development, Declining vegetable prices in Dambulla market. From five studies, three studies were submitted to the Ministry of Agriculture and one was submitted to the Honorable Speaker Parliament of Sri Lanka.

02 action researches were conducted replicating Agro-village development model developed in 2011. Buduruwagalla & Gonnoruwa villages in Moneragalla and Hambanthota districts were identified and implement in the first stage of this model.

Training also forms an integral part of the Institute's activities. The main emphasis is on the improvement of skills of the development workers in the agrarian sector. This also facilitates the exchange of experiences with public officials members of rural institutions and farmers. With these ends the Institute conducts seminars, workshops and training courses in its areas of interest. It also collaborates with or assists other organizations which conduct training programmes in relevant fields either by organizing such programmes jointly or by providing resource personnel and other inputs. The focus group of HARTI training programmes are farmers, middle level officials involved in Agriculture Development activities and higher level or managerial level officers including policy makers. In 2012 a total of 5031 personal including farmers and officers were trained by conducting 64 training programme in 20 districts.

In the area of international relation, as a partner of World Food programme (WFP) the institute assisted in conducting the third food security assessment survey which covered three provinces, North, Eastern and North Central. The Twenty-Seventh meeting of CIRDAP Technical Committee was held at HARTI in June 2012. Technical Committee members from all CIRDAP member countries were attended. Also study was undertaken for preparation of the Sri Lanka Rural Development Country Report-2012 for CIRDAP. The main objective of the study was to provide information for the regional action plan with the identification of country specific needs for youth.

During 2012 capacity development of staff has given more priority and invests Rs. 1.2 million compare with last three years. 108 and 29 staff and non staff members respectively had undergone local training and 08 staff members had opportunity in participating foreign training.

The earning of the Institute has increased significantly since 2010. In 2010, the earnings of the Institute were Rs. 15.5 million and it was Rs. 27.8 million in 2012. A major contribution out of the above amount received from conference and accommodation facilities.

Lalith Kantha Jayasekara
Director

AGRICULTURAL POLICY AND PROJECT EVALUATION DIVISION

Research Team

Mr. J.K.M.D. Chandrasiri	-	Head/APPE Division
Mr. R.L.N. Jayatissa	-	Research Associate
Ms. M.K.N. Damayanthi	-	Research Officer
Ms. M.D. Susila Lurdu	-	Research Officer
Ms. K.P.I. Priyadarshani	-	Research Officer
Ms. M.W.A.C.S. Wijetunga	-	Research Officer
Ms. B.A.D.S. Bamunuarachchi	-	Research Officer
Ms. A.M.S. Perera	-	Research Officer
Ms. Sandhya Senanayake	-	Statistical Officer
Mr. K.P.K.I.U. Fernando	-	Statistical Assistant

COMPLETED STUDIES

1. Impacts and Lessons of Microfinance Component of the Dry Zone Livelihood Support and Partnership Programme

Research Team: Mr. J.K.M.D. Chandrasiri Co – ordinator
Mr. R.L.N. Jayatissa Co-researcher

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

The Dry Zone Livelihood Support and Partnership Programme (DLiSPP) of the Ministry of Agriculture was implemented from 2005 to 2012 in selected areas of four districts of Anuradhapura, Kurunegala, Badulla and Moneragala with major objective of enhancing income and standard of living of the people in these areas. Provision of microfinance for generating income/livelihood activities is one of the six components of the project. Microfinance component facilitated the poor and low income families to invest in income/livelihood activities through provision of concessionary easy credit under specifically designed credit scheme called "bagya". HARTI was involved in assessing the impact of the component. The major objective was to enhance knowledge on strategies adopted under the component and specific objectives were to evaluate its contribution to sustainability of livelihood of beneficiaries and to impacts on other aspects of their life.

Findings:

i. At the initial years of the project (until 2008), there has been much delay in credit delivery of the project as it had no properly established system for implementing its programme.

ii. In the later years the successful strategies adopted by the project has been able to mitigate the constraints faced in delivery of credit. Those were appointment of Marketing and Microfinance Officers with given targets to facilitate giving credit, development greater cooperation with banks, appointment of field facilitators to organize the work at ground level and giving a 5% training fee to the banks from the value of all loans issued.

iii. The project credit scheme which is based on group guarantee system assured collateral free easy and low cost credit for the beneficiaries, e.g. 61% beneficiaries could obtain credit within one month from the date of the application was handed over and 63% beneficiaries could obtain their credit by spending less than Rs. 500/-.

iv. The credit programme has a satisfactory impact on promoting new income activities (26%) and expanding already existed income activities. As much as 84% of invested income activities are still functioning. Already existed income activities seem to be more sustainable than new ones.

v. The employments (including full, part-time and seasonal employments) generated for new income activities are 1to 3 while for already existed income activities it is 1 to1.

vi. The incomes (profit) of 15% beneficiaries invested on new income activities and incremental incomes (profit) of 15% beneficiaries invested on already existed income activities are above Rs. 14,000/- per month. This means they are beyond the poverty line through that income alone.

vii. The incomes derived from investments have affected the enhancement of economic conditions of family life as those incomes have been utilized for useful activities such as household consumption (64), education (52%) and construction or repair of the household (10%). The compulsory savings under the project has increased the savings habit of the beneficiaries from 68% before the project to 98% after the project.

viii. As expected from the project, women are much empowered by having access to credit and they had invested on livelihood activities individually or jointly with their husbands or other members of the households. They had more opportunities to participate in taking decisions regarding livelihood activities, and spending derived new incomes etc.

ix. The recovery rate of the credit component has been very high (over 90%) due to much involvement of the banks to recover loan money. Other wise banks had to bear the loss.

Recommendations:

i. Establish an organizational set up to operate the proposed revolving fund in future.

ii. Strengthen small groups by reforming and awareness trainings to improve member's joint liability which is lacking at present.

iii. Take actions to solve marketing and technical issues faced by some income activities.

iv. Pay more attention to similar future interventions to select appropriate people to give credit and follow a combined approach to promote income activities and to monitor the progress of initiated livelihood activities and to quickly solve their problems.

2. Governance of the State Lands in the Context of Decentralization

Research Team: Ms. M.K.N. Damayanthi Co – ordinator
Ms. R.M.M.H.K. Rambodagedara Co – researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Though all types of decentralization practices have been implemented state land administration and service delivery seems to be inefficient and chaotic. The major objective of the study was to present suggestions to improve the land service delivery system by examination of factors affecting the chaotic land administration and service delivery system. The specific objectives were; (i) To identify and analyze the factors contributing to the chaotic land administration and service delivery system (ii) To identify problems faced by service seekers on land service delivery system (iii) To assess socio – economic effects of land service delivery system on service seekers (iv) To identify and present better ways to establish an efficient and effective land administration and service delivery system.

Findings:

i. There is not accurate and updated data base on land.
ii. Of the utilized land by service seekers 30% was encroached. It was reported as 59% in Sooriyawewa Divisional Secretariat Division.
iii. Busy schedule of Divisional Secretary, weakness of co- ordination among institutions, lack of officers with competence, inadequate knowledge about subjects of officers as well as service seekers and management weaknesses were basically contributory for delay the service delivery.
iv. Of the officers, 95% mentioned that they obtained training but 92% of the officers mentioned that they need further training.
v. 83% of the service seekers faced socio – economic or cultural difficulties / disadvantages or mental disarray due to delay of service or complexities of the process.

Recommendations:

i. Undertake a rapid survey on state lands of grass root level, make proper data base and update it regularly.
ii. Establish a district committee for matters on state lands with the chairpersonship of district secretary and co – chair with Provincial Deputy Chief Secretary. It should represent all relevant institutions and agencies and give adequate power to take decision on land matters.

iii. Provide knowledge to service seeker on service delivery process. Necessary documents need to be forward for the service by using electronic media, leaflet and training of grass- root level.

3. Factors Affecting Less Youth Participation in Smallholder Agriculture in Sri Lanka

Research Team:	Ms. M.K.N.Damayanthi	Co- ordinater
	Ms.R.M.M.H.K. Rambodagedara	Co – researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

During the last decade, unemployment has declined in Sri Lanka but the existing data shows that there is high rate of youth unemployment. In contrast, youth contribution to the agriculture sector is low. Overall objective of the study is to examine the factors contributing for less youth participation in smallholder agriculture sector in Sri Lanka. Specific objectives are; (i) to examine youth perception on farming as an occupation (ii) to identify and analyze pull and push factors of youth participation in smallholder farming sector (iii) to gather ideas of youth and other stakeholders to increase youth participation in smallholder agriculture and make suggestions (iv) to inform and educate policy makers and planners. The study was conducted in Nuwara- Eliya, Ampara, Monaragala, Matale, Anuradhapura, Polonnarua, Hambantota, Kurunegala and Batticaloa districts. Total sample size for the questionnaire survey was 533.

Findings:

i. Around 70% of respondents were engaged in agriculture related activities in various ways. Of them 39.5% and 26.4% were engaged in agriculture full time and part time respectively while 33.6% were engaged as family labourers. Of the total respondents 7.3% were engaged in agri business or industries.

ii. Of the total sample, 58.2% mentioned that they would like to engage in full time farming in future also, while 39.6% and 2.3% of respondents do not like to engage in full time farming and do not have any clear idea.

iii. Youth participation in smallholder agriculture is associated with the factors of age, gender, marital status, level of education availability and accessibility of lands, extension services and market facilities.

iv. Non availability of suitable social security scheme and lack or non social recognition of agriculture related occupations act as push factors.

Recommendations:

i. Strengthen the available young farmer societies and establish new societies in an effective way by providing necessary assistance.
ii. Provide at least 20% quota for members of farm families with qualifications for agriculture related government employment especially in semi government organizations and extension services.
iii. Change inferior attitudes towards farming through interventions specially arranged programmes of the relevant ministries and institutions such as the ministry of agriculture, ministry of education, ministry of media and school.
iv. Build a private public partnership to promote farming and agro based industries for youth.

4. Is Paddy Farming a Profitable Enterprise in the Dry Zone Sri Lanka?

Research Team: Ms. M.W.A.C.S. Wijetunga Co- ordinater

Source of Funding: Consolidated Fund

Scope and Objectives:

Irrespective of the fact that all the successive governments followed some incentive measures to protect paddy farmers, their living standards have been continually deteriorating over the years. This situation has further exacerbated in the previous maha season (2011/12 maha) with the devaluation of rupee, increase of fuel prices as well as other input prices. Hence, this study is focused on analyzing input use, their costs and returns in paddy sector during the period 2003-2012 with a view to understand the profitability of present paddy farming in dry zone. 300 paddy farmers in major and minor irrigated areas were selected randomly from Ampara, Anuradhapura, Hambantota and Polonnaruwa districts for this survey.

Findings:

i. Labour absorption has decreased over the past decade in all districts where labour has been substituted by machineries specially in Ampara and Hambatota districts particularly at the harvesting stage and wage rates have been increased by 4 folds .

ii. Total fertilizer distribution of ASCs are even higher than the total extent of paddy lands in respective districts that may indicate some leakages in the sector.

iii. The minimum total production costs has been recorded from Ampara district while it has increased from Rs. 17,000 per acre in 2003 to Rs. 34,000 per acre in 2012 maha season mainly due to less cost at the land preparation stage followed by low water management as well as heavy mechanization specially at the harvesting stage.

iv. The highest production cost has been recorded from Hambantota district (more than Rs. 43,600 per acre) and the rate of increase of production cost is highest in Anuradhapura district over the past decade.

v. Cash production cost has declined over the past decade with mechanization which currently contributes to nearly 60% of the total operating costs.

vi. Among the inputs, labour is the predominant cost component and represents 40-60% of the total production cost.

vii. In the previous maha season only a 30 % of farmers were able to sell their products to PMB outlets but less than 10% of the total production was purchased by PMB stores.

viii. Farmer's living standards were getting worse over the years and in 2011/12 Maha season farmers had to spend one rupee to just to receive 30 cents.

ix. Only the Polonnaruwa district can be considered productive and efficient in producing paddy to cater to farmers' needs.

Recommendations:

i. Prevent further fragmentation of paddy lands.

ii. Disseminate new technology among the farmers.

iii. Revise the fertilizer subsidy to generate high efficiency.

iv. Assure paddy famers to receive at least prevailing procument prices.

v. Enhance the role of private sector in order to improve the efficiency of selling paddy and purchasing inputs by paddy farmers.

5. An Analysis of Contract Farming in Vegetable Seed Production

Research Team: Ms. B.A.D. S. Bamunuarachchi Co-ordinater

Source of Funding: Consolidated Fund

Scope and Objectives:

This research addressed the issues of contract farming in vegetable seed production. The specific objectives were to find out contract seed production procedure, to estimate the costs and returns in vegetable seed production, to analyze the problems encountered by contract seed growers and contract firms and to suggest appropriate policy measures. Target group was contract vegetable seed producing farmers of DOA and private sector and other stakeholders in local vegetable seed industry.

Findings:

i. Contract farmers are mostly small scale farmers (0.25-0.5 Acres) and face problems of high cost of labour, unavailability of trained labour, water scarcity, wild elephant attack, low investment capability, inadequate and timely unavailability of capital for purchase of inputs and irregular payment.
ii. Vegetable seed production is profitable eventhough the profit margin is not so high and the majority of farmers are satisfied with economics of seed production.
iii. Shifting of contract farmers from DOA to private companies could be observed as there was a significant difference of time taken for settlement of payments between the two.
iv. Small scale companies face many problems and unavailability of cold room facilities remained as one of the main problems as seed is high prone to germination loss, pest attack and increase moisture content.

Recommendations:

i. As the main stakeholder in seed industry the DOA has to be more efficient in supporting government policy of seed production in aspects such as popularization of contract seed production programme, settlement of payment in time and field supervision.
ii. Large scale land owning entrepreneurs should be motivated for vegetable seed production.
iii. Purchasing price of the DOA for certain crops should be increased.
iv. Potential areas (e,g,Nikaweratiya) for vegetable seed production should be identified and more attention should be paid to increase the production in such places by overcoming problems faced by farmers.
v. Seed certification process should be accelerated and thereby time taken for settlement of payment can be reduced to some extent. This will attract farmers for the government contract programme.
vi. Lot of varieties with good charactersticks (considered as commercial seed) can be found among vegetables which are not considered as recommended varieties by the

DOA and steps should be taken to include than is the government contract programme.

ON-GOING STUDIES

1. Factors Affected for Adoption of Recently Introduced OFC and Vegetable Seed Varieties of Department of Agriculture

Research Team: Mr. J.K.M.D. Chandrasiri Co-ordinator
Ms. Dilupa Bamunuarachchi Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The Department of Agriculture (DOA) of Sri Lanka has played a major role to develop and disseminate high yielding varieties of food crops to increase the productivity and production under those crops. According to the department, the farmers' adoption of some of the recently developed OFC (other field crops) and vegetable seed varieties seem to be poor. Some of the introduced improved OFC varieties that indicate poor adoption belongs to chilli, maize and cowpea while vegetable varieties that indicate poor adoption belongs to capsicum, tomato, brinjal and long bean (mae). At this stage the DOA is interested in identifying the factors behind the poor adoption of the said crop varieties. Understanding the factors affecting farmer's adoption behavior of the said high yielding OFC and vegetable seed varieties is of paramount importance to DOA as it will contribute in better planning and targeting of OFC and vegetable seed varieties of the department.

The major objective of the study is to identify the present status and factors affected for adoption of selected new varieties of some OFC and vegetables introduced by Department of Agriculture. The specific objectives were; (i) To identify the level of acceptance and adoption of the said seed varieties. (ii) To identify socio-economic, institutional and other factors that influenced adoption of new varieties including their relevance and adequacy. (iii) To make the scientists, involved in generation of the said crop varieties, knowledgeable about farmers feed back in relation to adoption of the relevant crop varieties. Study is based on a field survey of farmers growing selected crops in their main districts.

Current Progress:

The field data collection and computerization of data is completed. The tabulation of data and the writing of the study report are well in progress.

Preliminary Findings:

i. In areas where farming of vegetables and OFC are more commercialized, farmers are more adapted to utilize imported hybrid varieties due to their high yield levels, better market demands and attractive incomes.

ii. Encouragement of farmers by companies that import seed by continuous supply of seeds and necessary extension advices at the farm level have affected the increase of the adoption level of hybrid varieties.

iii. Some varieties of the said crops of the DOA have become very popular in some popularly growing areas due to better yield and income under available ecological conditions (e.g. AK-2 chillie in kukulkatuwa in Anuradaapura and Thilina tomato in Labuhenwala in Nuwaraeliya.)

iv. Although there is a good demand for some seed varieties of the department e.g. KA-2, Thilina, there were no proper methods and means to purchase and to obtain frequent advice when required. This has caused for less adoption in many locations.

v. Though yield and income is high, production cost of hybrid varieties seems to be very high compared with local varieties due to high seed cost and more susceptibility to diseases. Continues growing of hybrid varieties under reducing yields and profits, farmers have understood the importance of local seeds which give less profit under less cost.

2. Impact Assessment of Api Wawamu-Rata Nagamu Programme

Research Team:	Mr. R.L.N. Jayatissa	Co-ordinator
	Ms. K.P.I. Priyadarshani	Co-researcher
	Ms. M.D. Susila Lurdu	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

As response to a request of the ministry of Agriculture the HARTI initiated this research study to assess the impact of the project. The main objective of the study is to review the performance of the Api Wawamu-Rata Nagamu Programme components in order to assess their impacts on people and the country with a view to learn lessons and giving recommendations for future planning purposes. The specific objectives are; (i)To review the implementation of programme activities with a view to assess their performance, relevance, effectiveness and sustainability;(ii)To assess the effect of the programme outputs in generating desired outcomes and impacts; (iii) To investigate the level of achieving project objectives and to highlight the lessons learned from the project while identifying key problems which hindered achieving project objectives; (iv) To investigate the perception of officers (at different level) and farmers about the programme and its success and their ideas about key areas in which attention should be paid under the present context

The Current Progress:

The collection of secondary data and the field survey is completed. Writing of three chapters of the study report is also completed.

Preliminary Findings:

i. Direct ideas of low and medium level officers such as Deputy Directors of Agriculture, Agriculture Instructors, Agrarian Development Officers had not been obtained sufficiently at the planning stage.
ii. There has not been continues monitoring regarding the achievement of targets given to different stake holders under this programme.
iii. Financial requirements of the individual institutions for the input supply have not been provided in time. This has caused for the delay in performing various activities.
iv. There was no integrated approach with different stake holders to be seen in the implementation stage of the activities which need different stake holder's participation for their success.

3. Youth in Development

Research Team:	Ms. M.K.N. Damayanthi	Co-ordinator
	Ms. G.G.de L.W. Samarasinha	Co-researcher
	Mr. M.A.C.S. Bandara	Co-researcher
	Ms. H.M.S.J.M. Hitihamu	Co-researcher
	Ms. A.M.S. Perera	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

This study was undertaken for preparation of the Sri Lanka Rural Development Country Report-2012 of the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP) in Bangladesh. The main objective of the study was to provide information for the regional action plan with the identification of country specific needs for youth. The study endeavoured (i) To identify and analyze status of youth and the strategies regarding youth; (ii) To identify strength, weaknesses, opportunities of youth and their threat; (iii) To identify way forward of youth in development (iv) To examine and analyze present regional collaboration for youth development and strategies to be taken for regional development. The study is basically depended on secondary data.

Preliminary Findings:

i. One of the major and invaluable resource of the country in the development process is youth population (belongs to age group 15-29 years) which is around 28% of the total population.
ii. Due to mismatch of education and labour market there is high rate of unemployment among youth.
iii. Though government implement a number of programmes for skill development of youth, it seems that these programmes could not achieve the targets as expected due to lack of carreer guidance mechanism and updated courses.

Harvesting stage of okra at correct maturity for seed production

Drying of okra seeds

Study: An Analysis of Contract Farming in Vegetable Seed Production

Harvesting of bushitavo at Kalpitiya

Study: **Factors Affected for Adoption of Recently Introduced OFC and Vegetable Seed Varieties of Department of Agriculture**

Poultry farming initiated with micro - credit programme supported by DZLiSPP

AGRICULTURAL RESOURCES MANAGEMENT DIVISION

Research Team

Ms. P.R. Weerakkody	-	Head/ARM Division
Ms. Sharmini K. Kumara	-	Research Associate
Mr. S.Epasinghe	-	Research Officer
Ms. H.M.S.J.M. Hitihamu	-	Research Officer
Ms. R.D. Wijesingha	-	Research Officer
Mr. I.P.P.M. Wijesingha	-	Research Officer
Ms. H.A.A.U. Hettiarachchi	-	Statistical Assistant
Ms. S.D.P. Sudarshani	-	Statistical Assistant

COMPLETED STUDIES

1. Evaluation of Rice Processing Village Programme

Research Team:

Mr. S. Epasinghe	Co-ordinator
Ms. Sharmini K.Kumara	Co-researcher
Ms. P.R. Weerakkody	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The study was aimed to evaluate the rice processing village programme implemented by the Post Harvest Institute of Technology (IPHT). Evaluation of the effectiveness of training programmes, study of institutional relationships associated with the programme, estimation of income and expenditure incurred in rice processing and investigation of the factors determining the sustainability of the programme were among the specific objectives of this evaluation.

Findings:

i. The training programmes were conducted by the IPHT, the institute which introduced the quality rice processing technology. It has contributed to the successful carrying out of the rice processing industry.

ii. There is a lack of a proper market established for the marketing of quality rice produced at village level both due to presence of many rice processors in a particular village and their inability to compete with the large scale millers. Accordingly the emergence of commercial level rice processors has been restricted to 15% trainees of the sample.

iii. An important trend is that the Mahweli authority, Samurdhi authority and NGOs, have contributed to introduce the rice processing technology at the village level in addition to the IPHT. However no proper procedure has been adopted for the selection of beneficiaries. Further only 19% of the beneficiaries have maintained links with the institutes that introduced technology to them since many of the trainees had been involved in rice processing for consumption purposes.

iv. Among the positive effects of this programme are; dissemination of quality rice producing technology and thereby production of quality rice at village level, and consumption of quality rice by village people.

v. Lack of basic implements for the processing of quality rice, lack of mills with advanced technology for quality rice processing, lack of facilities for packaging and storage of rice, low quality of rice produced with mechanically harvested rice are among the constraints for the processing of quality rice. Less access to credit for storage of paddy during the harvesting season is another problem faced by rice processors.

vi. The cost of processing is Rs. 40.20 /kg of 'nadu' rice and Rs. 13.50/kg of samba rice.

Recommendations:

i. The progress of rice processing village programme can be described under two aspects; processing of quality rice at subsistence level for consumption and a quality rice processing industry. Therefore this technology should be popularized island wide for the promotion of quality rice. Training on rice processing technology should be carried out on the basis of the demand made by village level societies (farmer organizations, women's' organizations, NGO based societies) followed by the awareness of extension officers' training need assessment.

ii. It is required to follow an individual approach to promote this programme as a quality rice processing industry and for which attention should be paid to the following.
   - Selection of potential entrepreneurs with entrepreneurial skills who are interested and committed to continue rice processing as an industry and obtain required capital.
   - Monitoring of the progress of commercial scale entrepreneurs and provision of assistance to them to solve problems eg: credit and marketing problems

iii. Pay due attention to popularize rice processing technology during state sponsored publicity programmes in order to promote the continuous growth of quality rice processing industry.

2. The Success of Modified FFS Approach as an Extension Tool in Promoting Rain-fed Upland Farming DZ-LiSPPS Experience and Lessons Learned

Research Team:	Ms. P.R. Weerakkody	Co-ordinator
	Ms. Sharmini K.Kumara	Co-researcher
	Mr. S. Epasinghe	Co-researcher

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

The main objective of this study was to assess the success of Farmer Field School (FFS) approach introduced by the Dry zone Livelihood Support and Partnership Programe (DZLiSP). By studying the institutional, technical, financial and sustainability aspects of farmer Field Schools (FFSs) which are popular as ‘crop societies’ this study was specifically aimed to draw lessons from the experience of DZLiSPP for policy formulation in agricultural extension in Sri Lanka.

Findings:

i. The programme had achieved 87 percent progress through implementing 2550 FFSs as of May 2012 and the success rate of FFSs was 24 percent. Having an average membership of 20 members per FFS, these societies were characterized by both increased participation and leadership by women in such FFSs.

ii. Success of crop societies was based on several factors. Included were accountability of membership, group cohesiveness, and intervention by facilitators, guidance by leadership, success of crops cultivated and ability to sell the produce. All these factors ensured functionality of a revolving fund and thereby the sustenance of the crop society. Failure of one or many of these factors led to non-functioning of the crop society.

iii. One-time grant provided to the crop societies to promote upland cultivation amounted to an average of Rs. 72,395/=. Accordingly an individual farmer had received an average amount of Rs. 3391/= as seed money. Whilst this money had to be continued as a revolving fund (RF) 30 percent crop societies had revolved this money 3 to 4 times.

iv. The RF had helped the farmers to purchase seeds or other inputs required for on-time commencement of the season and for collective purchase of inputs at a reduced cost. However various weaknesses were found in relation to the allocation of the RF to the crop societies.

v. Growth of RF and thereby individual loan amount were among the financial benefits of the implementation of crop societies. According to the analysis, the average growth of RF and individual loan value amounted to Rs. 18,607/= and Rs.1,718/=.

vi. Area expansion, improved farmer knowledge, technology adoption and change in farming systems through the introduction of new crops to project areas and conducting training programmes were among the technical outcomes of the DZLiSPP. Even though the beneficiaries have participated in the training programmes the DZLiSPP has failed to ensure a bottom up change through utilizing farmers’ experience as the subject of training as envisaged through the FFS approach.

vii. Formation of federations and handing over of overall responsibility to agricultural instructors (AIs) was the strategy chosen for ensuring the sustainability of the crop societies. This will provide opportunities for financial sustainability of these societies. However, transfer of technologies to a large number of societies is impossible for the AIs when one considers the large number of duties and coverage of farm families assigned to them.

Recommendations:

i. Theoretically group extension methods are effective than individual methods in terms of farmer coverage. Therefore it is proposed to encourage farmers through employing a group approach with revolving funds as in the case of DZLiSPP in agricultural extension activities for upland cultivation.
ii. Well functioning farmer societies are essential for the continuation of technical knowledge flow to the farming community whereas financial sustainability of these societies is a must for their existence. Therefore ensuring the financial sustainability of these societies is necessary through introducing proper financing mechanisms such as credit schemes.
iii. The overall responsibility of these societies should be handed over to the AIs to ensure their financial and technical sustainability. .
iv. Human resource requirements should be fulfilled, particularly by appointing AIs to maintain frequent contacts with the farming community to ensure continuity of technical knowledge flow to the farming community.
v. The crop societies should be considered as village level contact points in diverting all state sponsored inputs and activities in order to popularize this group approach among the farming community.

3**. Donor Assistance and Agricultural Based Livelihoods in the Northern Province**

Research Team:	Ms. Sharmini. K. Kumara	Coordinator
	Ms. P.R.Weerakoddy	Co-researcher
	Mr. S. Epasinghe	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The 30 year conflict in the Northern and Eastern Province came to an end in May 2009. Commencing September 2009 the resettlement of internally displaced persons (IDP's) was carried out by the government with the assistance of development partners. The resettles were provided assistance in kind and cash for their livelihoods. This study was aimed to assess the farmer's views on donor assistance and their contribution towards livelihood of the people.

Findings:

i. Support throughout 2009, 2010 and 2011 by various agencies has helped to strengthen the farm-based livelihoods and food security in the Northern Province.
ii. The issue of free seeds of high yielding varieties resulted in enhanced production and farmers have been satisfied with the quality of seeds issued to them.
iii. The training of farmers on new technology as foreseen by most of the aid agencies was lacking due to shortage of adequate manpower, limited mobility by farmers and officials due to transportation problems.
iv. While households are recovering economically, access to credit remains a major constraint due to reasons of lack of collateral, mistrust with bureaucratic red tape, and problems of accessibility to banks and land ownership disputes.
v. The study shows that that there is a link between agricultural assistance and the increased income of families.
vi. Though tremendous efforts have been taken and finances' have been spent to help in livelihood development there is still a large segment of the community who require more assistance.

Recommendations:

i. A certain percentage of resettled population have succeeded in resuming their basic livelihoods. However steps should be token develop more sustainable medium and longer-term livelihood projects with an emphasis on value addition and marketing.
ii. Start up assistance should be provided for the recently resettled household population particularly in Mullativu district.
iii. Livelihood assistance should be based on socio-economic conditions of the community.
iv. Land clearance and removal of mines and UXO needs to be expedited if livelihoods in certain areas are to commence.
v. Rehabilitation of agricultural infrastructure such as ASC Centres, Paddy mills, Paddy stores is most essential. The replacement of lost agricultural assets such as tractors water pumps , sprayers is an absolute necessity.
vi. Access to capital from the banks to a wider range of the population through a process of banking literacy programs should be ensured.
vii. The damaged lift irrigation systems should be renovated and rehabilitated to increase OFC cultivation as these crops were mainly cultivated in the dry season (Visvamadhu, Irananamadhu and Muthuankathu lift irrigation schemes)
viii. Steps should be taken to assess the needs of vulnerable groups such as women headed households and elderly and measures should be taken to provide appropriate income generation activities.

ix. Continued support should be given to home gardening activities as a means of increasing food availability for families.
x. Provision of an access to new agricultural technologies and training to the farming community is absolutely necessary.

4. Production and Marketing of Manioc in Sri Lanka

Research Team: Ms. H.M.S.J.M. Hitihamu — Co-ordinator
Mr. T.A.C.H. Perera — Consultant

Source of Funding: Department of Agriculture

Scope and Objectives:

This study was aimed to fill the gap in knowledge about production and marketing of manioc in Sri Lanka with special reference to the Gampaha and Kandy districts. Specifically it was aimed to find out problems and constraints in manioc production and socio economic conditions of the manioc farmers and to map out effective policy directions in planning and development of manioc production and marketing in the country.

Findings

i. Demographic parameters : 87% male farmers and 13% female farmers,: Majority (55%) above 50 age group : 42% are in between 30-50 age limits : majority of the farmers were educated (57%) up to GCE O/L
ii. Forty percent of the sample, cultivated manioc due to better income and 28% cultivated due to the less demand for water.
iii. The cost of production including impute costs was Rs 69,732 and Rs 53,968 respectively in Gampaha and Kandy districts. Land preparation was 35% of the total cost of production. Weeding was 16% in Kandy district and 22% in Gampaha district. The share of fertilizer cost (36%) was the biggest cost component. The producer price of manioc in the Kandy district is higher than in the Gampaha district and the total production of manioc in the Gampaha district is approximately twice that of the Kandy district. (Gampaha- 9035kg, Kandy 5025 kg)
iv. The gross income is also higher in Gampaha than Kandy because the total manioc production per acre in Gampaha is higher in the district. (Gampaha- Rs. 266,532.50, Kandy Rs. 174,769.50)
v. The unit costs including impute labour cost were Rs 7.70 and Rs 10.70 in Kandy and Gampaha districts respectively.
vi. According to the regression analysis the manioc land area, no of plants per acre, total annual income and amount of fertilizer are the factors having significant positive relationship with the total manic production.

Recommendations:

i. Testing and popularization of manioc varieties through outreach programmes and on farm trills are necessary for enhancing manioc production.
ii. Organized marketing programmes and extension programmes will further develop the manioc sector in Sri Lanka.
iii. The restrictions regarding manioc cultivation in paddy lands in Kandy district need to change.

5. Multiple Effects and Impact of Small Farmer(FFS BASED) Seed Potato Production in the Badulla District Dry – Zone Livelihood Support and Partnership (DZLiSP) Programme

Research Team:	Dr. W.D. Wickramasinghe	Co-ordinator
	Mr. Chinthaka Jayasooriya	Co-researcher

Source of Funding: DZLiSPP /IFAD

Scope and Objectives:

In 2008 IFAD DZLiSP- Badulla implemented a program in collaboration with *Sita Eliya* research station of the DOA, to produce quality potato seeds by small farmers using tissue cultured seeds (G_0/Prebasic seeds/mini tubers) with the help of technology transfer model called "Farmer Field School (FFS)". This study attempted to assess the success, importance and overall impact of the program and to understand the shortcomings and sustainable aspects and to examine how the program could be positively used in the seed industry development activities in Sri Lanka.

Findings:

i. It was revealed from the study that FFS has provided an opportunity for farmers to learn together and test and adapt this new technology through a collective decision making process.
ii. In adoption of this technology, FFS approach has made a considerable impact compared to other efforts made from 1997 onwards to diffuse this technology to farmers. Farmers have experienced that technology can produce table potato at a cost of production of Rs. 18.00 – 23.00 per kg. at 2012, prices and that costs can be reduced considerably.
iii. Pre basic seeds (G_0) production by farmers in hydroponic system in protected chambers (poly tunnel–units) is the most innovative project intervention that has made tangible benefits of this program and is a profitable small-medium scale

enterprise (Rs.0.5 to 2 mn investment) that has a potential to scale up by the including additional tunnels.

iv. Tuber production in hydroponic system in protected chambers is on average 1,020 mini tubers per m^2.

v. By year 2012, 1.2 mn G_0 tuber productions per year have been reached which is about 66% of the target achievement

vi. On average farmers received 3660 G_1 tubers from 500 G_0 seeds in the first upland cultivation. When cultivating in uplands, in the next season (*Kandu Kannaya*) they were able to get only 495 kg on average which is almost half of the target.

vii. The average cost of producing 50 kg of G_2 potato seeds starting with cultivating G_0 mini tubers in upland for two consecutive seasons is estimated at Rs. 6076.00

viii. Productivity of lowland potato cultivation with multiplied tissue cultured seeds (G_1 or G_2) is 1: 11 or 9280 kg per Ac and, it is double the yield that obtained from conventional system where it is about 1: 7 or 4600 Kg per Ac.

ix. Farmers have evidenced that this technology can produce table potato at a cost of Rs.18.00-23.00 per kg, where it reduce the cost of production by more than double at 2012 prices.

Recommendation:

i. Integrating the IFAD model to the formal potato seed production system is a viable option in increasing the seed potato supply to the country. In this direction, federation of all mini tuber/G0 producing groups; public, community, private with the direct supervision of DOS (*Seethaeliy* research station, seed certification division, seed production division and PGRC) as a formal seed supply system is vital.

ii. Certification of G0 seeds nevertheless requires careful scrutiny adhering to the Seed Act.

iii. Continuous supervision by the research stations and the seed certification services of the DOA is a prerequisite.

iv. Establishment of a coordination body for FFS to access G_0 seeds is important in disseminating technology to the farmer.

v. Increase the efficiency of minituber production by tunnel farmers by providing training overseas.

vi. A stable policy on commercial potato cultivation and institutional support are essential to make this endeavour a success.

ON-GOING STUDIES

1. Viability of Controlled Environmental Agriculture for Vegetable Farmers in Sri Lanka

Research Team:	Ms. Sharmini. K. Kumara	Coordinator
	Ms. P.R.Weerakoddy	Co-researcher
	Mr. S. Epasinghe	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Vegetable farmers face both social and economic problems which have curtailed the vast potential of the sector. Erratic weather conditions, attacks from pests and diseases, lack of guaranteed markets are some of the issues which have perpetuated the unprofitability of this sector.

Controlled environment agricultural (CEA) systems are used globally as a means to extend the growing seasons and increase farmer incomes while encouraging conservation and preservation of the environment. Since 1990's cultivation of vegetables under CEA has been promoted by the government with the latest initiative in 2011 by the Ministry of Agriculture to provide poly tunnels to 400 farmers in the four districts of Matale, Kandy, Nuwara Eliya and Badulla (Daily News 2011). However field level sources reveal that farmers are reluctant to use CEA after a year or two of production.

This study is being carried out to investigate the viability of CEA as a sustainable means for vegetable production in Sri Lanka.

Specific Research Objectives:

i. To evaluate the degree and nature of adoption of CEA techniques by vegetable farmers.
ii. To explore the viability of CEA technology at farm level for vegetable farmers.
iii. To Identify major issues and constraints faced by CEA farmers
iv. To Suggest appropriate policy measures to improve the use of CEA among farmers

2**. Assessment of Indigenous Yams as a Subsidiary Food Crop in Sri Lanka**

Research Team:	Mr. S. Epasinghe	Co-ordinator
	Ms. Sharmini K. Kumara	Co-researcher
	Ms. P.R. Weerakkody	Co-researcher

Source of Funding **:** Consolidated Fund

Scope & Objectives:

The reasons for the decline of the production of Indigenous Yams and the dynamics of the expansion of indigenous yams as a subsidiary food crop

Specific Objectives:

i. To identify the present production of different varieties of Indigenous Yams and their consumption patterns
ii. To calculate of the cost of production of Indigenous yams as a commercial crop
iii. To examine the constraints in the production of marketing of Indigenous Yams
iv. To review the progress of the expansion of the production of Indigenous Yams under the programs "Divi Naguma"/"Api Wawamu Rata Nagamu".
v. To make recommendation for the development and increase of production of Indigenous Yams

3. **Effects of Rural Infrastructure Development on Diversification : The Case of Rural Development in the Southern Province**

Research Team:	Ms. P.R. Weerakkody	Co-ordinator,
	Ms. Sharmini K. Kumara	Co-researcher
	Mr. S. Epasinghe	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

This study is aimed to identify, describe and measure the effects of rural infrastructure on diversification of livelihoods and changes in the income of rural households in the Southern province.

Objectives:

i. To identify, describe and measure the effect of rural infrastructure development on diversification of livelihoods in rural households.

ii. To measure the effect of rural infrastructure development on changes in agricultural income in rural households.
iii. To make recommendations on promoting diversification of livelihoods and to examine had income improvement can be best achieved by pursuing rural infrastructure development.

4. **Workshop on 'Strengthening of OFC Seed System in Sri Lanka'**

Research Team:	Ms. P.R. Weerakkody	Co-ordinator
	Ms. Sharmini K. Kumara	Co-researcher
	Mr. S. Epasinghe	Co-researcher

Source of Funding **:** Consolidated Fund

Scope and Objectives:

'Mahinda Chinthna' policy document has set targets to increase the production of 11 OFCs in order to minimize the imports by the year 2015. Therefore purpose of this workshop will be to provide a conceptual framework that can be used by policy makers and seed program managers to understand key factors affecting seed system development; and to identify and propose organizational and institutional strategies for strengthening of OFC Seed sector in the country.

Objectives:

i. To examine the progress and ascertain challenges and weaknesses that have hampered the growth of OFC seed sector development and increased contribution towards national seed/planting material requirement.
ii. To identify appropriate strategies and standards for further strengthening of OFC seed system.
iii. To recognize socio-economic research issues that require investigation towards strengthening of OFC seed system.
iv. To make policy recommendations that ensure increased contribution to fulfill the national seed/planting materials both in quantity and quality terms.

Study: Donor Assistance and Agricultural Based Livelihoods in Northern Province

Agro Well for agricultural purposes built by NGO in Vavuniya North, Vavuniya District

Home garden cultivation Northern Vavuniya DSD, Vauvniya District

Large scale cultivation of Vegetables in Madhu DSD in Mannar District

Study: The Success of Modified FFS Approach as an Extension Tool in Promoting Rain-fed Upland Farming DZ-LiSPPS Experience and Lessons Learned

Field Facilitator inspecting onion cultivation in Anuradhapura District

A focus group discussion with members of female farmer field school at Soranathota

Leader of the “Ran Bingu” farmer field school showing his bee keeping unit at Bandarawela

Study: Viability of Controlled Environmental Agriculture for Vegetable Farmers in Sri Lanka

Expolanka Pvt Ltd- Protected agriculture Project in Kandy District

Farmer constructed and maintained polytunnel in Uva Paranagama

Rain shelter structure used in Dambulla district

Study: Evaluation of Rice Processing Village Programme

Barrel used for steaming of rice

Water tank used to wash rice and stove

Processed rice

ENVIRONMENT AND WATER RESOURCES MANAGEMENT DIVISION

Research Team

Mr. M.M.M. Aheeyar	-	Head/EWRM Division
Mr. M.A.C.S. Bandara	-	Research Officer
Ms. G.G.de L.W. Samarasinha	-	Research Officer
Mr. W.H.A. Shantha	-	Research Officer (Study Leave)
Ms. M.T. Padmajani	-	Research Officer (Study Leave)
Mr. H.J. Chinthaka Jayasooriya	-	Research Officer
Mr. A. Ratnasiri	-	Statistical Assistant

COMPLETED STUDIES

1. Crop Production Performance in the Anicut schemes in the Walawe basin

Research Team:	Mr. M.M.M. Aheeyar	Co-ordinator
	Ms. M.T. Padmajanee	Co-researcher

Source of Funding: Consolidated fund

Scope and Objectives:

The major objective of the study was to assess the factors affecting the crop production performance in anicut schemes with special emphasis on changing agrarian and climate conditions.

Findings:

i. Current level of paddy yield under anicut systems is much lower than potential yield levels under irrigated conditions. There is much room to shift anicut based agricultural system towards more production and profit oriented farming.
ii. Existing low levels of yield are mostly due to institutional gaps which could be addressed without increasing cost of production to farmers.
iii. Building stronger and supportive institutional structure at the village level is one of the prerequisites to make beneficiaries to be active partners of any implementation.
iv. Scarcity of water in anicut systems has a tendency to aggravate further with changing climatic parameters and increasing water withdrawals from anicut systems for other water-use sectors. Farmers are not aware of the climate change impacts and not prepared for adaptation.

Recommendations:

i. Establishing linkages with divisional and district level officials is essential to receive extension supports, new technologies and other support services to anicut farmers.
ii. Water losses due to channel damages need to be correction through participatory approaches acknowledging local knowledge and wisdom which has high potential of providing good returns with little investment.
iii. As FOs in the anicut systems are mostly beyond the hydrological boundaries, it is important to establish anicut level water management committees and establish proper linkages with village level FOs and empower them with needed knowledge and skills.
iv. A package for water management should be introduced to each anicut scheme by provision of training on water management, appointing separate *jalapalaka* for water

management and paying an honorarium for his services, and by establishing a maintenance fund.

v. The causes of inefficiency in paddy farming under anicut schemes identified by the study such as cultivation of long age varieties and inadequate experiences need to be worked out by providing short age varieties and imparting necessary knowledge.

vi. Farmers should be educated about the features of climate change, impacts of projected climate change and appropriate adaptation measures.

vii. As there is high potential for crop diversification in most of the anicut schemes at least in *yala* seasons, promoting crop diversification enhance the productivity and farmers income.

2. Evaluation of Solar Powered Drip Irrigation (SPDI) Project - Phase 2

Research Team:	Mr. M.A.C.S. Bandara	Co-ordinator
	Ms. M.T. Padmajanee	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The Sustainable Agriculture Water Management Project was designed and initiated to uplift the living conditions especially for the dry zone marginal farmers through providing the water application technology called SPDI. The major objective of this study was to evaluate the effectiveness of provided solar powered drip irrigation kits with modifications done in the phase

Major Findings:

i. Majority of beneficiaries (53%) were using the SPDI without drip containing laterals. Only 14 percent of the beneficiaries were using complete set of SPDI, while another 10 percent were using the drip system, but without fertigation unit. Another 21 percent of the beneficiaries were not using the SPDI kit for any agricultural activities while two percent of them even not installed the system in the field yet.

ii. Only about 11% of the beneficiaries have paid any installments after paying the down payment, but nobody is making regular payment of installment even though district coordinators are involved in the implementation mechanism in phase 2. The main reasons for the nonpayment of the installment are; nonpayment of installments by other farmers (55%), failure to generate sufficient income (27%), expectation of loan write off from government as the government did for agricultural credits in the past (28%) etc.

iii. Especially, Northern and Eastern beneficiary selections were completely done by the BP solar company by using middlemen in the villages, though it was the responsibility of the Ministry of Agriculture. More than 50 percent of the beneficiaries complained that they didn't know the conditions of the agreement even though they signed the document.

iv. There is no proper monitoring mechanism in place to monitor the after sales services provided by the company.

Recommendations:

i. Even though the second phase of the SPDI was implemented with modifications, project has not being able to achieve its objectives. Therefore it is not recommended to continue the project. Even if, government plans to promote micro irrigation technology through subsidized programmes in future;

- Selection of beneficiaries should be done carefully considering farmers entrepreneurship, level of education, willingness to use new technology, degree of waters scarcity, environmental condition of the area and the farming system.
- Agreements signed in this kind of projects should be strong enough to recover the cost, if beneficiaries failed to pay back the loan.
- Proper loan repayment mechanism should be introduced at the time of the project implementation

3. Evaluation of the Soil Conservation and Watershed Management Program Implemented by Hadabima Authority of Sri Lanka

Research Team: Ms. G.G.de.L.W.Samarasinha Co-ordinator

Source of Funding: Consolidated Fund

Scope and Objectives:

Hadabima Authority of Sri Lanka (HBA) is responsible for managing watersheds in a sustainable manner through conserving soil and water within its designated area of work. Much effort was directed towards achieving the objectives for the past 40 years.

The major objective of the study is to assess the soil conservation program implemented by the Hadabima Authority of Sri Lanka towards achieving project objectives.

Findings:

i. Soil and moisture conservation program of HBA has been able to achieve high rate of success in terms of adoption of soil conservation measures and participation of crop diversification program by the beneficiaries.
ii. Level of awareness among the beneficiaries regarding negative effects of soil erosion and methods of soil conservation was very satisfactory.
iii. Project approach in beneficiary selection and input delivery is successful and community leaders as facilitators between HBA and the beneficiaries of the project have proved to be an effective approach.
iv. Initiatives regarding strengthening of farmer organizations and development of entrepreneurship skills among the beneficiaries have shown limited success in the study area.

Recommendations:

i. Current program for increasing land productivity and entrepreneurial skills of the farmers should be modified to attract more participation giving more emphasis on enhancing the economy of the household.

ii. Post project monitoring is recommended for the sustainability of project activities by making suitable institutional arrangements to get the active participation of village level government officers such as divisional officer of the agrarian service centers, *grama niladhari* etc

4. Assessment of Pesticide Usage in Up Country Vegetable Farming

Research Team:	Ms. M.T. Padmajani	Co-ordinator
	Mr.M.M.M. Aheeyar	Co-researcher
	Mr. M.A.C.S. Bandara	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The objective of this study was to assess the level of pesticide usage by upcountry vegetable farmers in order to formulate effective policies and regulations on pesticide use.

Major findings:

i. About 77 percent of farmers apply pesticides prior to emergence of pest or disease attacks as a safety precaution. Around 38 percent of the farmers in Badulla district and 41 percent farmers in Nuwara Eliya district use more than recommended dosage as they believe that recommendations and prescriptions given in the pesticide products label are not appropriate.

ii. Almost all the commercial vegetable farmers use pesticides as the main weapon to manage pest and disease problems since they are easily available, simple and cheap to apply, less labour intensive and "highly" effective. About 23 percent of farmers are aware on Integrated Pest Management (IPM), but only four percent of them have applied the knowhow in vegetable cultivation

iii. Unexpected increase of vegetable prices is one of the factors motivating farmers to harvest the vegetables without talk into consideration the minimum time interval required between pesticide applications and harvesting. According to the findings nearly 20 percent of farmers harvest before 14 days due to above reasons.

iv. Most of farmers (53 percent) are in the habit of mixing more than one active ingredients and brands of pesticides to prepare a "cocktail" mixture expecting that the mixture would help to save labour time and act effectively in controlling pests and diseases.

v. Most farmers (more than 47 percent) prefer to use Organophosphate (OP) group of insecticides, such as; Chlorpyriphos, Profenophos and Phenthoate as they are highly effective in knocking off the pests and rare comparatively cheaper despite their toxicity and persistent nature in the environment.

Recommendations:

i. Instead of using different trade names for the same chemical it is recommended to give a common name for all, based on active ingredients to reduce the misuse of pesticides.

ii. Disposal of empty pesticide containers is one of the problems faced by farmers in their natural environment. Therefore it is essential to introduce a mechanism to collect empty containers at farm level and /or introduce a proper system for disposal.

iii. In intensive pesticide use- areas, pest clinics should be set up periodically to identify old and new emerging pests, to provide advice to farmers on appropriate pesticides and to guide available alternative control methods.

iv. Farmers and agricultural extension officers should be empowered with new technologies regarding safe and judicious use of pesticides. The training programme would cover appropriate pesticides for certain crops and pests, correct dosages and application timing, and appropriate application technologies.

5. Impact of Small Scale Irrigation Rehabilitation and Water Management under Dry-Zone Livelihood Support and Partnership Programme (DZLiSPP)

Research Team:	Mr. M.M.M. Aheeyar	Co-ordinator
	Mr. M.A.C.S. Bandara	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The main objective of this study is to evaluate the success of irrigation rehabilitation, operation and maintenance of irrigation schemes and introduced water management system by the programme to promote more uptakes.

Major findings:

i. The rehabilitation works in all the selected schemes are highly relevant and rehabilitation works are prioritized by the beneficiaries
ii. Strength of farmer institutions operating at ground level is very weak and mostly defunct or at a dormant stage
iii. Social mobilization part is relatively weak, which was by and large limited to delivering tangible outputs. The mobilization conducted is not sufficient to achieve the planned outcome of sustainable O&M of the irrigation schemes
iv. As the changing mindset of the stakeholders and convincing them was a challenging task, area demarcated for a catalyst is larger and not easy to engage the full scale mobilization process.
v. Performance of construction contracts undertaken by the FOs indicate the importance of having at least one or two beneficiaries of the given scheme to be in the office bearers/committee of the contracting FO
vi. The process of forming WUGs has started only in 2010 indicating the big time gap between hardware and software development. The time gap in social mobilizations for sustainable O&M has been seen as a major hindrance in performing activities of the water management package.

Recommendations:

i. The project must allocate necessary funds for the land survey at scheme level and to make necessary demarcations for reservation areas
ii. Attention should be paid to the issues of land distribution and ownership at scheme level
iii. The role of social mobilizers should be broadened to strengthen the institutional set up

iv. The current development formula of the project must be altered to accommodate more weight to social mobilization component to strengthen the community institutions
v. The water management package should be introduced and mobilize the farmers towards achieving the objectives from the initial step of the rehabilitation
vi. It is important to have few beneficiary farmers as office bearers of contracting FO or some authority for them to monitor the contract works
vii. The project has to adopt suitable methodology to provide early orientation and consultation for all stakeholders on project approach and roles and responsibilities of line agencies during the project and also in post project period.

ON-GOING STUDIES

1. Alternative Approaches for Small Tank/Cascade Rehabilitation: Socio-economic and Institutional Perspective

Research Team: Mr. Mr. M.M.M. Aheeyar

Source of Funding: Consolidated Fund

Scope and Objectives:

According to the 'Mahinta Chinthana' policy document, the "Dahasak Maha Wev" tank rehabilitation programme will be expedited with the participation of farmer community targeting 10,000 tanks and was expected to be complete by 2020. Therefore it is useful to study the past approaches adopted by different projects and programmes, NGOs and donors focusing on both soft and hardware parts in the development. The scientific analysis and documentation of the lessons of the past interventions are useful for future sustainable rehabilitation of small tank systems.

The main objectives of the study are;

a) To Study the different approaches adopted by different NGOs in rehabilitating small cascade systems
b) To draw lessons from past rehabilitation models
c) To propose recommendations for appropriate rehabilitation strategies

Data Collection (Focus group discussions, case studies and key informant interviews) have been completed. The data analysis and report writing is in progress.

2. Production of Compost from Municipal Solid Wastes (MSW): Potentials and Constraints

Research Team: Ms. G.G.de.L.W. Samarasinha — Co-ordinator
Mr. M.A.C.S. Bandara — Co-researcher

Source of Funding: Consolidated Funds

Scope and Objectives:

The government through *Mahinda Chinthana* has prioritized organic farming which requires an increase in both production and utilization of organic fertilizer. Production of compost from municipal solid wastes at local authorities is a potential way of increasing the availability of compost as well as a better way of disposing municipal solid wastes. Many authorities have implemented compost projects presenting both success and failure stories. However there is only little analysis done regarding the lessons learnt, limiting their value in policy decisions.

The objectives of the study are;

i. To investigate the potentials and constraints of composting municipal solid wastes at local authority level.
ii. To investigate successful marketing arrangements that can be used for marketing the compost manufactured using MSW.

Study: Production of Compost from Municipal Solid Wastes (MSW): Potentials and Constraints

Composting plant at Weligama Municipal Council

Study: Evaluation of the Soil Conservation and Watershed Management Program Implemented by Hadabima Authority of Sri Lanka

Stone bunds prepared to reduce soil erosion,Panwila,kandy

Study: Evaluation of Solar Powered Drip Irrigation (SPDI) Project Phase 2

Solar Powered Drip Irrigation units installed at Kalundawa GN division in Dambulla

MARKETING, FOOD POLICY AND AGRIBUSINESS DIVISION

Research Team

Dr. T.A. Dharmaratne	-	Head/MFPA Division
Ms. C.P. Hathurusinghe	-	Research Fellow
Ms. R.P. Vidanapathirana	-	Research Officer
Ms. Roshini Rambukwella	-	Research Officer
Mr. N.P.G. Samantha	-	Research Officer
Mr. W.H.D. Priyadarshana	-	Research Officer
Mr. W.A.N. Wijesuriya	-	Research Officer
Mr. E.A.C. Priyankara	-	Research Officer
Ms. J.A.U.P. Jayasinghe	-	Research Officer
Ms. I.K. Edirisinghe	-	Research Officer
Ms. R.M.M.H.K. Rambodagedara	-	Research Officer
Ms. P.A.J. Champika	-	Research Officer
Mr. N.S.W. Nawarathna	-	Senior Statistical Officer
Mr. P.G. Ajith Rathnasiri	-	Statistical Officer
Mr. N.S.J.K. Nissanka	-	Statistical Officer
Mr. K.A.R. Pathmasiri	-	Statistical Assistant
Mr. E.A.Upul Arunashantha	-	Statistical Assistant
Ms. W.G. Nirosha Malkanthi	-	Statistical Assistant
Mr. N.A.K. Shantha Arunasiri	-	Statistical Assistant
Mr. M.N.M. Naleem	-	Statistical Assistant

The key role of the division is collection, analysis, compilation, and dissemination of market statistics for policy markers, farmers, traders, academics and others. These activities have further continues and fulfilled in the year 2012. MFPAD provides market information to the Ministerial Sub Committee on National Food Security and Cost of Living Review which is located at the Presidential Secretariat of Sri Lanka. The MFPAD also essentially provides market information to the policy makers in the Ministry of Agriculture, Trade, Commerce and Consumer Affairs, Health, Finance and Planning and the Central Bank of Sri Lanka for stabilizing market prices. Other ministries of the government, various departments and other institutions at national and provincial levels, state and private banks, foreign donor agencies and institutes, foreign embassies, universities, libraries, private trading companies, cooperatives and private traders, nongovernmental organizations, newspapers, media agencies, electronic media and local farmers are also leading users of the market information system in the MFPAD. In addition, there are a number of other activities implemented by the MFPAD, such as providing marketing extension services, marketing advisory services and dissemination of daily price; wholesale, retail and producer prices by through the print and electronic media, and conducting agricultural marketing research studies and training programs for farmers, traders and officials of the extension services in the year 2012. The regular work program is as follows.

1. Food Information & Market Intelligence: Regular Work Program

Source of Funding: Consolidated Fund

Progress for the Year 2012

i. Weekly Food Commodities Bulletin–52 in English and 52 Sinhala.
ii. Monthly Food Information Bulletin – 12 in English and 12 Sinhala.
iii. Daily Food Prices were provided to relevant institutions throughout the year.
iv. Provided daily and weekly information to media in time.
v. Provided price data and other market information on request - to government and private sector agencies throughout the year.
vi. Food Commodity prices were collected on daily basis from the Narahenpita Economic Centre and sent to the Ministry of Trade, Commerce and Consumers Affairs throughout the year.
vii. MFPAD provides the food commodity prices with marketing information to the "Food Procurement and Monitoring Unit" under the Presidential Secretariat throughout the year.
viii. New program of SMS on daily vegetable wholesale Price dissemination of major vegetable commodity system in connecting Colombo wholesale market with other 7 Dedicated Economic Centers, through mobile platform

COMPLETED STUDIES

Dry Zone Livelihood Support and Partnership Program (DZLiSPP), initiated by the International Fund for Agricultural Development (IFAD) with the Ministry of Agriculture in the government of Sri Lanka. The Ministry of Agriculture and DZLiSPP has requested from the HARTI to conduct the 8 evaluation studies on various project components of the

DZLiSPP. Out of these 8 studies, following 5 assessments undertaken and completed by the MFPAD.

1. **Impact of Community Infrastructure & its Convergence Effects – Badulla, Monaragala, Kurunegala and Anuradhapura Districts.**

Research Team:	Dr. T.A. Dharmaratne	Co-ordinator
	Ms. J.A.U.P. Jayasinghe	Co-researcher

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

This study investigates the impact of convergence of the project intervention in four districts of rural-remote areas of Sri Lanka. It evaluates the effects of various community-level project interventions in rural farming community well-being and assesses the results of livelihood support and their impact. The study also attempts to provide some evidence on what type of different project components convergence to each other receiving more benefits for the poor.

The overall objective of the study is to examine the impact of implementing more than one livelihood support project to raise income and living standards of the rural poor in the program area on a sustainable manner. The specific objectives of the study are;

i. To assess the impact of convergence effects of different project components on beneficiaries.
ii. To evaluate advantages and disadvantages of convergence of project interventions

Findings:

i. Results of some locations are tremendously impressive in generating at least tentative livelihood opportunities for poor people without direction. Areas such as roads, irrigation facilities, buildings, wells for drinking & cultivation, rain water harvesting tanks, playgrounds, and school are prominent interventions. People request similar facilities for the areas in which those facilities are absent.

ii. Tanks and other irrigation facilities generated bountiful economic impacts in areas where water was the major retarding factor for livelihood development. This irrigation facility directly contributed not only to expand the extent of cultivable lands but also cultivable ability in both major seasons in the country. It was an insurance against the periodical food security related matters in many locations. Such jobs as agricultural laborers, marketers, input providers are positively correlated with the project even though insufficient.

iii. Successful components of the projects can be used as bench mark components for similar future projects in the country. The fundamental problems of the projects are in areas such as selection and implementation procedures, insufficient financial allocation, inefficient institutional setup, unnecessary political interferences, natural calamities and lack of community participation. These fundamentals check the convergence of project components as expected. Such fundamentals have created divergences in some locations rather than convergences.

Recommendations:

i. DZLiSPP in the planning process has not received the required priorities in relevant project components. The study essentially recommends that highest priority be given to the effects of convergence in the planning process, when the project is extended or reformulated.

ii. There is need of an institution of "technical consortium" which should be suitably strengthened by experts and technical personal to advice, formulate, evaluate and monitor the implementation of convergence model.

iii. Infrastructure is important not only for expansion of the livelihood support but also for transfer of technology with the productivity efficiency. The government investment in the infrastructure development may be encouraged by modifying various procedures and development approaches with the introduction of Rural Convergence Programs (RCP).

iv. Awareness on convergence effects, programs should be conducted for community to understand the "convergence effects of the infrastructures" in relation to the operating the common properties. Special efforts are required through awareness campaign and adopting appropriate strategy regarding the information and communication.

v. Study reveals that the proposal of any intervention placed by the communities in GN division is normally accepted. It is never weighted against the alternative components. To introduce the system of prioritization of component and selecting the needed one better awareness among the decision makers is first priority at the GN division. The village level team needs to facilitate this process so that the selected components provide the benefit to marginalized groups.

vi. Out of assessed 69 project sites, only very few cases of convergence with other agencies are visible. For thoughtful resource utilization, authorities at the level of officials need to give special thrust on identifying the scope of involvement of different departments/programs to any particular components proposed under the DZLiSPP for achieving convergence leading to maximum benefit.

2. Vegetable Collection Centers in the Moneragala and Badulla Districts: Impacts and Lessons

Research Team: Ms. R.P. Vidanapathirana Co-ordinator
Mr. W.H.D. Priyadarshana Co-researcher

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

Vegetable collection centers belong to the category of market-related infrastructures supported by the Marketing Fund which is a sub-component of the Marketing and Micro-enterprise Development component. One of the approaches of DZLiSPP was to build up linkages with the producer and the buyers and the project has established two vegetables collection centers in Wangiyakumbura village in Welimada DS division of the Badulla district and Ruwalwela village in Madulla DS division of the Moneragala district as public-private partnership programme with Cargills PLC. The DZLiSPP programme has constructed buildings and the Cargills bears all operational costs. The purpose of this study is to examine the viability of establishing collection centers and to make recommendations that incorporate lessons learnt from these collection centers. The specific objectives are;

i. To study existing operational mechanisms
ii. To assess impacts of vegetable collection centers in Badulla and Moneragala districts
iii. To ascertain cost effectiveness of vegetable collection centers

Findings:

i. Both collection centers are well located with enough space and also are equipped with essential facilities. At present both collection centers procure only around 2,500 -3,000kg of vegetables per day by each and they do not utilize the total capacity of the collection centers.
ii. Majority of the beneficiaries reported that receipt of higher prices, reduction of transport costs and increased efficiency are the major advantages for farmers linked with the collection centers of supermarkets.
iii. Majority of the beneficiaries are satisfied with the prices they received and they were paid on the day of selling. This shows that collecting centers are reliable with respect to their terms of payment.

iv. On average, farmers who supply to the Ruwalwela collection center received a higher price which is 50 percent higher than the prices in other markets in the Madulla area (In May 2012). The benefits for farmers linked with the Ruwalwela collection center was Rs.570, 142/= in May.

v. Quantity of vegetables purchased by the collection centers was limited compared to other markets. About 35 percent farmers linked to Wangiyakumbura collecting center sold only 30-50% of their total production while 54 percent of farmers linked to Ruwalwela collection center sold 50-90% of their production to the collection center.

vi. Most of the beneficiaries (87.5 percent) did not receive any benefits from the collection center a part from receiving a higher producer price. Further, none of the farmers had received trainings from the collection centers.

vii. So far there is no any fund allocated or maintained as the welfare fund. Hence, none of the beneficiaries received benefits from a welfare fund. Beneficiaries of the collection centers were not aware of a welfare fund.

Recommendations:

i. Sustainability of the vegetable collection center depends on several conditions. Effective functioning of the welfare fund is the must important among them. However, currently it is unsatisfactory. Therefore, there is a need to maintain its transparency as it will encourage the farmers and the activities of the collection centers and thereby this model will survive longer.

ii. As the committee has to supervise the activities of these collection centers in order to assure the collection centers pay a higher price than the other markets, collection centers should provide daily prices of each item to the DS/or the committees of the respective areas.

iii. At present the quantity purchased is limited compared to other markets and both collection centers have the capacity to absorb more than that. Hence, the quantity purchased should be increased. Else, the additional space could be provided to be utilized as a collection center for exporters (Wangiyakumbura).

iv. Collection centers should provide services according to the agreement and Cargills need to do more if they are keen on expanding operations. This would involve recruiting more technically-trained staff, improving farm advisory services and designing specific educational programs on quality production. At the collection centers, it is important to keep the records of the beneficiaries.

v. For both collection centers, water facilities are not available and to Ruwalwela collection center, electricity facilities are not available. Therefore, such facilities should be provided by the IFAD project or by Cargills PLC.

3. Evaluation of Expansion of Marketing Opportunities through Promotion of Forward Sales Contracts

Research Team:	Mr. W. A. N. Wijesooriya	Co-ordinator
	Ms. P. A. J. Champika	Co- researcher

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

Expansion of marketing opportunities through promotion of Forward Sales Contracts (FSC) was an important marketing intervention under the marketing component of the DZLiSPP. After the implementation of FSC's by the DZLiSPP, low-level of adoption and failure of the process was observed specially in Badulla and Kurunegala Districts. The overall objective of the study was to examine the status of Forward Sales Contract Scheme implemented under different models and to review its performance. Specific research objectives**;**

i. To evaluate the actual operations and real outcomes of the FSCs program under two different models.
ii. To identify problems and constraints in the implementation of FSCs.
iii. To suggest possible alternative ways of implementing contracts sustainably in the future

Findings:

i. The study found that eventhough many service provider organizations joined at the initial stage of the project; REDA was the only existing SP at the latter stage of the project. Out of the studied 10 groups in the Kurunegala district, only 2 farmer groups sell their products under FSC's at present. They are one farmer group who grow gherkin (or Jalapeno pepper) and another farmer group who cultivate perennial organic products. These two are the only successful programmes that have been able to continue FSC's for more than two seasons. In the Badulla district, none of the farmer groups visited, sell their products through contract agreements at present. Commercial scale vegetable production in Poly- tunnels was introduced to the Badulla district through service provider model in 2009. This is the only programme in the Badulla district where forward sales contracts were signed and buyers bought the product at least once.

ii. Eighty percent of surveyed farmers did not process a copy of the agreement and they didn't have clear idea about their buying company. The situation reveals lack of awareness of the agreement. The SP is not able to build up continuous dialogue between the farmers and the buyers regarding the needs of the buyers, input provision to the farmers, quality related and post harvest issues at the ground level which was a must to build up mutual trust between both parties. The majority of the buyers did not have any mechanism like collecting centers, processing and grading facilities and storage to impress farmers. Inadequate human resources of the service provider was another important reason for the failure.

iii. Despite failures of the Service Provider model, project intervention has created some positive indirect impacts. The cropping Patten has changed and new crops such as Ground Nut, Gherkin and Pepper have been developed introduced. A considerable increase of income was observed in *Yala* season cultivation, due to the change of the cropping patterns. Some 'Crop zones' have been developed. An example is the Papaya zone in Rambe area. A very prominent feature is that women's engagement in income generation activities has been increased, eg: Ground Nut farming in Kurunegala, HVV in Polytonal in Badulla.

iv. As a successful model of FSCs outside the project, the Maize and Soya bean production programme in Plenty Foods Private Ltd was studied. The company has over 6000 famers, operating in four major districts, and the company guarantees fixed prices for their produce and assist in extension and micro financing through banks. Major elements of the success FSC's programmes were practicing "Contract farming model", and FSC's only a part of it. Efficient input delivery mechanism to farmers, vertically well integrated value chain and proper monitoring of each step, professionally qualified well organized extension structure, Long term relationship and mutual trust between farmers and buyers, an assured markets for the buyers. Thinking beyond FSC document, Group formation and encouraging group cohesion, implementation number of welfare and social programmes under the company's Corporate Social Responsibility and Awards from National agri-business Council are needed.

Recommendations:

i. It is necessary to conduct series of awareness programmers prior to implementation of FSC's through holistic approach. According to the available literature, and the lessons learnt from the success stories on this study within the contact farming model the success rate of FSCs was very high. Therefore, it is recommended to pay more attention to contract farming system than FSCs approach. The most suitable facilitator was development or commercial banks operating in the producing areas. They can easily provide a series of financial services like credit, insurance, savings which are the binding agents for farmers and the buyers. Establishment of market information system is an urgent need for empowering market power especially for women farmers. As an initial step, farmers can be made aware of HARTI/MOBITEL mobile phone based market information system.

ii. It is essential that smallholders organize themselves into farmer organizations as a prerequisite for entering into contract farming. In selection of crops, priority should be given to the industrial processing and export oriented crops like Maize, Soya Bean, Green gram, and Gherkin. Research and Development programmes should focus on the negative attitudes of state sector officials as well as farmers and land owners on Gherkin farming. There is a need to evaluate buyer's capacity to continue FSCs. Development of specific legislation and guidelines for contract farming practices in Sri Lanka is a prerequisite for the success of the program.

4. Impact of Dairy Development Programme in DZLiSPP

Research Team: Mr. N.P.G.Samantha Co-ordinator

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

The Dry Zone Livelihood Support and Partnership Program (DZLiSPP) funded by the International Fund for Agricultural Development (IFAD) and implemented by the Ministry of Agriculture (MOA) targeted the rural poor in the dry zone. The programme had involved with dairy development through the approach of dairy Farmer Field School (FFS). The objective of this study was to evaluate the success of FFS approach in dairy development and to promote the approach. The specific objectives of the assignment were, to assess the impact of dairy FFS developed by the programme, to analyze dairy FFS in terms of financial and economic aspects and to evaluate sustainability of dairy FFS.

Findings:

i. According to the survey, 50% of FFS members had experience on cattle farming for more than ten years and 84% of the FFS members who joined the project had practiced dairy farming before attending the FFS. The project had changed the mentality of farmers to some extent and led them in to dairy farming.

ii. Only 36% of the FFS members had maintained any form of cattle sheds to provide housing for animals before the project. A majority of cattle shed (62%) maintained by farmers before the project intervention were informal and consisted of only a shelter over the cattle. Condition of cattle shed has improved in all the study locations as a result of project intervention.

iii. Survey found that only 17 percent of the FFS members had received credit facility from the project to purchase cattle.

iv. The improvement in feeding of pasture and fodder is visible in all the study locations after the project intervention. Farmers have shifted from free grazing and tethering systems into mixing of tethering and cut & feed system. On average, in all the study locations, only 36% of FFS members had used concentrate feeding as a main component of cattle feeding before the project intervention and it has increased up to 78% after joining the project.

v. Only 45% of FFS members had used Artificial Insemination (AI) as a cattle breeding method before the project intervention and it has increased up to 76% after joining the project.

vi. Difficulties in finding good quality animals or non-availability are major problems faced by farmers in obtaining cows with a higher genetic potential. They have had upgraded animals especially through Artificial Insemination (AI) and using stud bulls from other farmers. But there is a high demand for animals with high milk production capacity among the farmers in each area.

vii. Only 27 percent farmers had practiced evening milking before the project intervention. The project intervention is not satisfactory in this regard especially in Anuradhapura area. Only 17 percent FFS members who did not practice evening milk had changed to evening making after attending FFS.

viii. Lack of follow up action by the project officials is recorded as a limiting factor in all the study locations. The project has given the targets to field facilitators to form a number of FFS during each and every year. They are following targets rather than considering about the sustainability of the FFS.

ix. In all the study locations, feed cost is the largest (78%) cost item when calculating without adding values to the family labor. It is higher as 88% in Badulla district where the concentrate feed is highly used with intensive cattle farming system.

x. None functioning of the revolving fund is identified as a limiting factor for sustainability of FFS and only 28% FFS recorded proper functioning of revolving fund in all the study locations.

xi. Only 38% of FFS had proper connection with milk collecting company as a group. All the group members agreed to sell their milk production to the selected company and if the price and other services were not satisfied all the members agreed to shift to other company as a group.

Recommendations:

i. The study suggests forming FFS during the first part of the project and during the second part sustainability of the FFS should be considered formation of FFS at the end of the project is useless because there is no time to sustain the FFS.

ii. Activating the revolving fund is very important as it is the linking factor of FFS. By motivating FFS for bulk purchasing of input and other materials FFS could be able to reduce the cost of production and maintain a welfare fund for the benefit of the members.

iii. Two or three FFS could be linked to one milk collecting centre as in the Moneragala district rather than providing a milk collecting center for each FFS. It’s better to link social mobilization program with FFS to change the attitudes of farmers to link in group activities. FFS should be reformed before linking with the federation by appointing efficient office bearers.

iv. Financial auditing is recommended for all the FFS before linking with the federation because money granted by the project remained in bank accounts without been used in most of the FFS.

v. Proper regular follow up service covering all the FFS should be established using field facilitators until the FFS are sustained rather than forming FFS to increase the number. It's better to have a common plan when building cattle sheds and farmers should be motivated to build sheds accordingly.

vi. Some sheds built using project funds in all the study locations were not up to the standards. It's better to train one or two farmers from each FFS as leader farmers to fill the gap of veterinary services and lead FFS members with novel technologies.

vii. Establishment of breeding farm within FFS could be able to provide good quality animals to the members at a low rate. Project could provide more facilities to such selected farmers and animals could be distributed on a revolving system.

5. Investment Impacts of Micro-enterprise Component of the Dry Zone Livelihood Support and Partnership Programme (DZLiSPP)

Research Team: Ms. I.K. Edirisinghe Co-ordinator

Source of Funding: DZLiSPP/IFAD

Scope and Objectives:

Support for micro-enterprises is one of the main programmes implemented under the 'Dry Zone Livelihood Support and Partnership Programme (DZLiSPP)'.

The purpose of the evaluation was to assess the socio economic impacts of the micro enterprise development programme implemented through Service Provider system. It had four specific objectives: to evaluate the effectiveness of Service Provider system in implementing micro-enterprise development programme; to evaluate the outcomes of the programme; to review the level of improvement in living standards and level of empowerment of beneficiaries, and to provide recommendations to improve such interventions.

Findings:

i. The project has supported existing (79%) and new (21%) entrepreneurs as well as men (44%) and women (56%) entrepreneurs in four districts.

ii. Of the specific activities assigned to the SPAs, only the performances of the entrepreneurship development training can be considered satisfactory. Poor performances were observed with regard to technical training, arranging financial or credit facilities, arranging market linkages, facilitating business registration, and formation of trade associations.

iii. It was also noted that the SPAs have paid their attention only for the quantity of the work and not for the quality. This was proved by the inaccuracy of the beneficiary lists.

iv. With reference to the expected project outcomes, only 76% of enterprises were in operation despite the expectation that almost all the enterprises should be in operation. Even though it was expected to create more and more employment opportunities, only 1% of enterprises had created employment opportunities as a result of the intervention. Nearly half of the beneficiaries (46%) had experienced a significant increase in their income with regard to the expectation of increasing annual income of 70% of beneficiaries by 15%. Therefore gaps between the expected outcomes and the achieved outcomes were noted.

v. It was also observed that there were positive changes at the enterprise level, individual level, household level and community level with reference to a considerable number of beneficiaries. This was mainly an outcome of the entrepreneurship development training.

vi. Limitations or gaps under the areas of project design, project management, specific project activities, follow up activities, monitoring, reporting, and time management have contributed to poor performances of the intervention.

Recommendations:

Recommendations under five main areas: project design, project management, specific project activities, follow up activities, and monitoring have been identified and some of the key recommendations are listed below:

i. Project and SPAs collaboratively implement the project.

ii. Conduct a proper need assessment prior to the intervention by both SPAs and the project. More attention should be paid to selection of beneficiaries. Most suitable business for the available markets should be considered.

iii. There should be Integration between different project components. E.g. Micro enterprises and micro finance.

iv. More attention should be paid to technical training.

v. More emphasis should be given to credit programmes and for creating of market linkages.

vi. More attention should be paid to identifying marketing problems and strategies to solve them.

vii. There should be regular and close follows up action by both SPAs and the project and close supervision and monitoring by the project.

viii. Less number of entrepreneurs with more attention and follow up will be more successful.

6. Factors Influencing Low Consumption of Fruits in the Western Province

Research Team:	Ms. Roshini Rambukwella	Coordinator
	Mr. N.P.G. Samantha	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

The present government of Sri Lanka has given high priority to expand fruit cultivation for local consumption and export as well as to develop the processed fruit industries. Medical experts have recommended that the consumption of fresh fruits could create a healthy human society and each person's diet must contain at least 100 grams of fruits per day. But in Sri Lanka per capita consumption of fruit is 40grams per day. The low consumption of fruits has contributed to nutrition deficiency among Sri Lankan. Low fruit and vegetable consumption is an important risk factor for chronic diseases, but for many (mainly developing) countries, no data have ever been published (Justin N. Hall et al. 2009). Hence, there is a clear need to understand the factors influencing the consumption and consumer preferences for fresh fruits and what are the bottlenecks of preventing consumers from buying and consuming more fruits. Such a study is very important to marketers to understanding and making appropriate and timely adjustment on the supply side to match the supplies of the various fruits according to the potential demand. The main objective of this study was to identify the factors influencing low consumption of fruits. The other objectives were to identify the existing consumption pattern and buying behavior of fruits among the different income group of households and to probe the consumer awareness about the health benefits of fruit consumption.

Findings:

i. The average expenditure on fruits had a positive relationship with income of households. However, when considering the expenditure on fruits in all the three districts as a whole, it only occupied a tiny fraction of the monthly total food expenditure. It is recorded nearly 3%.

ii. Banana is the most consumed variety by the respondents in all the three districts and its consumtion 37% in Colombo, 35% in Gampaha and 36% in Kalutara, followed by Papaw. Among the banana varieties, *seeni* and *ambul* are the most popular varieties consumed by the sample respondents.

iii. Small children are the major fruit consumers of both local and imported fruit varieties in all the three districts, followed by young children. However, older, middle age and young adults consumed fewer amounts of fruits than the children in their house hold.

iv. When considering the daily per capita consumption of total fruits, virtually no one consumed sufficient amounts in all the study areas. Daily per capita consumption of fruits in each district is 35grames in Colombo district, 38grames in Gampaha district and 43grames in Kalutara district. However, daily per capita consumption of total fruits among the consumers in the rich category was comparatively higher than that of the other categories.

v. When considering the socio-economic factors affecting the fruit consumption of the sample respondents as a whole, this study revealed that, number of children in the family, monthly house hold income, preferences and consumer attitudes are statistically highly significant. Education level of the house holder, number of family members, occupation and price also were significant while, rest of the factors like, religion, gender, family type etc. were not significant with respect to the quantity of fruit consumption.

vi. The study found that, about half of the respondents of rich and average category in all the three districts were aware about the health benefits of using fruits and the fractions of unaware consumers also were insignificant in all the categories.

vii. According to the consumers, there are four major barriers associated with consumption of fruits. More than 38% of the consumers in rich and average category in all the three districts have been worried mostly about the usage of chemicals to ripen fruits. In contrast, more than 38% of the consumers in the poor category in each district felt high price is the most serious problem which affected their low consumption of fruits. Non availability of fresh and taste of fruits, seasonality were also important factors.

Recommendations:

i. There is a need for policies to promote and support fruit consumption. Consumer is concerned more for the safety and healthiness of fruits. Hence, policy and other implications related to increasing quality and safety of fruit production should be considered and the government needs to conduct adequate monitoring programs to assure that safety of fresh fruits and tolerable levels of chemical sprays are not exceeded.

ii. Awareness must be made to the general public on the nutritional importance of the consumption of fresh fruits and about the minimum daily intake of fruits through campaigns, media etc.

iii. Farmers and traders are key players in overall strategies aiming to increase fruit consumption. Hence, policies are needed to empower farmers and traders to ensure supplies of safe and quality fruits. Providing education to farmers, retailers, wholesalers, and supermarkets etc. on safety fruit production and selling. The importance about the consumer attitudes and perceptions are very important factor to be considered by the government.

iv. Proper guidance on the consumption of fruits should be strengthened. It is an urgent need to educate parents on food and nutrition regarding children's dietary intake of fruits at home.

7. Use of Plastic Crates as Fresh Vegetable and Fruits Packaging Material

Research Team:	Ms. C.P. Hathurusinghe	Co-ordinato
	Dr. T.A. Dharmaratne	Co-researcher
	Dr. W. D. Wicramasinghe	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

During the last ten to fifteen years marketing practices between fruits and vegetable producers and wholesalers/retailers had gained national attention. Government officials and academics offered their views on fruits and vegetable price fluctuations and the related issues. Fresh fruits and vegetables are mostly cultivated in very distant rural areas and the higher demands could be seen in the urban cities. The huge margins between producer prices and retail prices were observed and both the consumers and the researchers had a view that this has happened due to high wastages during transport and low quality products. Various marketing systems have evolved gradually to deliver fruits and vegetables to the urban areas.

In transferring from producing areas to consuming areas, packaging gets a prominent place. Packaging fresh fruits and vegetables is considered as a vital function in the marketing system to minimize the losses. Various packing materials are used by the farmers and traders in the country to protect the produce damage during transportation and handling. Some of them are natural and environmentally friendly low cost packing materials. As a result, quality and competitiveness have improved to some extent. However to minimize the damages and to give a better produce to the consumers the government directs all producers, transporters, distributors and traders of locally produced selected vegetables and fruits to use plastic, wooden or hard paper containers to collect, store and transport. This directive was implemented under the Gazette of the Democratic Socialist Republic of Sri Lanka (Extraordinary) No. 1728/5- Monday October 17th 2011.

The government had planned to improve the quality of fruits and vegetables coming to the market and reduce the wastages by using packing material as plastic crates instead of polypropylene mesh bags. Stakeholders of fresh fruits and vegetables are reluctant to use plastic crates as packing material though the government is willing to provide services to transport crates. The purpose of this survey is to find out the views of stakeholders on the use of plastic crates and to find out losses during transport. This study explains present marketing practices and new distribution systems. It also provides an explanation of reasons behind the changing dynamics of fresh produce marketing system.

Findings:

i. The survey revealed that the total loss of vegetables and fruits is due to many reasons such as packaging without sorting, over packing in bags, overloading in to the trucks, laborers sitting on top of the vegetable bags, laborers dropping unmanageable heavy bags with vegetables and delayed transport etc.

ii. It was also revealed that the losses are very low in the shorter supply chains where there are recently developed wholesale markets and in some private distribution and retail stalls because these traders are linked to the producers. Hence these producers keep on selling good products to their regular buyers. When the farmers and wholesalers linked together, the malpractices by farmers are very limited.

iii. Though there are many retailers in every selected market the price at the retail level is very high because the retailer has to clean and sort out vegetables and very limited quantity can be sold in a fresh form. The survey revealed that the losses while transporting from remote areas to urban cities have declined considerably due to new developments in marketing system and road network. Farmer awareness programmes are needed to limit damaged and over matured products when transporting to various distant places from remote farmlands.

iv. Though the plastic crates have been introduced to the country almost all the stakeholders are reluctant to use them due to various reasons. Their view is that the retail price will increase as fewer kilograms can be transported at a particular time. They complained about returning the empties and cleaning them also were additional work. Both the wholesalers and retailers complaint about limited space for displaying.

Recommendations:

i. It is needed to find low cost methods to minimize the post harvest losses during transportation. The other losses are also man-made losses. It is necessary to design a proper distribution network for the products throughout the country within a shorter period and minimum loading and unloading times.

ii. It is necessary to take action to minimize overloading because this is also a hidden cost to the consumers. It is essential to develop the necessary infrastructure such as market places, forklifts, appropriate vehicles that are suitable for usage of plastic crates.

iii. Further research is needed to investigate the present marketing systems and the pricing mechanisms and cost structures because gross margins are very high though there are less value addition.

8. Value Chain of High Value Highly Perishable Vegetables

Research Team: Ms. C.P. Hathurusinghe Co-ordinator

Source of Funding: Consolidated Fund

Scope and objectives:

In the agricultural sector, fresh vegetables have the most potential to respond to market opportunities rapidly because of their shorter growing period. Any marketable vegetable crop suitable to increase income or reduce income instability of the poor farmers is called "high value" in the context of high value crops. This study limits its selection of commodities which have specific potential profitability and substantial nutritional value and a demand in domestic as well as export market. For the development of this sector Sri Lanka fruits and Vegetable Producers Processors and Exporters Association has contributed considerably. They produce nearly 25 new varieties of high value vegetables such as Bell pepper, Zukini, Iceberg Lettuce and Butter head Lettuce which are being produced exclusively targeting niche markets. For the detailed study cauliflower, broccoli, Chinese cabbage, bell pepper and lettuce were selected.

The purpose of the study is to review the overall situation of high value highly perishable crops in the vegetable sub sector of Sri Lankan agribusiness and to identify, assess, and prioritize constraints and to find out the remedial measures and cross-cutting policy reforms to enhance competitiveness, growth, employment, and business opportunities in the country. The study aims to provide inputs as the basis to design a development strategy for the rational economic growth. To maximize the market potential of this highly important sector, it is necessary to understand all the elements related to it. The study's specific objectives are as follows;

i. To review the present situation of this sector
ii. To assess the performance of farmers involved in the production of highly perishable high value vegetables using a value chain analysis
iii. To find out the constraints faced by the chain actors

iv. To examine the challenges and opportunities for increasing access to the regional and global markets for the products and associated inputs and
v. To suggest measures to overcome the constraints to develop this sector.

Findings:

i. The cultivation of high value highly perishable vegetables such as lettuce, parsley, celery, iceberg, Bok Choy, bell pepper, cauliflower, broccoli and cucumber has increased by 35 – 40 percent during these two years due to increased demand from Tourist Hotels which cater to foreigners.
ii. After the new construction projects started, the demand for these crops has increased from foreigners considerably. The supply chains were very clear because these high value crops should be delivered to the final consumer within a very short period to keep freshness and to minimize the losses.
iii. New generation has entered this sector to cultivate both in open field and in protected areas due to high demand in the local as well as in the export market and also due to high prices and higher income compared to these of other vegetables.
iv. It was identified that farmers do mixed cropping of these vegetables with herbs to maximize their farm income. About 50 farmers entered into this crop sector in 2009 and this number has increased by 85 percent in 2010. From 2010 to 2011 about 32 percent increase could be observed.
v. Though these crops are available in the market, the demand from local consumers are increasing very slowly due to high prices and lack of awareness on culinary methods. Almost all the farmers and many consumers are not aware of the nutritional values of these crops. Therefore almost all the farmers do not consume these vegetables.
vi. In the urban areas both the supply and demand have increased because the affordable consumers are willing to pay for these vegetables with the changing food habits and awareness of nutrition value of each crop.
vii. During the last few years agri-businesses in the vegetable subsector have grown with higher prices and better profit margins. As a result some of the farmers reinvest their income for these new vegetables to earn higher profits by reducing the cultivation of less profitable traditional types of vegetables and potatoes.
viii. The development of this vegetable subsector has shown significant impacts in poverty reduction of smallholder farmers mainly in the Uvaparanagama area in Bandarawela and Meepilimana area in Nuwaraeliya.
ix. There is a potential to enhance the incomes of small farmers and create employment for rural labourers by increasing the production, processing and marketing of high value crops. Farmers and traders are linked well in the value chain to minimize losses by satisfying the consumers. Both producer and wholesale prices of these commodities are more or less stable within the months and the year.
x. The mode of transport varies according to the distance and the request of the customer. Transport cost ranged between Rs.8.00 - 20.00 per kg from Bandarawela and Nuwaraeliya to Colombo and Hambantota. Packing material also varies.

Recommendations:

i. This sector is a good solution for poverty reduction in rural areas by direct linking with the locations where tourists visit. Youths can be encouraged to agri-business by giving them financial and micro enterprise support.

ii. The price factor is not the only criteria for selecting the commodity. Quality of fresh vegetables plays a vital role in marketing. Hence awareness programmes should be introduced for food safety and quality assurance from the cultivation through final consumption.

iii. Most of the local vegetable consumers have no idea of consuming these vegetables. Therefore the farm training centers can be used to introduce culinary methods of these vegetables. To increase the local demand awareness programmes are needed. Hence school children and youths in government as well as private farms should be made aware of nutritional values of these vegetables.

ON-GOING STUDIES

1. Export Market for Organic Food: Present Status, Constraints and Future Scope

Research Team:	Ms. R.P. Vidanapathirana	Co-ordinator
	Mr. W.A.N. Wijesooriya	Co-researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

Global trade in organic foods has grown tremendously over the past years. In Sri Lanka, there is a growing interest and demand for producing organically grown food products for export. Organic exports are sold at impressive premiums, often at prices about 20 percent higher than identical products produced on non-organic farms. The government's agricultural policy has identified the importance of expanding the organic agriculture sector in the country and to ensure a higher price for organic products. The future of organic farming is promising in Sri Lanka primarily as an export or specialized commodity enterprise rather than a general agricultural programme. In future, the export should be essential to be organic as the global demand for organic products increasing. Also, the local demand will be high in future as people are more conscious on health and the demand will be increased with the development of tourism industry in the country. Hence, the organic food production and marketing could be greatly expanded in Sri Lanka and it is important to identify global trends as well as local trends in demand and supply of these products. Therefore, this study will attempt to find out the opportunities and constraints of organic food sector and the policies influencing the adoption of organic food production with the objective of promoting the expansion of organic food export in Sri Lanka. The objectives of the project are;

i. to review the present status of export market for organic food

ii. to evaluate the actions taken by the various stakeholders to support organic food Industry

iii. to identify challenges and constraints for organic food processors and exporters

Data collection (questionnaire survey and key informant interviews) have been completed. Data analysis and report writing are in progress**.** A comprehensive literature review on organic food production practices both local and global has been completed. During the study number of private sector organic food export companies and other stake holders were interviewed to gather necessary information. Report consists of six chapters.

2. Agricultural Forward Contracts as Pre-harvest Commodity Marketing: Problems and Prospects

Research Team:	Mr W.A.N.Wijesooriya	Co-ordinator
	Mr W.H.D.Priyadharshana	Co- researcher

Source of Funding: Consolidated Fund

Scope and Objectives:

As an alternative to the conventional government intervention in agricultural marketing, the Central Bank of Sri Lanka introduced forward Sales Contracts (FSC) under the *Govi sahanaya* scheme in 1999. At present, Paddy, other Field crops, Vegetables, medicinal plants and several other horticultural crops are covered under the scheme. In the Sri Lankan context, more than ten years after the implementation of Forward Sales contract, still a mix performance and low-level of adoption can be observed related to this mechanism. As there had been no comprehensive study undertaken in order to understand the present situation of Forward Contract Scheme in Sri Lanka, this study focuses on examining the Forward Contract Scheme and reviewing its performance. Study will be focused on Forward Sales Contracts in selected other Field Crops such as Maize, Black gram and Soya bean.

The specific research objectives are

i. To assess the factors affecting the adoption of Forward Contracts
ii. To evaluate the critical success and failure factors of FSC's
iii. To suggest the key policy initiatives for the sustainability of the Forwards Sales Contracts.

Questionnaire Survey was completed in Galenbidunuwewa, Elayapattuwa areas in Anuradhapura District and Galnewa, Tabuttegama areas in the Mahaweli H, and the data analysis is in progress. During the survey nearly 300 Maize, Soya Bean and Black gram farmers were interviewed.

3. An Evaluation of Dedicated economic Centers in Norochcholei and Nuwara Eliya

Research Team:	Mr. W.H.D.Priyadarshana	Co-ordinator
	Ms. J.A.U.P Jayasinghe	Co- researcher

Source of Funding: Consolidated Fun

Scope and objective:

Although the Dedicated Economic Centers are equipped with infrastructure facilities such as storage, electricity and parking, sanitary, many people criticize that targeted beneficiaries (Eg: Producers) do not get benefits from these centers and that practically the traders are the major beneficiaries. It has been observed that, there is no competitive trading environment within the DECs as expected, because the traders determine the price rather than the producers. Prior to the establishment of these centers, traders visited the farm gate for purchasing. In this process the farmers had a certain power in fixing the price. It should be related that on an occasion, a Member of the Parliament reported to the parliament that farmers/ producers had not benefited from the Nuwara Eliya DEC. However, these issues have not been explored yet in detail. Such an exercise is necessary as the government is setting up more and more DECs without an appropriate assessment of the existing centers. If causes of the problems and solutions are identified, such information will be useful in solving problems in the excising centers as well as in the planning and operation of economic centers in near future too. So, the purpose of this study is to assess the status of the performance and problems of present DECs and in recommending suitable measures towards equipment of marketing system in the country.

The overall objective of this study is to identify the present market status of DECs and the problems uncounted and to recommend solutions for identified problems from a national point of view. The specific research objectives are;

i. To identify different types of suppliers and traders of DECs as well as buyers arriving at the DECs.
ii. To study marketing activities such as grading, packing, transport, storage, pricing etc and the market management system.
iii. To identify problems faced by farmers, traders and buyers.
iv. To examine the appropriateness of the location, the layout and the design of DECs for trading activities.
v. To analyze the impact of the DECs on production and marketing of commodities in the surrounding areas and Suggest recommendation to solve the identified problems**.**

The questionnaire survey was completed in Nuwara Eliya, and Puttalam districts and the data analysis is in progress. During the study, numbers of public and private sector stakeholders were interviewed to gather necessary information. Report consists of six chapters.

Study : Impact of Dairy Development Programme in DZLiSPP

Milk collecting center at Kadawaramkulama in Anuradhapura District

A cattle shed granted by DZLiSPP in Monaragala District

Study: Vegetable Collection Centers in Moneragala and Badulla Districts: Impacts and Lessons

Sorting and grading of vegetable at Wangiyakumbura collection centre

Loading of vegetable from Ruwalwela Collection Centers

Study: Use of Plastic Crates as Fresh Vegetable and Fruits Packaging Material

HUMAN RESOURCES AND INSTITUTIONAL DEVELOPMENT DIVISION

Research Team

Dr. M.S. Senanayake	-	Head/HRID Division
Mr. S.M.A. Samarakoon	-	Senior Research Officer
Mr. H.M.J.K. Herath	-	Research Officer
Mr. N.S.B. Epakanda	-	Research Officer
Mr. P.C.J. De Silva	-	Research Officer

Scope of Trainings:

Training programs conducted by the Human Resources and Institutional Development Division are structured on the following:

1. Co-ordinating organizing and preparation of general training programs based on the needs of the farming community specially in order to implement the Mahinda Chinthana Development Programme.
2. Co-ordinating and preparation of training programs at the request of various organizations related to the agrarian sector as well as implement action Research Project
3. Providing training expertise to other requesting organizations.
4. Designing and conducting Research Projects under Mahinda Chithana Development programme.

Besides national and international trainings, seminars and workshops are organized and co-ordinated collaboratively with other national and international organizations.

The training programs conducted all over the country during the year 2012 by the Human Resources and Institutional Development Division are as follows:

1. Training Programme on Participatory Techniques (RRA, PRA & PCM) for Planning & Management of Rural/Community Development Projects, (No. of Programs conducted-07)

Training Team:	Mr. N S B Epakanda	Co-ordinator
	Dr. M S Senanayake	Head/HRID
	Mr. J K M D Chandrasiri	Head/APPED
	Mr. S M A Samarakoon	SRO/HRID
	Mr. R L N Jayatissa	RA/APPED
	Mr. S Epasinghe	RO/ARMD

Objectives:

i. The main objective of the training program was to enhance the knowledge of preparing the Participatory Community Action Plans of the officers who are directly involved in the Agrarian and Community Development Process.

ii**.** The other objective was to enhance the participants' knowledge on the concepts and methods used in Participatory Planning & Management.

Details of the Programs Conducted

	Participant	No. of Programs	No. of Participants
1.	Villagers in kevil village and Government Officers (02/02/2012)	01	172
2.	Villagers in Buduruwagala and Government Officers (19/04/2012)	01	148
3.	Field manager of Hadabima Authority (09-13/07/2012)	01	25
4.	Villagers in Gonnoruwa and Government Officers involved in Rural development (27-28/07/2012)	01	89
5.	The Government Officers directly involved in Rural Development activity (13-17/08/2012)	01	32
6.	District Planning Officers (15-18/10/2012)	01	29
7.	Newly appointed Officers to the Divisional secretariat in Padiyatalawa 28/11/2012 – 02/12/2012	01	30
8.	Planning Officers in Trincomallee District (17-21/12/2012)	01	45
9.	Planning Officers in Puttalam District (12-16/11/2012)	01	46
	TOTAL	**09**	**444**

2. Training Program on Marketing Extension (No. of Programs conducted-03)

Training Team: Dr. L P Rupasena – AD
Mr. N S B Epakande - RO/HRID } Co-ordinators
Dr. T A Dharmaratne Head/MFPAD
Mr. W H D Priyadharshana - RO/MFPAD
Mr. E A C Priyanka RO/MFPAD
Mr. N G P Samantha RO/MFPAD
Mr. W A N Wijesuriya RO/MFPAD
Mr. N S W Nawaratne SSO/HRID

This training program was designed to train the extension staff on marketing extension in order to promote market-oriented production system.

Principle Objectives were:

1. To enhance the participant's knowledge about the concepts on marketing extension and preparation of business plan;
2. To understand ways and means of delivering marketing extension among farmers;
3. To understand the use of market information on production and marketing planning

Details of the Programs Conducted:

	Participant	No. of Programs	No. of Participants
1.	The Officers in Export Agricultural Department (21-24/05/2012)	01	23
2.	Extension Officers in North western provincial Agricultural Department (18-20/06/2012)	01	41
3.	Extension Officers in North western provincial Agricultural Department (08-10/10/2012)	01	39
	TOTAL	**03**	**103**

3. Training Programme on Social Mobilization (No. of Programs conducted-04)

Training Team: Mr. S M A Samarakoon — Co-ordinator
Dr. M S Senanayake — Head/HRID
Dr. N S B Epakande — RO/HRID
Mr. P C J De Silva — RO/HRID
Mr. H M J K Herath — RO/HRID
Mr. N S W Nawaratne — SSO/HRID

This training program was mainly designed for Agricultural and Rural Development Officers who were involved in agrarian and rural development activities as social mobilizes.

Objective:
The objective of this training program was to enhance and strengthen participants'theoretical and practical knowledge on social mobilization and participatory development.

Details of the programs conducted

	Participant	No. of Programs	No. of Participants
1.	Field Officers in Agriculture and Livestock Sector in Sabaragamuwa Provincial Council (19-21/01/2012)	01	38
2.	The Officers of Export Agricultural Department (20-22/03/2012)	01	46
3.	The Officers of Export Agricultural Department (24-26/04/2012)	01	34
4.	The Development Officers in District secretarial in Plolnnaruwa (30/10/2012 – 02/11/2012)	01	39
5.	Training Officers in Rural Development	01	30

	Training and Research Institute. (10/12/2012 – 31/12/2012)		
	TOTAL	**05**	**187**

4. Training of Farmer Leaders on Strengthening of Farmer Organizations Anuradhapura, Ampara, Plonnaruwa District

Training Team: Dr. M S Senanayake — Co-ordinator
Mr. S M A Samarakoon — SRO/HRID
Mr. P C J De Silva — RO/HRID
Mr. N.S.B. Epakanda — RO/HRID
Mr. R.B. Dissanayaka — External Resource Person
Mr. Ahamad Maulana — External Resource Person

Farmer organization is only community based organization among other organizations in Sri Lanka which have legal power the Government Act to do various kinds of development activities in Rural Farming Community. There are about 14000-15000 farmer organizations formed in Sri Lanka as indicated by various sources. But only about 6000 farmer organizations actively work and are registered under the Agrarian Development Act. Among these, most of the organizations still could not identify their role in the farming community.

The Objective:
The objective of this program was to empower the farmer leaders and strengthen farmer organizations to get maximum benefits from the organizations to the farming communities to fulfill the Mahinda Chintana National Development programme.

The Topics Discussed:

i. Leadership for success of organization;
ii. Social Mobilization;
iii. Role of Farmer Organizations and their legal framework;
iv. Making aware that the records should be maintained and kept by the Farmer Organizations;
v. Nature Farming.
vi. Discussion of the main problem of Famer Origination

This program was aimed to train all farmer organization leaders in the relevant districts, specially the Chairman, Secretary, Treasurer and the Action Committee members. During the year 2012, this program was conducted only in two (03) districts, namely Ampara, Polonnaruwa and Anuradhapura.

According to official sources in the Agrarian Development Department in the Anuradhapura district, there are 1500 active farmer organizations in operation in the Anradhapura district. These were divided to train all officials of the farmer organizations. The total number of officials of the Anuradhapura district is 1500 x 3 and we trained them in 40 training programmes.

In the Anuradhapura district, prior to the Deyata Kirula 2012, we trained 4500 farmer organization leaders in the district. According to official sources, there are about 1500 farmer organizations throughout the district. Anuradhapura District Office of the Agrarian Development fully assisted the organization activities as well as providing resource persons for the training programs.

	Participant	No. of Programs	No. of Participants
1.	For Farmer Leaders (28/05/2012 – 01/06/2012)	05	581
2.	For Farmer Leaders (18/06/2012 – 22/06/2012)	10	804
3.	For Farmer Leaders Ampara (Tamil) (04-10/11/2012)	06	491
4.	For Farmer Leaders Ampara (Sinhala) (18-25/11/2012)	06	387
5.	For Farmer Leaders Polonnaruwa (Sinhala) (04-08/12/2012)	05	351
6.	For Farmer Leaders Plolonnaruwa (Sinhala) (24-28/12/2012)	05	390
	TOTAL	**37**	**3004**

3004 farmer organization leaders in the Ampara, Plolonnaruwa and Anuradhapura districts were trained by the above program during the year 2012 and it had empowered the 1850 farmer organizations in the above districts to get their maximum services to the farming community as well as for the rural development activities.

5. Training Programme on "Empowerment of Farmer Leaders on Traditional Farming Technology (Nature Farming)"

Training Team:	Dr. M S Senanayake	Co-ordinator
	Mr. S M A Samarakoon	SRO/HRID
	Mr. P C J De Silva	RO/HRID
	Mr. Thilak Kandegama	Chairman/Jathika Govi Samuluwa.

Nature Farming Training Program is specially designed for all kinds of farmers, farmer leaders field level officers who are directly involved in the agriculture sector, and the higher, middle level officers as well as policy-makers and political leaders.

Objective:

The objective of this one-day awareness training program was to provide participants with the knowledge in the following areas:
- Organizational Leadership;
- The farming system based on organic tradition
- Customs, ethics and values in the traditional indigenous agriculture
- The effect of astrology on agriculture

The Training Programs consisted of lectures, presentations, video films as well as discussions. There were very high responses from various level officials as well as farmer leaders. Within this year 2012, more than 14 training programs were conducted, and about 933 people were trained. Different kinds of groups of people participated in these programs such as Farmer Leaders, Field Level Officers, Administrative Level Officers, Teachers, University Students, Armed Force Officers and many other groups. Several districts were covered by this program; specially, Jaffna, Galle and Ampara. There were many farmers and farmer organizations experimentally started to implement this system of agriculture.

Details of the Programs Conducted:

District	Training Programs	Output (Officers and Farmers)
Jaffna	01	64
Galle	01	70
Ampara	12	809
TOTAL	**14**	**943**

There are demands for this program from various institutions and farming communities, but limited resources and time constraints limit the program.

Deyata Kirula 2013

Under the Deyata Kirula 2013, there are two kinds of training programmes held in Ampara, Trincomalee and Polonnaruwa districts:

1. Participatory Rural Appraisal (PRA). The Planning Officers of all the District Secretariats and the Divisional Secretariats in Ampara, Trincomalee and Polonnaruwa participated in these training programmes. They are all directly involved in Deyata Kirula Development activities in the districts. The financial support given by the Ministry of Agriculture under the Deyata Kirula 2013 and all organizing work were done by the District Secretariat and Divisional Secretariats in the respective districts.

2. Farmer Organization Empowerment Training Programme. The Farmer Leaders in all the Agrarian Development Centers in the Ampara and Polonnaruwa are involved in this training programme. 22 one-day training programmes were conducted in the

above 02 districts and around 2000 Farmer Leaders and Agricultural Research and Production Assistants were trained.

One-day training programme covered

Leadership

Social Mobilization and Empowerment

Legal Procedures and Role of Farmer Organizations

Documents maintained in Farmer Organization and Accounting

Problem discussion in all Farmer Organizations.

Buduruwagala Chili Cultivation Project

Research Team:	Mr. E.A.C. Priyankara	Co-ordinator
	Mr. Lalith Kantha Jayasekera	Director
	Dr. L.P. Rupasena	Addl. Director
	Dr. M.S. Senanayake	HD/HRID Division

Source of Funding : CIC Company

Objectives:

In the past the Buduruwagala village has played the role of a main chili cultivation area cultivating local variety called "Wanni" or "Hane'. Later on the villagers have adopted to developed varieties. However chili cultivation has been abandoned owing to various diseases affecting the cultivation . In this context the HARTI has undertaken an action research programme to promote cultivation of local chili (wanni) variety as a private public partnership project. Participatory rural Appraisal (PRA), Baseline survey and preparation of community Action Plan (AP) were done by the training division of the Institute and based on these information the project was started. By the end of 2012, Brain storming, formation of groups, awareness and training of farmers on nursery Management, Integrated Pest management disease control, time of planting and off season cultivation, marketing and storage have been completed. Further, distribution of chili seeds, fertilizer and pesticides and transplanting also have been completed. Heavy rains in the latter part of the December 2012 have affected the crop to some extend. Overall the project is successful so far and continued in to 2013.

Farmer organizations empowerment program (NATURAL FARMING) at Ampara (Henanigala, Dehiattakandiya, lihiniyagama) and Trincomalee districts

Training program on Social Mobilizing for newly recruited graduates at planning division, Polonnaruwa district in the Ministry of Economical Development on October 2012

Farmer Organizations Empowerment program was done at Gonnoruwa as the second part of the PRA and aimed to improve the socio-economical and legal knowledge of farmers of the whole village on August 2012

PRA Training programme for newly recruited graduates at planning division in Pollonnaruwa, August 2012 (Village of the PRA- Ulpathgama Villege Madirigiriya division)

OTHER ACTIVITIES

1. Publications & Presentations

Damayanthi M.K.N. Land Governance in Sri Lanka: What went wrong? : Economic Review, Oct/November 2012

Priyadarshana W.H.D. How to increase income of the farmers in Big Onion : GoviJanatha, Vol.15, January-March, 2012 ,HARTI, Colombo

Priyadarshana W.H.D. Jaffna red onion and good quality: GoviJanatha, Vol.15, January-March, 2012, HARTI, Colombo

Dr T.A.Dharmaratne Presented the paper titled of "Reconstruction of Agricultural marketing System in the Northern Province of Sri Lanka" at the International Research Conference, Faculty of Humanities and Social Sciences, University of Sri Jayawardanapura**,** in 8-9 November**,** 2012

Mr. W.H.D.Priyadarshana Presented a paper on titled of "Market Margin Analysis of Potato and Red Onion" at the 22nd Annual Research forum of Agricultural Economics Association held at Coconut Research Institute, Lunuwilla, on 22nd November, 2012

Mr. E.A.C.Preyankara Presented a paper on titling of "Konakumbukwew*a*": The Model Village Development Experiences of the HARTI, as one of the best rural development practice in Sri Lanka, at the CIRDAP Technical Committee meeting, held in June 2012 at HARTI, Colombo, Sri Lanka-

2. Serving in Expert Committees

Mr. M.M.M Aheeyar - Vice Chairman of "Lanka Rainwater Harvesting Forum"

Mr.M.M.M. Aheeyar - Steering committee member of "Sri Lanka National Water Partnership (Lanka Jalani)"

Ms. G.G. de. L. W. Samarasinha - Joint secretary of Young Scientist Forum of National Science and Technology Commission

Mr. M.M.M. Aheeyar - Rapporteurs of the Young Water Professional Symposium

Mr. M.M.M. Aheeyar - Member of panel of reviewers for the papers submitted for the annual symposium of Young Scientists Forum

Mr. J.K.M.D. Chandrasiri - Member of Joint Working Group (JWG) of MOU on Cooperation in Field of Agriculture Between Sri Lanka and India

Ms. C.P. Hathurusinghe - Member of Technical Evaluation Committee for the procurement of Food Items to the Armed Forces, Hospitals and Prison -

Dr. T.A.Dharmaratne Trust member of the Trust Board meeting of the Megoda Dedicated Economic Centre

Mr. W.H.D.Priyadarshana - Committee member of the food security committee (Divinaguma Programme) of the secretariats of senior ministers-

Ms. I.K.Edirisinghe & Ms. J.A.U.P Jayasinghe, Mr. E.A.C.Preyankara - Team leader, conducted and assisted the field survey on “Food Security Assessment in North, North central and Eastern Province in Sri Lanka” in Polonnaruwa, Anuradhapura and Batticaloa district that organized by the World Food Program and HARTI –

3. Special Reports

Mr. M.M.M. Aheeyar - “Climate change adaptation in water management for food security: Recent developments in Sri Lanka-A review of Existing Knowledge and Information” for UN- Asia Pacific Adaptation Network activity coordinated by the Ministry of Irrigation and Water Resources Management-

Mr. W.H.D.Priyadarshana - “Price behavior of paddy in Sri Lanka” the report submitted to the Ministry of Agriculture and Ministry of finance in March, 2012

Mr. W.H.D.Priyadarshana - “Use of plastic crates in Sri Lanka” the report submitted to the Ministry of Agriculture in January 2012

Mr. W.H.D.Priyadarshana - “Paddy surplus situation in Sri Lanka 2011-2012” the report submitted to the Minister of Agriculture in October, 2012

Ms. R.P. Vidanapathirana - “Marketing of Vegetables, Fruits and Pulses produce under the Divineguma Programme” submitted to the Ministry of Agriculture in May, 2012-

Ms. R.P. Vidanapathirana - “High Prices of Vegetables in June” report submitted to the Minister of Agriculture and the Secretary, Ministry of Agriculture in July, 201.

Mr. E.A.C.Priyankara- “Ability to Export and Process of Tomato” report submitted to the Ministry of Agriculture in November 2012.

Mr W.A.N.Wijesooriya - "Minimum Support Price of Paddy" a report submitted to the Ministry of Agriculture, April, 2012.-

4. Training

Dr. T.A.Dharmarathne - Conducted lectures on "Development Planning and Project Management" for the fourth year students in the special degree programme of Department of Economics of University of Sri Jayawardenapura in the academic year 2012

The Training activities of the MFPAD provided the Resource Persons[1] for conducting marketing extension training programs for officials of the agricultural extension services and that were the leading training activity of the MFPAD. The division provided the resource persons and produce relevant training materials for the following training programs in the year 2012.

Duration	Agency	Participants	No. of Participants
22 – 24 May 2012	Training Centre – in Department of Export Crops Development	Agriculture Instructors and other relevant field officers of the Department of Export Crops	35
18 – 20 June 2012	Wayamba Provincial Council in Kurunegala	Development officers, Program officers, Program Assistance and other officers	60
8 -11 October 2012	Provincial Department of Agriculture, Central Province	Agricultural officers, Agricultural instructors and other relevant field officers of the Matale, Kandy and Nuwara Eliya districts of Central Province.	40

[1] T.A. Dharmaratne, Mr. Duminda Priyadarshana , Mr. N. P.G. Samantha, Mr. W.A.N. Wijesuriya and Mr. E.A.C. Priyankara.

Mr W.A.N.Wijesooriya - Delivered a lecture on “Agricultural Forward Contracts “for the staff of Aitkin Spence Tourism Company Limited on 14th Feb, under the MLearning process.-

Ms. J.A.U.P Jayasinghe - Coordinated the consultative workshop on market Driven National Food Production plan that organized by National Food Security Committee, Ministry of Agriculture. (August-September 2012)

Mr. W.H.D.Priyadarshana - Delivered a lecture entitled “Organization and Operation of Tomato, Pinaple and Banana Market in Sri Lanka” on request of International Red Cross Organization in Sri Lanka on 15th June, 2012

5. **New Paper Articles and Radio Programme**

Mr. N.P.G.Samanta - Attended the live radio program of “Mahagedarin Govigedarata*”* on the topic of “Need of Market Oriented Agricultural Production Plan” in Sri Lanka Broadcasting Corporation, Colombo

Mr. W.H.D.Priyadarshana - Participated for 11 live radio program on “Marketing problems of major food commodities “in V Fm radio channel, at 4.00 pm to 4.30 pm, Sunday in throughout the year 2012.

Mr. W.H.D.Priyadarshana- Participated in a four live radio program called “Govegedering Mahagedarata” that conducted by Sri Lanka Broadcasting Cooperation in connection to the Imported price behavior and food market situation at 6.30 to 7.30 pm, in 2012.

Mr. E.A.C.Priyankara - Participated the “Govigedarin Mahagedarata*”;* the live radio program of the “Need of Market Oriented Agricultural Production System” in Sri Lanka Broadcasting Corporation

Mr W.A.N.Wijesooriya - Participated the “Govigedarin Mahagedarata”; the live radio program regarding on “*The* Importance of Food Security” in Sri Lanka Broadcasting Corporation, 10th May, 2012.

Mr W.A.N.Wijesooriya - “Recent trends of paddy/rice sector in Sri Lanka” the article prepared and published in “Dinamina” news paper” on 13th, July, 2012

Paper articles by **Mr. W.H.D.Priyadarshana**

Reduction of vegetable prices and its reasons Dambulla Dedicated Economic Centre" – "Ada" – on 02.03.2012
"High Procuments cost and transportation of vegetable" - Sunday Times 11.03.2011,
"What is the "price dissemination program" – Lankadeepa 13.02.2012
"New method for dissemination of market prices of vegetables" - Lankadeepa on 22.02.2012
"A Local solution for marketing problem of big onion" - Divaina 12.09.2012

Lecture on Post Harvest Technology by
Dr. Jil Gang Kim, Horticultural Specialist
National Institute of Horticultural and Herbal Science, Korea
15 October, 2012

Two consultative workshops have conducted for the development of Market Driven National Food Production (MDNFP) Plan in August &September 2012 with key officers from various ministries and departments both from the Central Government and Provincial Councils.

27th Technical Committee Meeting of the Centre on Integrated Rural Development for Asia and the Pacific (CIRDAP)

held from 13-16 June, 2012 in Colombo, Sri Lanka.

The Twenty-Seventh meeting of CIRDAP Technical Committee was held at Hector Kobbekaduwa Agrarian Research and Training Institute (HARTI), Sri Lanka from 13 to 16 June 2012.

Technical Committee members from all CIRDAP Member Countries, Professor Dr. Y. Kaida, IRD Expert (Japan) and the Secretary General, AARDO attended the meeting. Ambassador of the Islemic Republic of Iran and acting High Commissioner of Bangladesh in Sri Lanka were also present. Senior Government Officials from the Ministry of Agriculture, HARTI and representatives from the civil society organizations also attended the inaugural session.

Hon. Minister of Agriculture - Mahinda Yapa Abeywardena inaugurated the function as the Chief Guest and Mr. W. Sakalasooriya, Secretary, Agriculture, graced the occasion as the special guest.

DATA AND INFORMATION MANAGEMENT (DIM) UNIT

This unit comprises of two sections namely the Agrarian data bank and data processing section. The Data bank has been conceived of as a facility for social science research, planning and policy marking for development in the Agrarian sector. The basic principles, which underline the establishment of the data bank, are

i. To facilitate ready and equal access to the existing quantitative data, such data should be centrally located and the services should be automated.
ii. Such a centre serving as a coordinating agency for quantitative data would be in the best position to identify gaps in information and new data needs and activate generation of new series of data.
iii. Data collected through special survey and studies can be used for various purposes, in addition to those for which they were collected and thus, be valuable resources to social scientists both in the present and future and that the value of the data becomes enhanced when information regarding the characteristics of the data is also available.

The data base is ideally located within a social science oriented research environment, where researchers collect data from diverse sources and also generate information though their own studies.

The department of census and statistics, department of Agriculture, Department of customs and Central bank are major sources from which the data is currently collected.

The activities related to data bank fall in to following six categories.

01. Data collecting
02. Coding
03. Verification
04. Storing
05. Retrieving
06. Analyzing

The data collection is carried out from the above sources and their websites and text books published by relevant organizations. Some of data coming under prices of food commodities are collected from marketing and food policy division of HARTI.

During the year, the computer based information system was further implemented to run over stand alone environment and also for better performance. Data verification together regeneration of indices was carried out to increase the performance of the computerized data base. The following indicators were updated during the year.

Land use	:	Sown extent of paddy by mode of Irrigation -2010/11 M & 2011Y
	:	Cultivated extend of all highland crops -2010/11M & 2011Y
Production	:	Production of paddy -2010/11M & 2011Y
	:	Average yield of paddy by mode of Irrigation 2010/11 M & 2011Y
	:	Production of all other highland crops -2010/11 M & 2011 Y
	:	Population of cattle, Buffalo, swine, Goal & Sheep, Chicken and Duck (2011)
	:	Animals slaughtered for food -2010
Marketing	:	Retail prices of rice and all other food crops -2011
	:	Average wholesale price of rice and all other food crops -2011
	:	Imports of rice and all other food varieties-2010
	:	Export of rice and all other food varieties -2010
Income	:	Gross and net return per acre of paddy and other highland crops-2010 M and 2010 Y
	:	Net return to unit of capital in paddy and other highland crops Cultivation -2010 M & 2010Y
	:	Return to man day -2010 M & 2010 Y
Cost of production	:	Cost of production per acre of paddy and all other highland crops 2010 M & 2010Y

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 and agencies. During the year, the staff borrowed 998 books and 160 issues of journals for their reference requirements. The number of visitors to the library during the year was 226.

Acquisition of books, Journals and Reports

During the year 304 books were added to the collection, consisting of 69 purchased books, 106 bound volumes and 129 books received on complimentary basis and under exchange of publications program. A large number of periodicals, newsletters, annual reports from foreign and local institutions were also received on a complimentary or on an exchange basis. The library also subscribed to 08 foreign journal titles (which included 88 issues) and 08 local journal titles.

Library Services

Requests for information and documentation services as literature searches, reference services, current awareness services and photocopying services were provided to the research staff and also to the outside users.

Access to internet based information facilities have been further extended for the research staff with the ADSL facility in the Library.

Collection of newspaper articles on various subjects and indexing of the articles for quick reference were continued for the use of research staff and outside users.

Inter Library Cooperation (ILC)

The library is a member of the Agricultural Libraries Information Network (AGRINET) and the CARP Library functions as the focal point. Library continued to participate in AGRINET SDCP scheme (Selective Dissemination of Content Pages Data Base). Member libraries requested photocopies of 144 content pages of 8 journal titles and institute research staff requested 18 content pages of 03 journal titles from member libraries.

Supplied bibliographical references from the library collection to the following data-bases maintained by AGRINET:-

1. National Agricultural Bibliography (NAB)
2. Bibliography on Indigenous knowledge (with reference to Agriculture)

Digitization of institute publications

National Science Foundation had undertaken to digitize our institute's publications from 2012.12.11. The aim of the project is to establish an institutional e - repository and provide quick an enhanced online access to institute publications. The cost of the project will be borne by the NSF.

Publications Exchange Programme

Forty five (45) institute's publications (books/journals) were sent to under mentioned five (5) libraries on exchange basis.

1. Parliament Library
2. Postgraduate Institute of Agriculture
3. Socio Economic Center of Department of Agriculture
4. Department of Census and Statistics
5. Development Information Center of Department of National Planning.

Received thirty four (34) publications from five (5) libraries.

PUBLICATION UNIT

The Publication Unit of the Institute, which functions under the purview of the Additional Director is engaged in editing and publishing of Research Reports, Occasional Reports, Journals, Newsletter, Bulletins, Manuals, Brochures and other informational materials in all three languages.

A total of 09 research reports were released in Sinhala and English during the year. The details are as follows:

1. Production and Marketing of Other Field Crops: A Review
2. Major Dimensions of Contemporary Smallholder Agriculture Sector in Sri Lanka (ER 146)
3. A Study on Value Chain of Pineapple and Banana in Sri Lanka (ER 145)
4. Impact of High Food Prices on Sri Lankan Household (SR 47)
5. Ginger Cultivation in Sri Lanka: Constraints and Potentials (SR 50)
6. Governance of State Land in the Context of Decentralization: Case Study in Hambantota District (SR 51)
7. Socio-Economic and Environmental Impact of Mechanized Paddy Harvesting (SR 49)
8. Present Situation of Sri Farming in Sri Lanka (ER 147)
9. Present Situation of Tenant Farmers Study in Sri Lanka (SR 48)

In addition, following publications were also released during the year:

1. "*Govi Janathawa* – 2011 April - June, Vol. 15, No. 2
2. "*Govi Janathawa* – 2011 July – September, Vol. 15, No. 3

The Unit participated in the following exhibitions and organized workshops, International Conference/Workshop (CIRDAP), media conferences and other documentaries during the period concerned.

"*Dayata Kirula*" National Programme

National Farmers Week ("*Govi Sathiya*")

International Conference

Media /Press Conference

Field visit with Media Personnel

Eye clinic and Dry rations distribution program

Features Articles for News Papers

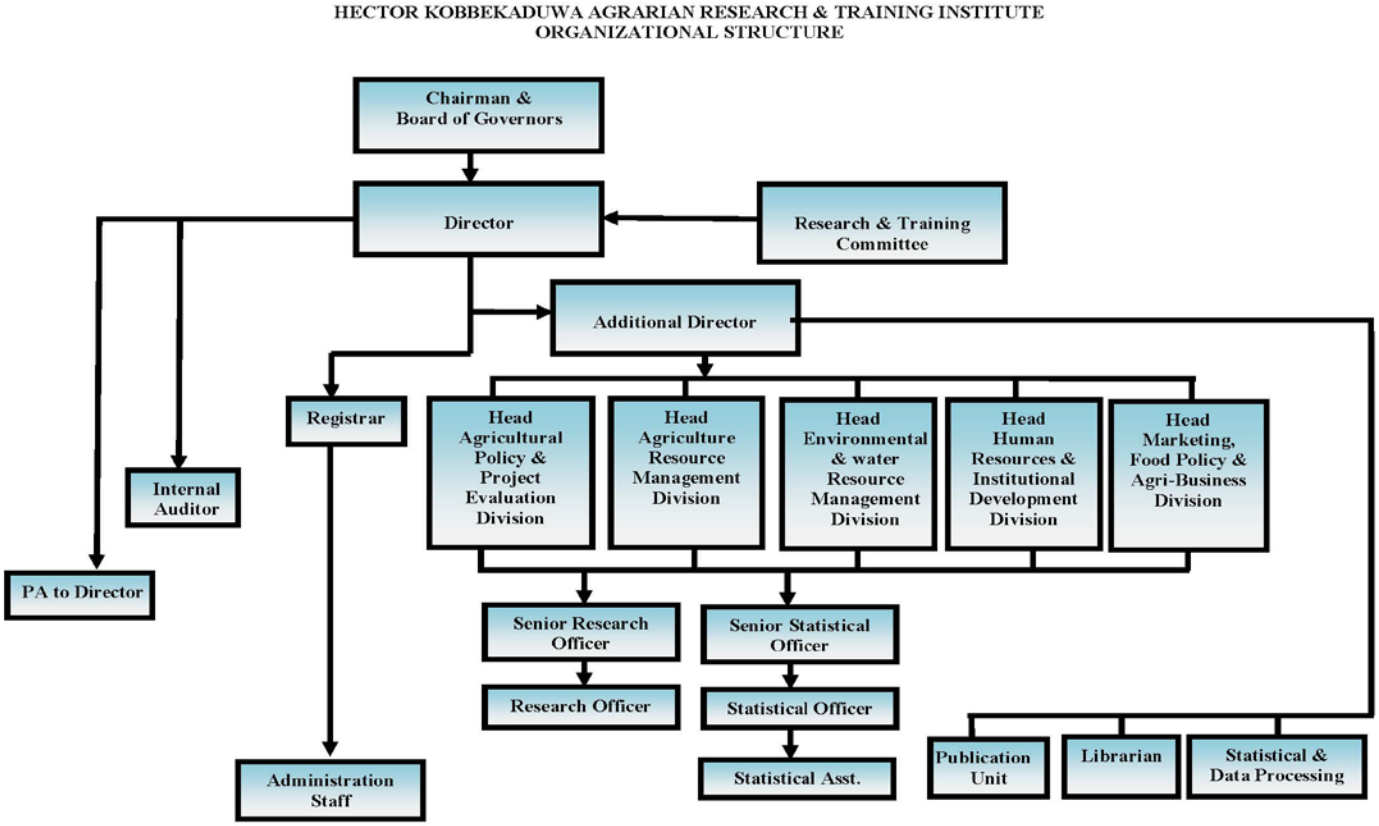
TV Programmes

-“*Me Dawaswala Business*” on “Sirasa”, March 17, 2012.

Radio Program (One hour programme)

- “*Mahagedarin Govi Gedarata*” (Live Programme)– Swadeshiya Sevaya on Tuesday, 10 January, 2012
- “*Mahagedarin Govi Gedarata*” (Live Programme) – Swadeshiya Sevaya on Thursday, 02 August, 2012
- “*Mahagedarin Govi Gedarata*” (Live Programme)–Swadeshiya Sevaya on Monday, 03 September, 2012

STAFF



AGE ANALYSIS OF STAFF

Age Analysis of staff as at 31st December 2012

Age Group	Managerial Staff	Research Staff	Statistical, Data Analyst Staff	Clerical & Allied	Minor Grades	Total
51-60	05	12	06	10	12	45
41-50	04	03	10	06	08	31
31-40	02	24	04	12	24	66
21-30	-	-	03	22	04	29
Total	**11**	**39**	**23**	**50**	**48**	**171**

Service Analysis of Employees as at 31st December 2012

Service (Number of Years)	Managerial Staff	Research Staff	Statistical, Data Analyst Staff	Clerical & Allied	Minor Grades	Total
Above 20	02	09	06	12	14	43
16-20	03	06	07	05	03	24
11-15	-	-	05	06	-	11
06-10	01	11	01	05	07	25
Below 05	05	13	04	22	24	68
Total	**11**	**39**	**23**	**50**	**48**	**171**

Staff Positions as at 31st December 2012

	Positions as at 31.12.2011	Termination, Registration During the year	Appointments	Positions as at 31.12.2012
Director	01	-	-	01
Additional Director	01	-	-	01
Head of Divisions	05	-	-	05
Research Staff	34	01	-	33
Administrative Staff	06	-	01	07
Senior Staff of Library	02	-	-	02
Data Development Unit	01	01	-	-
Computer Unit	01	-	-	01
Publication Unit	01	01	01	01
Statistical Staff	24	03	-	21
Technical Staff	01	-	-	01
Clerical, Secretarial & Parallel Grades	64	18	-	50
Operative & Allied Grades	51	01	-	48
Total	**192**	**23**	**02**	**171**

STAFF DEVELOPMENT

In 2012, The Institute has invested Rs. 1.2 Mn for staff development. 108 and 50 staff and non staff members had undergone local training and 08 staff members had opportunity in participating foreign training.

The following Research Officer was engaged in Post-Graduate studies.

Mr. W.H. A. Shantha	-	Doctoral Course Student at the Department of Global Agricultural Sciences, the Graduate School of Agricultural and Life Sciences, the University of Tokyo, Japan (12th April 2011 to 31st March 2014)

Participation at International Training Programmes/Seminar/Workshops/Conferences/Meeting etc.

Mr. P.C.J. de Silva – Research Officer attended the "Decentralized Governance and Service Delivery through Effective Human Resources Development Strategies" held in Hyderabad, India from 19 January – 28 February 2012.

Ms. K.P.I. Priyadarshani – Research Officer attended the "Decentralized Governance and Service Delivery through Effective Human Resources Development Strategies" held in Hyderabad, India from 19 January – 28 February 2012.

Dr. M.S. Senanayake – Research Associate attended the "New Dimension in Agricultural Extension Management for SAARC and African Countries" held in Hyderabad, India from 18 February – 29 February 2012.

Mr. M.A.C.S. Bandara – Research Officer attended the "Climate Change and Low-Carbon Development" held in Beijing, China from 4 June - 24 June 2012.

Mr. M.N.M. Nalim – Statistical Assistant attended the "Geo-Informatics Applications in Rural Development for Sharing Innovative and Best Practices' held in Hyderabad, India from 3 September – 12 September 2012.

Ms. R.P. Senadeera – Statistical Assistant attended the "Geo-Informatics Applications in Rural Development for Sharing Innovative and Best Practices' held in Hyderabad, India from 3 September – 12 September 2012.

Mr. W.H.D. Priyadarshana – Research Officer attended the "Post-Harvest Technology for Horticultural Crops" held in Seoul, Korea from 02 September -22 September 2012.

Mr. C.U. Senanayake – Information and Publication Officer attended the "ITC Strategy for Rural Development" held in Hyderabad, India from 5 November – 10 November 2012.

Participation at Local Training – Staff Officers

22 Research Officers attended the training course including 11 sessions (45 hours) on Data Analysis Using SPSS held in HARTI from March – November 2012

Mr. K.T.U. Kamburugoda – Accountant attended the "Internal Auditing" held in the Academy of Financial Studies from 22 March - 23 March 2012.

Six Research Officers attended the "Workshop on Ethics in Research" held in SLAAS on 20 April 2012.

Mr. S.T.G. Aravinda – Administrative Officer and Mr. C.U. Senanayake – Information & Publication Officer attended the "Concept of Power and Art of Leadership" held in National Institute of Labour Studies on 31 July 2012.

Ms. A.I. Pathirana – Actg. Registrar and Ms. N.C. Ekanayake – Internal Auditor attended the "Conflict Management and Grievance" held in the National Institute of Labour Studies from 23 July – 24 July 2012.

Ms. N.C. Ekanayake – Internal Auditor attended the "Seminar on Effective Internal Auditing" held in Skill Development Center on 19 July 2012.

Mr.K.T.U. Kamburugoda – Accountant, Ms. N.C. Ekanayake – Internal Auditor and S.A.K.M. Jayalath - Book Keeper attended the "Financial and Management Trainers and Capacity Builders" held in PRAG Service (Pvt) Ltd., on 21 August, 2012.

All Statistical Officers and Statistical Assistants attended the "GIS Training Programme" held in HARTI on 10 August 2012.

Ms. K.Y.P. Weerarathna - Asst. Librarian, Ms. Samanthri de Silva – Library Assistant and Ms. Chathurani Yapa – Library Assistant attended the "Library Training Programme" held in Sri Lanka Foundation Institute from 13 September – 14 September 2012.

Mr.K.T.U. Kamburugoda – Accountant, Ms. N.C. Ekanayake – Internal Auditor and S.A.K.M. Jayalath - Book Keeper attended the "Introduction to International Financial Reporting Standards" held in PRAG Service (Pvt) Ltd., on 18 September, 2012.

Fifteen Research Officers attended the "Stress Management for Better Performance at Your Work Place" held in SLAAS on 19 October 2012.

Six Research Officers attended the "Presentation Skill Development" held in Hotel Cinnamon Ground Room from 24 October – 25 October 2012.

Ms. K.Y.P. Weerarathna, Assistant Librarian attended the “Development & Management of Institutional Repositories using DSpace Open Source Software “held in NLDSB from 28th November-30th November 2012

06 Research Officers attended the “Re-imaging Development: An Ideas Exchange” held in Mihilak Medura, BMICH from 11th December- 12th December 2012

Participation at Local Training – Non Staff members

50 non staff members received local training on following subjects;

i. Suppliers and Stores Management for Store Assistants (02)
ii. Skill development for Secretaries (08)
iii. Pay Roll Management system for Account Assistants (02)
iv. Book keeping for Book keeper (02)
v. Library Assistant (02)
vi. Effective Communication for Management Assistant (06)
vii. Hospitality Training for Office Aids (23)
viii. Skill Training for Drivers (05)

HECTOR KOBBEKADUWA AGRARIAN RESEARCH & TRAINING INSTITUTE

BALANCE SHEET AS AT 31 DECEMBER 2012

		31.12.2012		31.12.2011	
ASSETS	Notes	Rs.	Rs.	Rs.	Rs.
Non Current Assets					
Property, Plant & Equipment	2	74,356,522.82		54,070,094.43	
Investments - Fixed Deposit	3	4,872,522.29		4,651,817.36	
Staff Development	4	17,294,840.42		21,618,550.52	
			96,523,885.53		**80,340,462.31**
Current Assets					
Stocks	5	4,253,145.45		4,178,865.66	
Debtors	6	20,386,538.17		21,852,636.01	
Deposits	7	764,570.00		662,070.00	
Prepayments	8	424,984.16		452,187.52	
Advance	9	355,808.35		607,441.12	
Cash at Bank	10	1,487,845.49		3,695,075.29	
Cash in Hand		10,000.00		10,000.00	
			27,682,891.62		**31,458,275.60**
Total Assets			**124,206,777.15**		**111,798,737.91**
EQUITY & LIABILITIES					
Capital & Reserve					
Government Grant-Capital	11	164,638,986.00		135,377,986.00	
Contribution from savings		1,102,372.79		1,102,372.79	
Capital Contribution from Ministry		2,342,835.00		2,342,835.00	
Project Capital Fund	12	15,177,206.09		15,177,206.09	
Capital Reserve		3,242,284.40		3,242,284.40	
Project General Reserve	13	16,301,977.47		16,301,977.47	
Incentive Fund		137,061.91		137,061.91	
Training Fund - Projects		396,261.91		396,261.91	
Incentive Fund - Institute share		2,161,902.03		2,161,902.03	
Net Deficit Carried Forward	14	(129,620,097.62)		(108,139,177.13)	
			75,880,789.98		**68,100,710.47**
LIABILITIES					
Non - Current Liabilities					
Gratuity Provision		30,596,875.00		28,134,437.50	
			30,596,875.00		**28,134,437.50**
Current Liabilities					
Creditors	15	10,606,717.79		7,886,183.79	
State Mortgage Bank – Housing Loans	16	-		-	
Accrued Expenses		7,122,394.38		7,677,406.15	
			17,729,112.17		**15,563,589.94**
Total Equity & Liabilities			124,206,777.15		111,798,737.91

These Financial Statements are in compliance with the requirements of the Finance Act, No.38 of 1971 and the Sri Lanka Accounting and Auditing Standards Act, No.15 of 1995.

....

K.T.U.KAMBURUGODA
ACCOUNTANT

The Board of Directors is responsible for preparation of these Financial Statements. Approved and signed on behalf of the Board of Directors

....

E.M.ABHAYARATNE
DIRECTOR

....

W.SAKALASURIYA
CHAIRMAN

HECTOR KOBBEKADUWA AGRARIAN RESEARCH & TRAINING INSTITUTE

INCOME STATEMENT FOR THE YEAR ENDED 31ST DECEMBER 2012

	Notes	31.12.2012 Rs.	31.12.2011 Rs.
INCOME			
Funds from General Treasury		109,581,750.00	106,302,500.00
Hostel & Conference Hall Charges	17	23,065,348.03	15,163,667.57
Funds From Outsiders		8,745,640.76	3,145,386.96
Sales of Publications		146,069.00	109,431.00
Interest on Investments		441,882.18	1,162,906.47
Interest on Staff Loan		1,031,136.04	941,653.02
Scholoship Debtors		230,000.00	1,435,594.52
Mobitel Income		162,065.63	-
Contribution From Projects	18	2,701,413.86	2,574,126.23
Miscellaneous Income	19	419,149.15	412,747.27
		146,524,454.65	**131,248,013.04**
EXPENDITURE			
Administration & Establishment Expenditure	20	(126,944,310.19)	(110,204,925.49)
Depreciation		(12,352,433.96)	(7,170,854.53)
Research and Training Activities - General		(15,774,464.93)	(23,985,536.27)
Research and Training Activities - Funded		(8,745,640.76)	(3,145,386.96)
Bad Debt over/(under) Provision		175,740.68	272,203.57
Net deficit from operations before Financing cost		**(17,116,654.51)**	**(12,986,486.64)**
Financing Cost		(40,555.88)	(23,250.00)
Net deficit before Taxation		(17,157,210.39)	(13,009,736.64)
Taxation		-	-
Expenditure over income		**(17,157,210.39)**	**(13,009,736.64)**

.... CHAIRMAN

.... DIRECTOR

.... ACCOUNTANT

HECTOR KOBBEKADUWA AGRARIAN RESEARCH & TRAINING INSTITUTE

CASH FLOW STATEMENT FOR THE YEAR ENDED 31ST DECEMBER 2012

	Notes		Rs.
Cash flow used in operating activities			
Net deficit for the year			(17,157,210.39)
Adjustment for			
Depreciation		12,352,433.96	
Prior Year Adjustment - Staff Development Amortisation		(4,323,710.10)	
Investment income		(441,882.18)	
Provision for Gratuity		4,234,185.00	
			11,821,026.67
Operating loss before working capital changes			**(5,336,183.71)**
Working Capital Changes			
Stocks		(74,279.79)	
Debtors		1,466,097.84	
Deposits		(102,500.00)	
Prepayment		27,203.36	
Advances		251,632.77	
Creditors		2,720,534.00	
Accrued expenses		(555,011.77)	3,733,676.41
Cash used in operating activities			**(1,602,507.30)**
Payment of Gratuity			**(1,771,747.50)**
Net cash used in operations			**(3,374,254.80)**
Cash Flow from Investing Activities			
Purchase of property, plant & equipment		(32,638,862.35)	
Investment income		441,882.18	
Staff Development cost		4,323,710.10	
Net cash used in investing activities			**(27,873,270.07)**
Cash Flow from Financing Activities			
Government Grant capital		29,261,000.00	
Project Capital Fund		0.00	
Incentive Fund- Projects		0.00	
Incentive Fund Institute share		0.00	
State Mortgage Bank – Housing Loans		0.00	
Net cash from financing activities			**29,261,000.00**
Net Decrease in Cash & Cash equivalents			(1,986,524.87)
Cash & Cash Equivalent at the Beginning of Period	I		8,356,892.65
Cash & Cash Equivalent at the End of Period	II		6,370,367.78
Notes:			
Cash & Cash Equivalent		1	11
		01.01.2012	31.12.2012
Investment - Fixed deposits		4,651,817.36	4,872,522.29
Cash at bank		3,695,075.29	1,487,845.49
Cash in hand		10,000.00	10,000.00
Total		8,356,892.65	6,370,367.78

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 31ST DECEMBER 2012

	Government Grant Capital	Contribution from Savings	Capital Contribution from Ministry	Project Capital Fund	Capital Reserve	Project General Reserve	Incentive Fund	Training Fund Projects	Incentive Fund - Institute Share	Accumulated Revenue	Total
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
01/01/2012	135,377,986.00	1,102,372.79	2,342,835.00	15,177,206.09	3,242,284.40	16,301,977.47	137,061.91	396,261.91	2,161,902.03	(108,139,177.13)	68,100,710.47
Funds received from Treasury	29,261,000.00	-	-	-	-	-	-	-	-	-	29,261,000.00
Prior Year Adjustment - Staff Development Amortisation	-	-	-	-	-	-	-	-	-	(4,323,710.10)	(4,323,710.10)
Income & Expenditure	-	-	-	-	-	-	-	-	-	(17,157,210.39)	(17,157,210.39)
Total	164,638,986.00	1,102,372.79	2,342,835.00	15,177,206.09	3,242,284.40	16,301,977.47	137,061.91	396,261.91	2,161,902.03	(129,620,097.62)	75,880,789.98

Notes to the Financial Statements
For the year ended 31st December 2012

1. Accounting Policies

1.1 General

The Financial statements are prepared under the historical cost convention in accordance with generally accepted accounting principles.

30/05/2013.

1.2. Valuation of Assets

(i). Property, Plant & Equipment

a) Depreciation - Property, Plant and Equipment are stated on the balance sheet at cost less accumulated depreciation. 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) The Institute has acquired the Palwehera Circuit Banglow and a Motor Vehicle (bearing no 65 – 1280) during the year 2012, but valuation has not been done as at 31.12.2012.

(ii). Debtors

Debtors are stated at the amounts at which they are expected to be realized. Adequate provision has been made in the accounts for bad and doubtful debts. Provisions for doubtful debts are made at 4% of debtors balance as at the date of reporting.

(iii). Stocks

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

1.3. Gratuity

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

The institute had changed the policy of Gratuity Provision in year 2011. The institute had decided to provide Gratuity for all employees per annum basis.

1.4. Income and Expenditure Account

The income over expenditure (expenditure over income) 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. Charging all expenses incurred in the year.

1.5. Staff Development

Staff Development expenditure has been decided to amortize over the period of 5years under the equal basis.

1.6. Funds from Outsiders.

Funds from outsiders have been taken to accounts from 2012 and adjust previous year accordingly.

Note 2

Schedule of Depreciation of Assets - 31.12.2012

Particulars	Cost as at 01.01.2012 Rs.	Additions/ (Disposals) during the Year 2012 Rs.	Total Cost as at 31.12.2012 Rs.	Acc/Dep as at 01.01.2012 Rs.	Dep.for the year 2012 Rs.	Accu/Dep. ended 31.12.2012 Rs.	Net Value as at 31.12.2012 Rs.
Land	1,716,667.00	-	1,716,667.00	-	-	-	1,716,667.00
Buildings	34,376,979.28	2,179,629.59	36,556,608.87	11,440,094.59	913,915.22	12,354,009.81	24,202,599.06
Equipment/Furniture	35,068,750.26	4,994,412.19	40,063,162.45	22,572,180.27	1,670,722.85	24,242,903.12	15,820,259.33
Computer Installation	20,271,412.58	657,290.40	20,928,702.98	16,597,618.13	671,037.97	17,268,656.10	3,660,046.88
Motor Vehicles	24,454,448.06	24,201,040.00	48,655,488.06	13,448,031.06	8,559,300.00	22,007,331.06	26,648,157.00
Books	10,668,359.71	606,490.17	11,274,849.88	8,428,599.41	537,457.91	8,966,057.32	2,308,792.56
Welfare Equipment	3,734.55	-	3,734.55	3,733.55	-	3,733.55	1.00
Total	126,560,351.44	32,638,862.35	159,199,213.79	72,490,257.01	12,352,433.96	84,842,690.97	74,356,522.82

Fully Depreciated Vehicle List

Vehicle Nos.	Vehicle Nos.	Vehicle Nos.	Vehicle Nos.	Vehicle Nos.
1).40 - 3933	3).32 - 0455	5).51 - 4324	7).32 - 5590	9).53 - 3287
2).53 - 3309	4).30 - 4342	6).32 - 4670	8).32 - 4671	

HECTOR KOBBEKADUWA AGRARIAN RESEARCH & TRAINING INSTITUTE
NOTES TO THE FINANCIAL STATEMENTS

	2012	2011
	Rs.	Rs.
3 HARTI Investments - Fixed Deposits		
Fixed Deposits at State Mortgage & Investment Bank	4,605,736.64	4,385,031.71
Call Deposit	266,785.65	266,785.65
	4,872,522.29	**4,651,817.36**

4 Staff Development

Balance as at 01/01/2012	21,618,550.52	20,691,565.02
Expenses incurred during the year	-	926,985.50
Prior Year Adjustment - Staff Development Amortisation	(4,323,710.10)	-
	17,294,840.42	**21,618,550.52**

5 Stocks

Publication and journals	1,918,637.00	1,825,682.00
Consumables	1,903,599.95	1,967,087.66
Sales Center	430,908.50	386,096.00
	4,253,145.45	**4,178,865.66**

6 Debtors

Staff Debtors

Housing Loan	2,361,943.59	2,361,943.59
Consolidated loan	16,840,755.12	19,070,701.42
Special Advance	4,550.00	2,550.00
Festival Advance	170,127.50	134,627.50
Due from displaced persons	6,723.32	6,723.32
Salary Advance	-	265,931.81
Scholarship debtors	20,665,859.97	20,895,859.97
	40,049,959.50	**42,738,337.61**
Other Debtors		
Investment income receivable	274,871.58	175,533.12
In-Services Training Institute	6,806.38	6,806.38
K N U Gunasekara	12,100.00	12,100.00
Ministry of Agriculture	85,527.16	109,738.31
Recoverable from resigned employees	482,272.45	389,677.10
Sarasavi Book Shop	4,272.25	4,272.25
Insurance claim	-	173,700.00
Debtors - Welfare Society	99.00	99.00
R - 405 (G - 30) -Dayata Kirula 2012-Konekubukwewa Model Village	-	163,731.31
Mobitel Income Receivable	12,414.71	-
Upatissa Paranamana - Caterer	18,462.01	-
Debtors - Miscellaneous	123,332.65	-
R - 427-The Success of modified FFS Apporach as an Extension Tool in Promoting Rain-fed Upland Farming : DZ - LiSPPS Experience and Lessons Learned	48,714.47	-
R - 421-Vegitable collection Centres in Badulla and Monaragala Districts : Impacts & lessons	35,902.13	-
R - 426-Forward Sales Contracts (FCS) Related to Other Field Crop Sector;Experience & Lessons from Failure in Badulla and Kurunegala Districts: Dry Zone Livelihood Support and Partnership Programme	78,078.52	-
R - 425-Investment Impacts of Microenterprise Component of the dry Zone Livelihood Support & Partnership Project	19,686.98	-
R - 439-Training Programme Buduruwagala	430,132.44	-
T - 366-Training Programme-"Deyata Kirula 2013"	46,287.74	-
T - 366 - 11-Training Programme "Deyata Kirula"	13,500.28	-
T - 366 - 111-Training Programme "Deyata Kirula"	37,874.06	-
T - 366 - 1V-Training Programme "Deyata Kirula"	121,862.25	-
	1,852,197.06	**1,035,657.47**
	41,902,156.56	**43,773,995.08**
Less:		
Provision for bad & Doubtful Debtors	(849,758.42)	(915,125.41)
Provision for debtors (Bond)	-	(110,373.69)
Provision for scholarship	(20,665,859.97)	(20,895,859.97)
	20,386,538.17	21,852,636.01

7 **Deposits**

Fixed - Caterer	70,000.00	70,000.00
Fixed - Cashier	1,500.00	1,500.00
Sundry - Filix Pereira and Sons	-	147,500.00
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 - MG Samsons & Sons	250,000.00	-
	764,570.00	**662,070.00**

8 **Pre-Payments**

Vehicle Insurance	424,984.16	452,187.52
	424,984.16	**452,187.52**

9 **Advances**

Purchase Advance	271,558.35	49,904.40
Advance for Travelling	84,250.00	-
Other Advance	-	557,536.72
	355,808.35	**607,441.12**

10 **Cash at Bank**

Bank of Ceylon - A/C No - 2323293	330,261.67	690,848.92
Bank of Ceylon - A/C No - 2323292	578,457.76	756,139.72
Bank of Ceylon - A/C No - 2323317	522,904.32	38,863.07
Bank of Ceylon - A/C No - 2323315	56,221.74	2,209,223.58
	1,487,845.49	**3,695,075.29**

11 **Government grant - Capital**

Balance as at 01/01/2012	135,377,986.00	126,207,761.00
Capital contribution during the year	29,261,000.00	9,170,225.00
	164,638,986.00	**135,377,986.00**

12 **Project capital fund**

Balance as at 01/01/2012	15,177,206.09	15,177,206.09
	15,177,206.09	**15,177,206.09**

13 **Project general reserve**

Balance as at 01/01/2011	16,301,977.47	16,301,977.47
	16,301,977.47	**16,301,977.47**

14 **Net deficit**

Balance as at 01/01/2012	108,139,177.13	95,129,440.49
Prior Year Adjustment - Staff Development Amortisation	4,323,710.10	-
Expenditure over income as at 31.12.2012	17,157,210.39	13,009,736.64
	129,620,097.62	**108,139,177.13**

15 Creditors

Tender deposit refundable	121,462.20	133,462.20
Canteen deposit refundable -Upatissa Paranamana	50,000.00	50,000.00
Salary Advance	1,984.41	-
Upathissa Paranamana -	-	827.15
Unpaid expenditure	354,356.50	139,170.21
Payable to Resigned Employees	154,320.08	154,320.08
Employees and restaurant deposit	13,084.50	13,084.50
Stamp Fees Payable	7,375.00	7,175.00
Retention	85,087.41	85,087.41
U & H Wheel Servises	261,340.80	-
Mobitel (Pvt) Limited	269,070.00	-
Pansilu Offset Printers	2,500.00	642,539.27
Creditors against projects		
Book on Rice Production	484,521.92	501,269.66
R - 300 - A comparative analysis of Samurdhi & non Samurdhi	234,996.50	234,996.50
R - 322 - Proposal to study the Feasibility for Establishment of a Dedicated Economic Centre at Wariyapola	26,119.08	26,119.08
R-324 - Economic Viability of Rice Processing at Household level	-	-
R - 332 - Study on Improvement of Pola Markets in Western Province	1,535,452.72	1,535,452.72
T - 294 - FIVIMS	217,946.87	217,946.87
R-318 - Food Security & Vulnerability Information Mapping System in Sri	22,450.07	22,450.07
R- 334 - Feasibility Study - Proposed Economic centre at Balangoda	24,048.32	24,048.32
T - 228 - Workshops on "Strategies for Development Work in Conflict Affected Areas"	613,680.24	613,680.24
R-330- Feasibility Study - Proposed economic centre at Kurunduwatta	163,057.26	163,057.26
R - 356 - Pre-Feasibility Study of the proposed Moneragala, Siyambalanduwa Sugar Project	163,945.94	163,945.94
T - 226 - Programs for Community based Leaders on Creating Awareness of Advocacy Messages	387,068.94	387,068.94
T-239 - In-Country Training Programme on Agricultural Marketing Extension	461,285.95	461,285.95
T-236 - Consulative Workshop on Sri Lanka Water Development Report	41,749.05	41,749.05
T-232 - Training Programme	443,078.38	443,078.38
T-245 - Regional Training Programme on New and Emerging Challenges in Rural Development for Addressing Poverty Alleviation	889,205.68	889,205.68
R - 371 - Pre-Feasibility Study of the Proposed Sugar Project in Anuradhapura and Trincomalie Districts	691,562.20	691,562.20
R - 410-Food Securty Assessment in the Nothern and Eastern Provinces	1,951,579.21	-
R - 417-Impact of Small Scale Irrigation Rehabilitation and Water Management Under Dry - Zone Livelihoodf support and Partnership Programme	193,030.41	-
R - 418-Impact of Promoting Micro Finance and Income Generation Activities under Dry Zone Livelihood Support and Partnership Programme: Lessons to be learnd	36,078.07	-
R - 429-Impact of Dairy Development Sub Project Dry-Zone Livelihood Support and Partnership Programme	113,954.74	-
R - 431-Impact of Convergence of the Project interventions All 4 Districts Dry - Zone Livelihood Support and Partnership Programme	198,558.05	-
R - 430-Study Proposal on Big Onion Value Chains in Anuradapura and Monaragala Districts Dry-Zone Livelihood Support and Partnership Programme	59,126.70	-
R - 428-Multiple Effects and Impact of Small Farmer(FFS BASED) Seed Potato Production in Badulla District Dry-Zone Livelihood Support and Partnership Programme	92,802.64	-
T - 366 - 11-Training Programme "Deyata Kirula"	-	-
T- 329 - Training Programme	59,680.06	62,443.22
T -338 - Training Programme	181,157.89	181,157.89
	10,606,717.79	7,886,183.79

16 State Mortgage Bank - Housing Loans

Balance as at 01.01.2012	-	1,629,394.41
Setoff against Housing Loan Account	-	(1,629,394.41)
Balance as at 31.12.2012	-	-

(State Mortgage Bank - Husing loan amounting to Rs. 1,629,394.41 in year 2010 setoff against Housing Loan balance in year 2011 - Initially the institute started Housing loan scheme by depositing 2 million and the bank had released loans exceeding the initial deposited amount)

17 Auditorium, Conference hall & Hostel charges

Auditorium & Conference hall charges	9,135,910.88	6,683,607.34
Hostel charges	13,929,437.15	8,480,060.23
	23,065,348.03	**15,163,667.57**

18 Project income

Administrative cost & project income	**2,701,413.86**	**2,574,126.23**

19 Miscellaneous income

Bungalow fees and room rent	72,414.00	72,414.00
Palwehera Room rent	45,000.00	15,700.00
Computer income	11,383.64	4,206.85
Tender fees	-	2,500.00
Other income	290,351.51	317,926.42
	419,149.15	**412,747.27**

20 Administration & establishment expenditure

Salaries - Permanent staff	47,679,077.48	42,688,999.42
Investigator salary	6,933,611.20	8,677,301.16
EPF	8,184,253.83	7,589,918.83
ETF	1,643,774.46	1,518,557.27
Overtime	2,955,544.51	2,436,268.72
Holiday pay	21,844.10	26,363.04
Cost of Living & Other Allowance	26,133,895.64	19,329,236.56
Gratuity	4,234,185.00	3,049,565.36
Travelling & Subsistance	1,052,099.83	1,103,991.18
Foreign Travel Allowance	-	374,760.07
Stationery and office requisites	1,746,912.72	1,682,093.48
Fuel and lubricants	2,176,493.11	2,058,860.01
Uniforms	131,313.00	313,208.40
Vehicle repairs	2,956,283.68	2,774,475.21
Maintenance of Building	1,400,633.56	1,174,449.65
Plant machinery and equipment repairs	1,398,314.80	864,323.49
Telephone charges	1,576,168.78	1,379,382.27
Electricity	5,289,762.12	4,430,650.23
Water bills	854,949.30	974,249.53
Taxes to local authorities	274,888.80	274,888.80
Postal charges	452,500.00	530,573.00
Transport	362,105.00	358,440.00
Legal activities on defaulters	100,000.00	120,000.00
Newspapers	225,212.00	281,558.40
License and insurance	1,560,465.01	674,425.82
Security charges	1,749,751.21	1,796,395.54
Cleaning services	533,970.98	542,293.91
Laundry services	603,670.00	328,470.00
Audit fees	329,646.00	300,000.00
Medical charges	15,250.00	292,352.93
Canteen charges	150,020.00	110,304.00
Miscellaneous expenses	445,786.09	604,917.16
Legal charges	60,000.00	2,680.00
Welfare	599,937.00	456,063.00
Advertisement	299,527.20	155,447.20
Interview charges	6,000.00	7,000.00
Board of governors	256,000.00	157,000.00
Printing & Publication	757,753.56	190,809.85
Entertainment	7,446.00	5,119.00
Dissemination of information	381,710.00	377,910.00
Cost of Sales - Publications	134,272.50	101,623.00
Staff Development	1,101,281.72	-
Audit & Management Fee	48,000.00	-
Technical Advice for Vehicles	120,000.00	90,000.00
	126,944,310.19	110,204,925.49

21 **Cash and cash equivalents at the beginning of the period**

Investment - fixed deposits	4,651,817.36	6,122,285.65
Treasury bills	-	8,699,757.00
Cash at bank	3,695,075.29	4,411,904.99
Cash in hand	10,000.00	10,000.00
	8,356,892.65	**19,243,947.64**

22 **Cash and cash equivalents at the end of the period**

Investment - fixed deposits	4,872,522.29	4,651,817.36
Cash at bank	1,487,845.49	3,695,075.29
Cash in hand	10,000.00	10,000.00
	6,370,367.78	**8,356,892.65**

23 **Contingent Assets & Liabilities**

Scholarship debtors

Dr.RB Senakarachchi
Court order on 17.08.2006 to pay back Rs.3,421,942.70 (appealed the case by defendent (next calling date 03.04.2013))

Dr.G Wickramasinghe
Court order on 24.11.2010 to pay the total amount (Appealed by defendant (pending))

Ms.R Athukorala
Pending at court no 05 (full bond value recovered from the gurantors)

Ms.V.Sathgunarajah
Pending at court no 06 (recovering from the guranters Mr.RLN Jayathissa in monthly installments of Rs. 5,000.00)

Mr.PDJ Ananda.
Pending court no 05 (Full bond value recovered from the Guranters)

Dr.P.I.Thudawe
Settled before the court on 06.11.2007 to pay back Rs.2,445,547.46 (paid back monthly installment basis and balance to be recovered is Rs. 92,539.87)

Dr.WG Somarathna
Settlement before the Board of Governers Pay back monthly installments of Rs.10,000.00

Ms.ACK Sepala
Court order on 21.06.2006 to pay back the total amount (Appealed by the defendant date 08.06.2012)

Mr.MS Gowrisanker
Action has been taken filled the case by the Attorney Generals Dept.(Bond value is been recovered by Mr.RLN Jayathissa in monthly installment of Rs.5,000.00)

Ms.SD Aberathna
Court case is laid by due to non availability of the present address.

Dr.ULJJ Perera
Court case is laid by due to non availability of the present address

Mr.PDR Kumarasiri
Pending at district court No. 09

Cases against the HARTI
Ms. Shirani Wanigasinghe
Ms. Shirani Wanigasinghe was appealed to the colombo High Court against the order of Labour Tribunal.
(Case No. HCALT/96/2010)
Vehicle Accident - Mr. J.Chandrawansa
Plaintiff sued against the Institute in Monaragala District Court (Case No.4269M)

විගණකාධිපති දෙපාර්තමේන්තුව
கணக்காய்வாளர் தலைமை அதிபதி திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT

මගේ අංකය / எனது இல / My No: AF/D/HARTI/FA/2012
ඔබේ අංකය / உமது இல / Your No:
දිනය / திகதி / Date: 21 August 2013

The Chairman

Hector Kobbekaduwa Agricultural Research and Training Institute

Report of the Auditor General on the Financial Statements of the Hector Kobbekaduwa Agricultural Research and Training Institute for the year ended 31 December 2012 in terms of Section 14(2)(c) of the Finance Act No. 38 of 1971

The audit of Financial Statements of the Hector Kobbekaduwa Agricultural Research and Training Institute for the year ended 31 December 2012 comprising the balance sheet as at 31 December 2011 and the income statement, statement of changes in equity and cash flow statement for the year then ended and a summary of significant accounting policies and other explanatory information was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Section 13(1) of the Finance Act, No. 38 of 1971 and Section 24 of the Hector Kobbekaduwa Agricultural Research and Training Institute Act, No. 5 of 1972. My comments and observations which I consider should be published with the Annual Report of the Institute in terms of Section 14(2)(c) of the Finance Act appear in this report. A detailed report in terms of Section 13(7)(a) of the Finance Act was furnished to the Chairman of the Institute on 31 May 2013.

1:2 Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Generally Accepted Accounting Principles and for such internal control as the management determines is necessary to enable the preparation of financial statements that are free from material misstatements whether due to fraud or error.

අංක 306/72 පොල්දූව පාර, බත්තරමුල්ල , ශ්‍රී ලංකාව
இல. 306/72, பொல்துவ வீதி, பத்தரமுல்லை இலங்கை
No.306/72, Polduwa Road, Battaramulla , Sri Lanka

දුරකථනය / தொலைபேசி / Telephone: 2887028 - 34
ෆැක්ස් අංකය / பக்ஸ் இல / Fax No.: 2887223
ඉලෙක්ට්‍රොනික් තැපැල් / ஈ- மெயில் / E-mail.: oaggov@sltnet.lk

1:3 Auditor's Responsibility

My responsibility is to express an opinion on these financial statements based on my audit. I conducted my audit in accordance with Sri Lanka Auditing Standards. Those Standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgements, including the assessment of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Institute's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Institute's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of financial statements. Sub - sections (3 and 4) of Section 13 of the Finance Act, No. 38 of 1971 give discretionary power to the Auditor General to determine the scope and the extent of the audit.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my qualified audit opinion.

1:4 Basis for Qualified Opinion

My opinion is qualified based on the matters described in paragraph 2.2 of this report.

2. Financial Statements

2:1 Qualified Opinion

In my opinion, except for the effects of the matters described in paragraph 2:2 of this report, the financial statements give a true and fair view of the financial position of the Hector Kobbekaduwa Agricultural Research and Training Institute as at 31 December 2012 and its financial performance and cash flows for the year then ended in accordance with Generally Accepted Accounting Principles.

2:2 Comments on Financial Statements

2:2:1 Accounting Deficiencies

The following observations are made.

(a) Depreciation in respect of the motor vehicles valued at Rs.2,701,868 eliminated in the years 2008 and 2009 had been computed for the year under review and as such depreciation amounting to Rs.540,374 had been overstated in the financial statements.

(b) The value of 06 motor vehicles costing Rs.3,063,404 and 02 motor cycles costing Rs.267,000 which had been fully depreciated, had not been revalued and brought to account.

(c) A deposit of Rs.2,000,000 had been made in a State Bank in the year 1993 without the approval of the Treasury for the purpose of granting housing loans to the employees. That deposit and the interest thereon had not been shown in the financial statements of the year under review.

(d) Income receivable for the hostels and the seminar hall for the year under review amounting to Rs.305,637 had not been brought to account.

(e) The capital grants amounting to Rs.40,861,902 shown under the capital and reserves in the financial statements had not been amortized.

(f) The value of the motor vehicle taken over by the Institute in July 2012 amounting to Rs.1,118,919 had not been brought to account.

2:2:2 Unreconciled Control Accounts

A difference of Rs.8,467,482 was observed between the balances shown in the financial statements and the value shown in the schedules and the Registers of Fixed Assets presented in relation to the following items of account.

Item of Account	Value according to the Financial Statements	Value according to the Schedules	Value according to the Registers of Fixed Assets	Difference
	Rs.	Rs.	Rs.	Rs.
Consumable Goods	1,903,599	1,778,999	--	124,600
Sales Centres	430,908	442,944	--	12,036
Computer Accessories	3,660,047	--	3,002,757	657,290
Motor Vehicles	26,648,157	--	20,472,629	6,175,528
Furniture and Equipment	15,820,259	--	14,322,231	1,498,028
				8,467,482

2:2:3 Accounts Receivable and Payable

The following observations are made.

(a) Action had not been taken for the settlement of the unpaid expenses amounting to Rs.75,191 existing under the creditors from the year 2009.

(b) The advances for purchases granted to officers from the year 2010 to June of the year under review amounting to Rs.74,634 and the travelling advances amounting to Rs.84,250 granted to 07 officers in May of the year under review had not been settled even by the end of the year.

2:2:4 Lack of Evidence for Audit

The evidence indicated against the following items of account had not been furnished for the examination of the items.

Item of Account	Value	Evidence not made available
	Rs.	
Time Deposits	255,285	i. Confirmation of Balances ii. Schedule of Time Deposits
Closing Stock	4,253,145	i. Stock Books ii. Board of Survey Reports
Deposits with the Ceylon Electricity Board	406,250	i. Reason for making the Deposit ii. Document relating to the Deposit
Buildings	24,202,599	i. Board of Survey Reports ii. Register of Fixed Assets
Furniture and Equipment	15,820,259	Board of Survey Reports
Computers and Accessories	3,660,047	Board of Survey Reports
Motor Vehicles	26,648,157	Board of Survey Reports
Library Books	2,308,797	Board of Survey Reports

2:2:5 Non-compliance with Laws, Rules, Regulations and Management Decisions

The following non-compliances were observed.

	Reference to Laws, Rules, Regulations, etc.	Non-compliance
(a)	Hector Kobbekaduwa Agricultural Research and Training Institute Act, No. 5 of 1972.	Even though the Board of Directors should comprise 21 members representing different subject areas, the Board of Directors consisted of 19 members as at the end of the year under review. The Board of Directors did not include members representing the Ministry of Lands and the Department of Rural Development Sectors.
(b)	Paragraph 3.13 of the Public Administration Circular No. 41/90 of 10 October 1990.	Even though a certificate from a qualified Mechanical Engineer in a Department, Corporation or a Board in the Public Sector should be obtained for confirmation of the reasonableness of the quotations submitted for carrying out the internal repairs of motor vehicles, it had not been so done in connection with the expenditure amounting to Rs.636,343 incurred in carrying out repairs to 08 motor vehicles of the Institute.
(c)	Government Procurement Guidelines Sections 4.3.1, 5.4.4(i), 8.9.1 and 8.12.2	The Circuit Bungalow at Pelvehera had been repaired at a cost of Rs.1,362,354 and the Institute had not obtained bids and performance bonds in that connecting while an agreement had not been entered into between the Institute and the contractor. Even though the mobilization advance should not exceed 20 per cent of the

estimated amount in terms of the Procurement Guidelines, a mobilization advance amounting to 51 per cent of the estimated amount had been paid to the contractor.

An estimate prepared by an authorized officer was not available for the work. The measurement reports certified by such an officer had not been obtained for making payments.

2:2:6 Transactions not supported by Adequate Authority

The Accountant had decided to write off the sum of Rs.21,618,551 spent upto the year 2011 for implementing the training programmes, scholarships and workshops arranged for the improvement of the knowledge and skills of the officers of the Institute in 05 ensuing years from the year under review. Nevertheless, the formal approval had not been obtained for the sum of Rs.4,323,710 written off against the profit in the year under review.

3. Financial Review

3:1 Financial Results

According to the financial statements presented, the operations of the Institute for the year under review had resulted in a deficit of Rs.17,157,210 as compared with the corresponding deficit of Rs.13,009,737 for the preceding year. The deterioration of the financial results for the year under review by a sum of Rs.4,147,473 as compared with the preceding year had been due to the write off of the employee development expenditure amounting to Rs.4,323,710 against the profit for the year under review.

3:2 Analytical Financial Review

Different stages of the financial results of the year under review and the preceding year are given in the following table.

	For the year ended 31 December		Variance	
	2012	2011	Favourable	Adverse
	Rs.	Rs.	Rs.	Rs.
Income	146,524,455	131,248,013	15,276,442	--
Expenditure (excluding Finance Expenses)	163,641,109	144,234,499	--	19,406,610
Net Operating Profit before Payment of Interest	17,116,655	12,986,487	4,130,168	--
Current Assets	27,682,892	31,458,276	--	3,775,384
Current Liabilities	17,729,112	15,563,590	--	2,165,522

4. Operating Review

4:1 Performance

The Institute had started 38 projects in the year under review and together with 07 projects of the preceding year, 45 projects had been implemented in the year. Out of that 30 projects had been completed in the year 2012 and 02 projects of the year 2011 and 13 projects of the year 2012 had not been completed.

4:2 Management Inefficiencies

The following observations are made.

(a) In the registration of suppliers as at the beginning of the year, a garage at Matara had been registered as a supplier without checking the qualifications. An additional cost had to be incurred in sending the motor vehicles to that garage and getting them back.

(b) The Institute had not taken action for the recovery of the value of 187 library books not returned by 10 officers who are no more in service in the Institute at present. The number of missing books had been 163.

(c) The Reports of Boards of Survey for the year 2012 had not been furnished to audit even by 10 May 2013. Appropriate action had not been taken on the 162 shortages and excesses included in the Board of Survey Reports for the year 2011.

(d) As the legal action against 06 scholarship recipients who had followed postgraduate courses in foreign universities and breached the bonds had been taken after delays ranging from 32 to 63 months the bond value recoverable as at 31 December 2012 amounted to Rs.11,900,868.

(e) Prior to the approval of the Scheme of Recruitment of the Institute, officers had been appointed on acting basis for periods exceeding two years to the major posts of Registrar, Assistant Registrar (Programmes) and Editor of the Institute. Those posts had not been filled even after the approval of the Scheme of Recruitment on 06 February 2012.

(f) The Institute had granted leave with pay for 02 years and paid a sum of Rs.1,874,757 as course fees for two officers in the year 2006 for following local postgraduate courses and those officers had not completed the relevant courses within the specified periods. Even though the Institute had extended the course period up to 31 December 2012 the officers had failed to complete the courses during that period as well.

4:3 Operating Inefficiencies

The unspent sum of Rs.9,286,136 remaining after the conclusion of 25 Research Projects and Training Programmes financed by external institutions had been shown continuously under the creditors in the financial statements without taking action for the settlement.

4:4 Uneconomic Transactions

Even though a Biogas Project had been implemented at a cost of Rs.636,690 without carrying out a feasibility study for reducing the cost of gas for the restaurant, the project had failed completely as it could not generate the expected quantity of biogas.

4:5 Identified Losses

A motor vehicle of the Institute released to the line Ministry had met with an accident in the year under review and had been repaired at a cost of Rs.230,700. Action on this loss in terms of Financial Regulations 104-109 had not been taken.

4:6 Assets without Legal Ownership

Even though a Double Cab Motor Vehicle of the World Food Programme Project had been given to the Institute on 25 July 2011 action had not been taken for the transfer of the legal ownership of the motor vehicle to the Institute.

4:7 Resources of the Institute given to other State Institutions

The following matters were observed.

(a) Two motor vehicles of the Institute handed over to the line Ministry on 26 April 2012 had not been recovered even by 31 December 2012.

(b) A Driver of the Institute had been attached to the line Ministry with effect from 27 August 2011 and the Institute had paid a sum of Rs.247,580 as the salary for the year under review.

4:8 Staff Administration

The following observations are made.

(a) Despite the availability of external candidates with the qualifications required for the post of Administrative Officer of the Institute in accordance with the Scheme of Recruitment, an internal candidate of the Institute who had not fulfilled the minimum qualifications had been appointed to that post.

(b) The salary scales of the Director and the Accountant of the Institute should have been revised in accordance with the Scheme of Recruitment approved by the Department of Management Services on 06 February 2012. As it had not been so done, overpayments of salaries amounting to Rs.174,520 comprising Rs.132,310 and Rs.42,210 had been obtained by the Director and the Accountant respectively.

5. Accountability and Good Governance

5:1 Budgetary Control

The variance between the data of the budget for the year under review and the actual data ranged between 22 per cent to 111 per cent, thus indicating that the budget had not been made use of as an effective instrument of management control.

6. Systems and Controls

Deficiencies in systems and controls observed during the course of audit were brought to the notice of the Chairman of the Institute from time to time. Special attention is needed in respect of the following areas of control.

(a) Repair and Maintenance of Motor Vehicles
(b) Construction Works
(c) Staff Administration
(d) Payment of Advances
(e) Inventory Control

H.A.S. Samaraweera
Auditor General

2.2 Expressing views on Financial Statements

2.2.1 Accounting Deficiencies

(a) Rs.2,701,868.00 being the value of condemned vehicles in 2008 and 2009 has neither been included in the Assets Register of 2012 nor calculated depreciations of those vehicles for 2012. (Annexure 1)

Accordingly our computation of depreciations correct.

(b) These vehicles are still at running condition, and the value of which have been calculated for 2012. However revaluation has not been done due to inadequacy of time, and action will be taken to revalue of those vehicles and account their value for 2013.

(c) This is a Revolving Fund valued Rs.02 Mn and deposited in 1993 in the State Mortgage & Investment Bank and maintains upto date by the Institution with the Board of Directors' approval for providing housing loans to the employees. The Bank has issued loans exceeding Rs. 02 Mn in 2010. This being the responsibility of the bank, no action was taken to include this in the Revolving Fund plus interest in accounts of this Institution. Anyway as debtors are continuously paying their loan installments plus interest, this deposits is to be updated in the future and action will be taken to account the relevant deposit and interest in2013.

(d) The sum of Rs.305,637.50 herein included should be corrected as Rs.249,977.50. The reason for this is the double calculation of Rs.52,785.00 received from the Ministry of Agriculture, Rs.977.50 received from Miss.J.D.S.Wathsala and Rs. 1897.50 received from Mr.I.P.P.M.wijesinghe. However out of the sum of Rs.249,977.50 stated as not accounted in 2012, Rs.243,857.50 has been accounted in 2013 as an income of the Institution. The sum of Rs.6120.00 being the balance of the above amount has yet to be recovered and action will be taken to recover and account the same. Details of money to be recovered are as follows;

(I) Evergreen Water Management Systems (pvt) Company	2,310.00
(ii) Sustainable Energy Authority	2,875.00
(iii) Mr. Dammika Salamom	935.50
	6,120.00

(e) Rs.40,861,902.00 being capital grants stated as a sum to be written off has not been accounted in 2012 which are grants accumulated from time to time since 1972 and it is difficult to trace even documents necessary for examining as to how these grants were received .However these grants have been identified separately, details of which are given in Annexure 02. Having duly identified those grants, action will be taken to write off the same.

(f) According to Note No.1-2(i)(b) of the final accounts 2012, this vehicle has been taken over, and action will be taken to correct the accounting defect caused due to non accounting of the value of this vehicle and action will be taken to correct the same in preparing final accounts for 2013

2.2.2. Non reconciled Control Accounts

The difference among motor vehicles, computer accessories and consumable goods has been reconciled and corrected in accounts.

The difference among sale centre, furniture and equipments are being further examined following which reconciliation and corrections will be made.

2.2.3 Accounts Receivable and Payable

(a) The sum of Rs. 75,191.00 being all non paid expenditure have been settled during 2013, details of which are as follows;

Name	Amount Rs.	Journal / Voucher No.
Mr.P.C.J.D.Silva	3,926.00	P 64
Mr.W.H.A.Shantha	2,945.00	P 64
Ms.H.A.N.Nilmini	1,075.00	J/V 282
Mr.M.Nithyakumara	14,560.00	J/V 282
Ms.H.K.G.Rishankamali	4,250.00	J/V 282
Mr.A.M.Gunawardena Banda	44,805.00	J/V 489
Mr.A.P.Pradeepkumara	3,630.00	J/V 282
	75,191.00	

(b) The sum of Rs.84,250.00 being travelling allowances made available for projects have been settled in March 2013.

The sum of Rs. 74,634.00 stated as procurement advances has been made available to purchase goods for stores, of which a sum of Rs. 70,604.00 has been settled. The balance amount of Rs. 4,030.00 was given to Mr.Chamith, former Maintenance Officer of the Institution to purchase goods from the Building Material Corporation and action will be taken to recover the same.

2.2.4 Non availability of evidence for auditing

Subject of Accounts	Value
Call Deposits	Rs. 255,285.00

Call deposits are limited only to Rs. 1,500.00 while the remaining value has been identified as accounting defects in 2009 and 2010, the value of which has been corrected in 2013 through journal entry No.497 & 498.

Final Stock

Subject of Accounting	Value
Final Stock	Rs. 4,253,145.00

This final stock consists of,

Publications & Magazines	Rs.1,918,637.00
Consumable Goods	Rs. 1,903,599.95
Sale Centre	Rs. 430,908.50
	Rs. 4,253,145.45

Inventories made available for publications & magazines were reconciled with the balance of accounts, and it has been submitted with financial statements in the form of final account schedules. There appeared difference between consumable goods and sale centre books. The difference of Rs.124,600.00 appeared in respect of consumable goods have been identified as follows;

Value of items not included in the Inventory	Rs. 49,837.00
Value that should be corrected at valuation of items	(Rs. 3,707.42)
Shortage of the former Store Keeper	Rs. 78,470.66
	Rs. 124,600.24

Action will be taken to recover the shortage of the former Store Keeper amounting to Rs. 78,470.66 from salaries payable to him (Rs. 115,504.66) upon completion of the inquiry.

At the moment it is difficult to identify as to how difference at the sale centre caused and take action to submit details thereof at the end of the probing.

Delays caused in submitting Board of Survey reports and those reports were submitted for auditing on 11.11.2013.

Ceylon Electricity Board (CEB) deposit Rs. 406,250.00

This is a refundable deposit placed in the CEB as a security by the Institution in 2001, a certified copy of which is attached as Annexure 03

Buildings

Fixed Assets Register has been updated.

Board of Survey reports in respect of furniture, equipments, computers & accessories and library books were submitted for auditing on 11.11.2013. Board of Surveys were not conducted in 2012 on motor vehicles and action will be taken to conduct same this year.

2.2.5 Inconsistency with Laws, /Regulations and Management decisions

(a) In terms of the Agrarian Research and Training Institution (Amendment Act) No.29 of 1981 only one representative should be nominated when two or more subjects have been assigned to one Minister. As the Ministry of Land and the Ministry of Land Development have now been joined as one Ministry, only one representative has been appointed all totaling 20 representatives. The Ministry of Agriculture has been informed in writing on 24.06.2013 for appointing a representative for the Ministry of Rural Development. Accordingly present Director Board consist of 19 representatives.

(b) Out of the vehicle repair value of Rs. 636,343.00 stated at audit query, five vehicles (Rs. 232,393.00) have been repaired with Technical Officer's recommendations, but not obtain the same for the remaining three vehicles(Rs. 403,950.00), the details of which are as fc'lows;

51-4324 Rs. 93,423.00

Whereas not approved by a Technical Officer of the Institution, only the amount recommended and approved by Technical Officer of the Sri Lanka Insurance Corporation has been paid. That sum was reimbursed by the Insurance Corporation.

CR-0111 Rs. 76,000.00

Break repair was made on the vehicle Reg. No. CR-0111, but due to inadvertency not obtained the certificate of the Technical Officer. However a certificate has been obtained from the driver of the vehicle that repairs were carried out properly.

PD-6402 Rs. 230,700.00

Repairs were made on damages caused by an accident at Anderson Road Junction in the Kohuwala Police Division. Action is being taken to obtain compensation while an inquiry is to be held to determine the responsibility of the accident.

(c) It appears that deficiency pointed has been caused. As per Procurement Guideline Section 5.4.9,bid performance guarantee has not been obtained for these repairs as Procurement Limit having not exceeded Rs.2.0 Mn. As regards maintenance activities of the Institution, normally the estimates are prepared by Maintenance Assistant. Before commencing repairs to circuit bungalow, Palvehera the Director of the Institution examined and personally satisfied with the estimates prepared by Maintenance Assistant. These repairs were effected as per Circular No.PFD/MPD/03/04 and former Director's letter dated03.01.2012 as it had to be undertaken urgently to provide lodging facilities to officers participating at " Deyata Kirula" Exhibition.

2.2.6 Transactions not confirmed by sufficient authority;

Funds have been received from 1988 to 2011 for staff development under Provision for capital expenditure. Therefore this has been indicated in the balance sheet under non current assets.

This being not a physically existing asset, action has been taken to write off the same from accounts in five equal installments amounting to Rs.4,323,710.10 commencing from 2012.

3. Financial Review

3.1 Financial Result

Agree with the operational result indicated.

3.2 Analyzed Financial Review

Increased of Income

The reason for this increase is going up the income received from hostels and seminar halls, and enhancing of the research activities to be implemented utilizing funds received from outside institutions.

Increase of expenditure

The reason for this has been the increase of expenditure related to the payments of emoluments to employees.

Increase of operational losses

The main reason for this is the reduction of expenditure on staff development by Rs. 4,323,710.10 in 2012due to taking action to write off expenditure on staff development by five years.

Current Assets

Reason for this has been the reduction of financial & debtor Balances.

Current Liabilities

Main reason for this has been increase of Project Debtors.

4. Operational Review

4.1 Performance

The reason for getting delayed 11 studies out of 13, implementation of which commenced in 2012 is entrusting additional responsibilities to Researchers. Accordingly priority had to be given for 10 IFAD studies and 7 studies entrusted by the Ministry of Agriculture. Upon completion of IFAD studies, a sum of Rs.3.5 Mn. was received by the Institute. All studies have been completed by December 2013. Reason for delays of research undertakings and progress thereof are submitted herewith. (Annexure 4)

4.2 Management Inefficiencies

(a) It appears that qualifications have not been examined. At present this garage has been deleted from the list of registered garages for repairing of vehicles.

(b) details on 187 books.

The number of books, value of which recovered	136
The number of books on which action has been taken to recover the value (Mr. SMA Samarakoon)	48
The number of books already found (Mr.G.P.Batuwitage)	03
	187
	======

Approval of the Board of Directors has been received on 23.05.2012 to write off 163 books lost. (Board Minute No.320)

(c) The Board of Survey reports for 2012 have been submitted for auditing on 11.11.2013. Deficiencies referred to in the audit query with regard to inclusions in Board of Survey reports in 2011 are not actual deficiencies, and they are goods handed over to stores and those exchanged between divisions of the Institutions.

(d) Taking legal action against 06 scholarship recipients who violated agreements got delayed due to long term effort ranging from 22-48months towards reaching consensus. Court Verdicts in respects of 03 scholarship recipients have already been obtained in favour of the Institution, the value of which totaling Rs.9.8 (82%) Million. However petitions have been filed in the Court of Appeal against those verdicts, and petitions are now being heard. Due to difficulty in finding present addresses of the remaining three individuals, the case is pending, details of which are given in Annexure 05.

(e) Post of Registrar

Applications were invited through press notice published in all three languages on 11.08.2013 to fill the vacant post of Registrar remained vacant for long time. Accordingly the process that is related to recruitment for the post is continuing.

Assistant Registrar (Programmes)

Following the calling of applications through press notice published in all three languages on 03.062012 recruitment for the post of Assistant Registrar (Programme) has been made effective from 11.01.2013.

Editor

Applications were invited through après notice published in all three languages on 03.06.2012. However due to unavailability of any applicants who fulfilled required qualifications for this post, another press notice was published in the same manner 14.07.2013 and it has been decided to hold the interview on 27.11.2013, following which recruitment is to be made for the vacant post.

(f) The value of the guarantee offered in respect of two officers amounted to Rs. 1,874,757.00. They were informed to repay the value of the guarantee as they were unable to complete the course within the specified period of time. Subsequently they have submitted an appeal to the Board of Directors for its sympathetic consideration. Accordingly at the Board meeting held on 26.06.2013 decision was taken to extend the period for completing the course up to the end of November 2013.

4.3 Operational Inefficiencies

The balance amount of money received from outside sources for implementing research and training programmes were utilized for purchasing of vehicles for the Institution and encashment of non-availed medical leave. However at present those funds are not availed with the Institution. Hence correction will be made in preparing accounts for 2013.

4.4 Uneconomical Transactions

It has been proved through field investigations carried out by Waste Management Authority in 2013 that the project is not a failure. The second phase of the project implemented for correcting short-comings identified at the investigation (failure of meter, non-availability of safety cover and non-modernization of pipe system)is now nearing completion.

4.5 Unidentified Losses

A committee has been appointed as per FR 104 to determine the extent of the loss/damage, the report of which will be obtained in due course.

A case has been filed relating to this accident, and action will be taken to claim compensation from the Insurer depending on the final verdict of the court.

4.6 Assets without legal ownership

A letter has been sent to the General Treasury requesting funds for registration of this vehicle, and as soon as he provisions are received action will be taken to transfer the legal ownership of the vehicle.

4.7 Resources of the Institution made available to other state institutions.

(a) These two vehicles have been released for duties in the Ministry.

(b) Mr. Thennakoon, driver is reinstated in this institution from 21.08.2013.

4.8 Staff Administration

(a) An inquiry is being held on this matter and suitable action will be taken following the receipt of the relevant report.

(b) The former registrar has instructed to pay salaries to the former Director appointed on 21.05.2010 according to the existing salary scale, and salaries have been paid accordingly (Annexure 06 & 07) Salaries are being paid to the present Director according to new scheme of recruitment. Action will be taken to pay salaries to the Accountant placing him on a suitable salary point of the scale (above 5 increments) so as to be equal his salary to the amount he was growing at his previous place of work.

5. Accountability and good governance

5.1 Budgetary control

The Institution has taken every efforts to maintain the actual expenditure within the limit of budgetary expenditure. However due to unavoidable reasons in certain instances there may b e variations between actual data and budgetary data. Votes/Heads included in the above query has have shown disparities on the following reasons:

Overseas Travel Expenses

As no overseas travels occurred during the year 2012, anticipated expenditure has not been expended.

Vehicle repairs

Increased expenditure is due to repairing of vehicles unexpectedly.

Gratuity

Exceeding of vote limit is due to increasing of year-end allocations.

Medical charges

Whereas allocations were made for entering medical cost reimbursement scheme it was not materialized which result in this saving.

Expenditure on Board of Directors

Savings due to non-attendance of Board members for all meetings.

Legal charges

Saving of this Vote is due to cases against the Institution having remained unsettled at the end of 2012.

Entertainment expenditure

Reduction of entertainment expenditure is due to obtaining food and beverages from the Institution's canteen at concessionary rates.

6. Systems & Control

(a) Repair and maintenance of vehicles

A copy of Pay in Voucher on vehicle repairs from 2013 onwards will be attached to the file while adhering to provisions of Procurement Guideline & Circular Instructions.

(b) Constructions

Terms and Conditions of the procurement Guideline are being followed.

(c) Staff Administration

Action will be taken to recruit suitable officers adhering to specified procedures.

(d) Advance Payment

It was not possible to settle travelling expense advances made available for research activities assigned to this Institutions through IFAD project until fund is received from that Institution and action will be taken to settle same in 2013 upon the receipt of these money. Due procedures will be followed in the payment of advances in future.

(e) Inventory Controlling

Inventories are updated and reconciliation carried out regularly.