ANNUAL REPORT
2018

OUR VISION

To become the most sought-after and most outstanding educational institution dedicated to entrepreneurial agriculture and sustainable natural resource management in Sri Lanka

OUR MISSION

To establish a widely acclaimed and accessible outcome-based educational system dedicated to academic excellence, high impact research, creative enterprise, strategic industry partnerships and constructive community engagement to produce well-rounded and well-grounded graduates with global perspectives for globally competitive agriculture and sustainable natural resource management in Sri Lanka

Director's Review:

Sri Lanka is predominantly an agricultural country and majority of the rural population is engaged in farming for their livelihood. However, because of the low productivity in the agriculture sector, and lack of focus on value added agricultural products at a commercial level, the country still depends on imported food stuff to meet the domestic requirement. One of the main factors attributed to this situation is the knowledge gap existing in the chain of stakeholders, in particular, the farming community.

The vision of the University of Colombo Institute of Agro-technology and Rural Sciences (UCIARS) is to fill this knowledge gap constructively; with a view to fostering farming community through enhancing awareness, education and creating a forum for exchange of know-how that would eventually lead the way for self-sufficiency in agricultural produce.

The UCIARS is the first ever University Institute which thinks out of the box and offers diplomas, higher diplomas and degrees of agro-technology for agro-entrepreneurs in the country. The course modules that the UCIARS offers have drawn particular attractions over the traditional education system that exists in the universities in the country and helps to narrow the knowledge gap in the agriculture sector in order to ensure the sustainability of the agriculture sector.

With a view of enhancing farm productivity, the UCIARS provides high quality tissue cultured banana saplings and other planting materials to the farming community. Another important milestone of the UCIARS is its technical input in promotion of mango (Tom-EJC) for export market, strengthening the Government's drive in poverty eradication.

As the Director of the UCIARS, it is with profound gratitude that I recall the excellent support and guidance extended to us by our Vice Chancellor in every steps in our journey keeping the motto 'quality first'. My thanks also go to all those who contributed in whatever the manner possible, towards achieving the objectives of the UCIARS.

Prof.S.Subasinghe
Director
Institute for Agro-technology and Rural Sciences
University of Colombo
(UCIARS)

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GOALS AND OBJECTIVES

Goal 01: Enhanced production of graduates with the requisites attributes

Objectives

1.1 Increase intake to exiting degree and new vocational and degree courses by 10% annually

1.2 Increase the number of multiple-entry from 0 to 3

1.3 Enhanced blended mode of delivery in all academic offerings

1.4 Reduce casualties at the examination by 10% annually

1.5 Restructure and develop curricula with more space (10%) for development of soft skills

1.6 Strengthen student-centered learning and outcome-based education and assessment

1.7 Increase Agri-business established by students and alumnai

1.8 Improve the study resources and training facilities

Goal 02: Increased industry partnerships and international cooperation

Objectives

2.1 Establish mutually reinforcing links with industry for training and research collaboration

2.2 Appoint the "movers and shakers" of industry and promising entrepreneurs as Visiting Staff

2.3 Establish academic cooperation and research collaboration with reputed foreign universities

2.4 Establishment of an "Industrial Research Chair", UNESCO Chair, SARRC Chair etc.

Goal 03: Enhanced academic profile and impact of research and outreach

Objectives

3.1 Provide postgraduate training for 80% the staff by 2022

3.2 Recruit senior staff up to 50% to the new academic cadre by 2022

3.3 Conduct high impact research with regional focus and publish findings in indexed journals

3.4 Commercialize research findings and facilitate technology transfer

3.5 Provide new technology and information services through ICT to the community

Goal 04: Improved infrastructure facilities and amenities

Objectives

4.1 To upgrade and expand infrastructure facilities by 20% annually

4.2 To upgrade and expand research facilities by 20% annually

4.3 Establishment of Techno-park by 2019 for teaching, research and learning facility

4.4 Increase staff and students accommodation facilities by 50% by 2020

4.5 Improve public amenities and recreation by 50% by 2020

4.6 Green space/Green technology

Goal 05: Improved governance and financial management/discipline and reduced financial dependence

Objectives

5.1 Capacity building of academic, administrative and technical staff (Strengthening the competencies of the Academic and Non-academic staff)

5.2 Introduce a fully computerized integrated MIS by 2019

5.3 Reduce audit queries and improve accountability by 10% annually

5.4 Improve economy, efficiency and effectiveness (3Es) [outsourcing, rationalization and sharing of resources (Physical, human and financial)]

5.5 Increase net income by 10% annually through (training, advice, consultancy, information services, patents, licenses, sale of elite planting material)

Special Events in 2018

1. Development of a Mushroom Bag Filling Machine.
   The machine has been developed by Mr. G. Pathum Hashan an undergraduate in the seventh batch as a manually operated machine with 25% efficiency.

2. The institute has developed an instant poridge with Karapincha, Traditional rice and spices mixing an appropriate amounts.

3. Production of a dual purpose machine for curing of bio wrappers and fabrication of bio plates with Banana leaves

4. Opening of New Lecture Hall Building and the Elementary Laboratory
   A well facilitated lecture hall accompanying an elementary laboratory was opened on 6th November 2018 by Senior Professor S. Subasinghe, the Director, of the Institute for Agro technology and Rural Sciences.

5. A 30 Ac ft tank has been built to store water for the development activities of newly developing farm land of 40Ac and for practical activities of students in the farm practice course.

6. Two acres of paddy field was constructed and first paddy crop was harvested.

7. Opening of the canteen
   Since a Canteen for students was a vital need it was ceremonially opened on 6th November 2018 by Professor Priyani Paranagama, the Director, of Institute of Indigenous Medicine.

8. Laying Foundation Stone for Staff Quarters
   The staff quarters are a desperate need for IARS since it was located in a remote area in Hambantota District. Hence, the foundation stone was laid by Senior Professor, Ranjith Mahanama, the Dean of the faculty of Science and Senior Professor, S. Subasinghe, the Director of the Institute for Agro technology and Rural Sciences, on 06th November 2018.

9. Foundation Stone was laid for a Buddha Shrine at UCIARS premises on 6th November 2018 by Dr (Mrs). N.P. Vidanapathirana, Head/Department of Agro-technology.

10. Construction of Dairy shed, Dryer house and Mushroom shed were started.

Special Events in Department of Agro-technology (2018)

1. The degree of Bachelor of Agro-technology was awarded for thirteen (13) under graduates at the convocation held on 24th July 2018 at the BMICH.

2. The new academic year of IARS was started on 20th January 2018 and 192 new students were enrolled for the Nine Batch. The students were ceremonially welcomed by the institute and Senior Professor Lakshman Dissanayake, the Vice – Chancellor, University of Colombo participated as the chief guest

3. In 2018 the Institute has taken a new group of students from A/L passed students who are willing to study agriculture.

4. Admission of New intake (10th batch) with 300 registered students.

5. A team from University of Malaya, Malaysia visited for a study program at UCIARS.

6. The Degree program has selected for UNESCO blended learning project for development of blended learning activities.

7. Development of a machine to fill substrate bags for mushroom.

8. Development of a machine to produce bio food wrappers with banana leaves.

9. A cultural event "*Prana* " was held with involvement of all students belongs to six batches. The programme was organized by the first years and held on 23rd September 2018 with the presence of the Senior professor S. Subasinghe, Director/IARS, Mr.Bandula Harischandra, District Secretary in Hambantota a member of the Board of Management of IARS and Mr. M.D. Piyathilake the former Director of IARS .

10. Students in the fourth batch organized a function after completion of the farm practice course as "Harvesting night". This function was held on with the presence of the Director, Senior Professor S. Subasinghe and all staff members.

1. OVERVIEW

1.1 Introduction

The Institute was first established as the Magampura Agro-Technology and Community Services Center in Weligatta, Hambantota affiliated to the University of Colombo in 2000 by the University Grants Commission. The Centre's history dates back to 1998 through which the University researchers were able to build over the years close collaborative links with the community in order to transfer technology/knowledge and know-how directly to the end-users and improve efficiency in agriculture and agro-industry in the region. The founder of this institute was the former Vice-Chancellor of the University of Colombo and the former Chairperson of the University Grants Commission, Professor Kshanika Hirimburegama.

The University of Colombo Institute for Agro-Technology and Rural Sciences (UCIARS) was established as a Higher Educational Institute affiliated to the University of Colombo, under Section 24A of the Universities Act No.16 of 1978 and the University of Colombo Institute for Agro-Technology and Rural Sciences Ordinance No.02 of 2008. The Order came into operation with effect from 23rd August 2008.

UCIARS conducts a Bachelor of Agro-Technology Degree programme. All courses conducted by the UCIARS are blended with distance mode of teaching to provide opportunities of higher education to farming community across barriers of age, space, time and academic background. The Institute has a mandate to provide, promote and develop among persons presently engaged in Agriculture and Agro-Technology, higher education in the discipline of Agro-Technology and Rural Sciences. It will cater to the changing individual and social needs by taking education through a blended learning mode to the doorsteps of the farming community who never dream of entering the portals of higher education. They have aspirations and potential to pursue higher education but could not utilize the opportunities due to their personal, family or economic backgrounds. With the flexibility in the entry requirements and choice of courses, the Institute demonstrates that it is possible to impart quality higher education using modern Information Communication Technologies to learners of the farming communities of poor rural sectors to pursue education at a pace and place convenient to them and realize their academic, professional and social aspirations.

In addition to the Academic Programme, the Institute produces tissue cultured banana to the local farming community with very reasonable rates and has generated income for the Institute as well. At the moment 03 tissue culture laboratories are in operation and 03 main net houses have been built at the nursery. All three laboratories contributed produce at about 22,000 tissue cultured banana plants monthly and about 6,500 farming entrepreneurs were facilitated by the Institute. The Institute conducted workshops, seminars to transfer the tissue cultured banana technology to the rural farmers scattered in islandwide. Also the Institute has participated at various national level exhibitions using its resources to make aware the people about the new technology affixed to rural sciences.

1.2 The Board of Management

The Board of Management of the Institute is constituted in terms of Section 05 of the University of Colombo Institute for Agro-Technology and Rural Sciences Ordinance No. 02 of 2008. According to Section 10 of the above Ordinance, The Board of Management shall be the academic and executive body of the Institute and shall consist of:

Table 01: The composition of the Board of Management in 2018

Ex-officio members (as specified in the Ordinance)		
1	Director – Chairman/UCIARS	Prof.S.Subasinghe
2	The Deputy Director	No Deputy Director cadre approved for the institute
3	The Secretary to the Ministry of the Minister in charge of the subject of Higher Education or the Secretary to such other Ministry to which the subject of Higher Education may be assigned or his nominee	Mrs. A.S.P. Weerasuriya Senior Assistant Secretary
4	The Secretary to the Ministry of the Minister in charge of the subject of Agriculture or his nominee	Mr.P.S.K.R.Weerakoon Additional Secretary (Admin and Human Resources Development)
5	The Dean of the Faculty of Science of the University	Prof. K.R.R.Mahanama
Other members (as specified in the Ordinance)		
1	Two members appointed by the University Grants Commission to represent the Agro-Technology and Agri-business industries	Prof.Tara De Silva Professor in Plant Science, Dept. of Plant Science, University of Colombo
		Prof.Saman Abeysinghe Department of Botany, University of Ruhuna
2	Two members appointed by the Council from among its members	Mr.Anil Rajakaruna Attorney at Law
		Mr.Mahinda Madihahewa Chairman, Employee Trust Fund Board
3	The District Secretary of the Hambantota	Mr. Bandula Harischandra
4	One member appointed by the Academic Syndicate from among its members	No Academic Syndicate for the institute
Secretary to the Board of Management		
	Assistant Registrar/UCIARS	Ms.S.A.S.Priyadarshani

The Board of Management of the institute met regularly during the year to review the academic and administration matters. The Board of Management has met Eight (08) times during the year 2018.

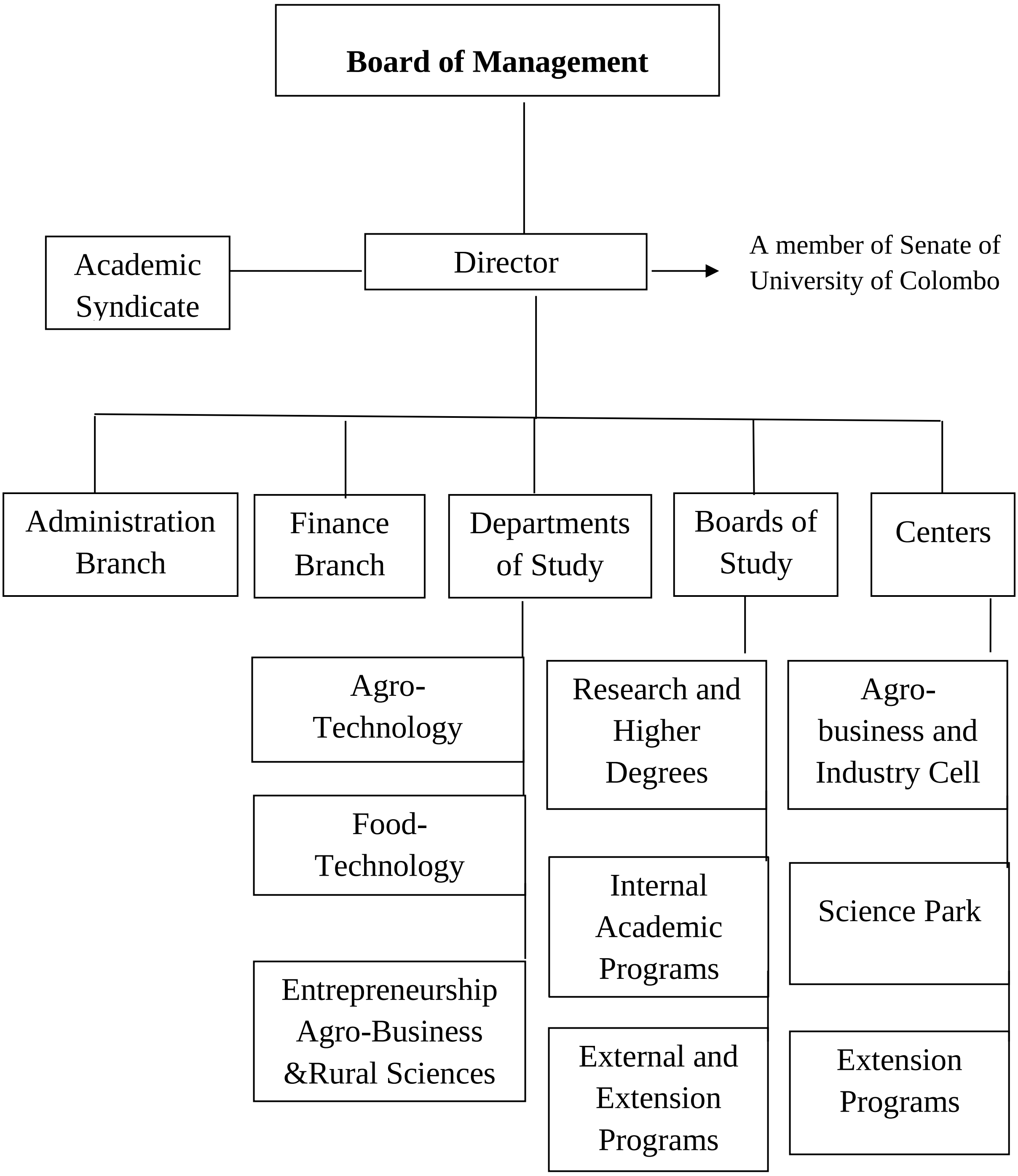
1.2 Audit Committee

The Audit Committee of the institute met quarterly during the year. The Audit Committee has met three (03) times during the year 2018.

The composition of the Audit Committee in 2018 is as follows:

Mr. Anil Rajakaruna	Chairman/Council Nominee
Mr.K.E.W.Jayasiri	Secretary, Senior Asst. Internal Auditor, University of Colombo
Ms.A.S.P.Weerasuriya	Member of the Board of Management Senior Assistant Secretary, Ministry of Higher Education and Highways
Prof.K.R.R.Mahanama	Member of the Board of Management Dean/Faculty of Science, University of Colombo, BOM Member
Mr.W.G.N.Abeywickrama	Treasury Representative/Chief Accountant, District Secretariat/Hambantota
Ms.W.A.T.G.Weerakkody	Superintendent of Audit, Government Audit Division, University of Colombo
Prof.S.Subasinghe	Director/UCIARS
Mr.U.L.Abeysooriya	Assistant Bursar (Acting)/UCIARS (up to 28.10.2018)
Mrs.A.D.P.De Zoysa	Assistant Bursar/UCIARS (w.e.f.29.10.2018)
Ms. S.A.S. Priyadarshani	Assistant Registrar/UCIARS

1.3 Organizational Structure



2. OVERALL PERFORMANCE

The Institute is mainly involved with offering Bachelor of Agro-technology degree program, Tissue Cultured Banana plant production and other farm products. In addition to that, continuous field visits were conducted to make aware of rural farmers on new technology of farming and value-added products of banana cultivation as outreach activities of the Institute by identifying their social needs.

In the year 2018, Institute continued its academic activities through Department of Agro-technology and produced Tissue cultured Banana plants using laboratories and the nurseries.

The Institute worked towards its goals with the assistance of 67 Staff members comprising 5% Administrative, 4% Academic (Permanent), 15% Academic (Assignment/Temporary), 63% Non-academic (Assignment) staff and 13% as daily basis employees (Table 02 and Figure-01).

Table 02: Staff of the UCIARS in 2018

Staff Category	No.of Employees
Administrative	03
Academic (Permanent)	03
Academic (Assignment/temporary)	10
Non-academic (Assignment)	42
Daily Basis Employees	09
Total Staff	**67**

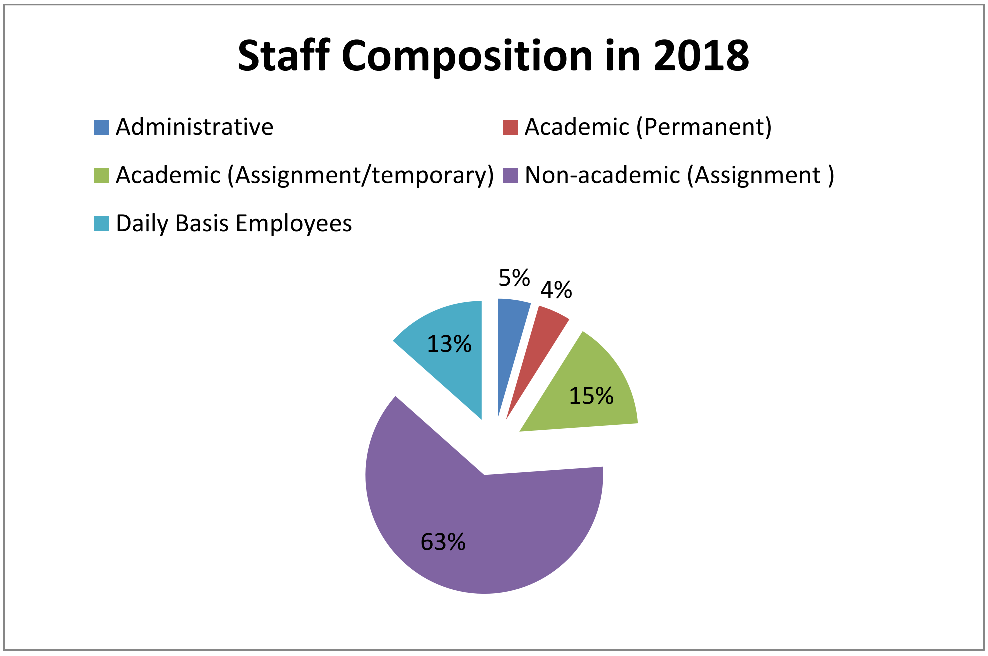


Figure-01: Staff of the UCIARS in 2018

Table 03: Administrative Staff of the Institute as at 31.12.2018

S/n	Name	Designation
1.	Prof.S.Subasinghe	Director
2	Mrs.S.A.S.Priyadarshani	Assistant Registrar
3	Mr.U.L.Abeysooriya	Assistant Bursar (Acting) (up to 28.10.2018)
4	Mrs.A.D.P.De Zoysa	Assistant Bursar (w.e.f.29.10.2018)

Table 04: Non-Academic Staff (Administrative Support) of the Institute as at 31.12.2018

S/n	Name	Designation
1	Ms.W.K.K.Rajika Nilangani	Management Assistant
2	Mr.R.V.P.N.P.Kumara	Management Assistant
3	Ms.A.G.U.Wasanthi	Management Assistant
4	Ms.U.M.A.A.M. De Silva	Management Assistant
5	Mr.J.A.U.Srinath	Store Keeper
6	Mr.M.G.J.P.S. Sandaruwan	Management Assistant
7	Ms.W.I.Chathumali	Management Assistant
8	Ms.K.D.C.Ariyasena	Computer Application Assistant

Table 05 Non-Academic Staff (General Administration) as at 31.12.2018

S/n	Name	Designation
1	Mr. K.S.R.Sampath	Security Officer
2	Mr. W.M.Chaminda	Security Officer
3	Mr. K.P. Gunadasa	Security Officer (Part-time/Night Shifts)
4	Mr.M.A.C.Jayalath	Security Officer (Part-time/Night Shifts)
5	Mr.S.V.Upali	Driver

<u>Progress of the Land Acquisition Process in the year 2018</u>

Master Plan, Landscape plan, Waste water management plan, Drainage plan and building plans for the 40 acre land out of 50 acre land were submitted to Department of Wild Life Conservation to release the 40 acre land which is within the Bundala-Wilmanna Sanctuary.

However, until the end of year 2018 it was unable to get the final approval from Department of Wild Life Conservation to release 40 acre land to UCIARS though several times remind to them.

2.1 Academic Programme Performance

The UCIARS introduced its academic programs in the year 2008 and has a mandate to provide, promote and develop among persons presently engaged in Agriculture and Agro-technology, higher education in the disciplines of Agro-technology and Rural sciences. It will cater to the changing individual and social needs by taking education through a blended learning mode to the doorsteps of the farming community who never dreamt of entering the portals of higher education. However, they have aspirations and potential to pursue higher education but could not utilize the opportunities for personal, family or economic reasons. With the flexibility in the entry requirements and choice of courses the institute demonstrates that it is possible to impart quality higher education using modern information communication technologies to learners of the farming communities of poor rural sectors to pursue education at a pace and place convenient to them and realize their academic, professional and social aspirations.

This is a novel educational venture for Agriculture entrepreneurs and this is the first opportunity for rural farming community to upgrade their knowledge using local language in Sri Lanka. Farming community of Sri Lanka is mostly concentrated in rural areas and their contribution to the agriculture is very high. But the rural farming community has low facilities to pursue their education, personal and professional development. Hence, for the first time, Institute of Agro technology and Rural Sciences which was affiliated to the University of Colombo (UCIARS) at Weligatta offered a Bachelor of Agro-technology Degree programme for farmers who were presently engaged in agriculture. The significant feature of this programme is that it operates through online and distance e-learning method which is a novel experience in Sri Lanka. There are 10^{th} batches of students (700 students) following the degree program. First batch and Second batch have already graduated.

Objectives of the Academic Program

1. To democratize higher education underpinned by principles of lifelong learning, flexibility and learner centeredness and widen the access to masses, in particular to the farming community, through the provision of blended learning.

2. Farming community /Agriculturists to be involved in knowledge-based agriculture and thereby enhancing the quality and quantity of agricultural products.

Special features of the program

- These activities change individual and social needs by taking education through online learning mode for the farming community who has never dreamt of entering the portals of higher education.
- Providing opportunities for the farming community to pursue higher education while being in cultivation of crops.
- Introduction of new agro-technologies and Introduction of ICT for Sri Lankan farming community
- First ever University academic program for the farming community in Sri Lanka

- In 2018 the Institute has taken a new group of students from A/L passed students who are willing to study agriculture

Bachelor of Agro-technology (BAgtec) Course approval details

Senate approval:	338th Senate Meeting (29.09.2010)-Syllabus
Council approval:	462nd Council Meeting (15.08.2012)- By Laws
UGC approval:	867th UGC Meeting (07.02.2013)- Degree Program

Bachelor of Agro-technology Course Outline

The duration of the Bachelor of Agro-Technology Honors Degree is 04 years.

An 'Academic Year' consists of 02 Semesters of 15 weeks each and academic program is based on 'Course Credit System', where the students will be assessed continuously throughout the semester (i.e. formative) and end-semester evaluation (i.e. summative) will be held at the end of the semester for the designated courses. The students will be informed about the type and schedule of continuous assessment at the beginning of each course unit.

In order to qualify for the award of Bachelor of Agro-Technology Honours degree, the prospective student is required to earn a total of 120 Credits, which contributes to the final grade (GPA course units) and successful completion of all the courses which are not contributed to final grade (i.e. 12 Non-GPA course units).

The yearly breakdown of course units is summarized below:

(Year 1) – Thirty (30) credits of GPA course units and four (4) credits of Non-GPA course units.

(Year 2) – Thirty (30) credits of GPA course units and three (3) credits of Non-GPA course units (Cumulative Sixty (60) credits of GPA course units and seven (7) credits of Non-GPA course units)

(Year 3) – Thirty-two (32) credits of GPA course units and three (3) credits of Non-GPA course units. (Cumulative Ninety two (92) credits of GPA course units and ten (10) credits of Non-GPA course units)

(Year 4) – Twenty eight (28) credits of GPA course units and two (2) credits of Non-GPA course units. (Cumulative one hundred and twenty (120) credits of GPA course units and twelve (12) credits of Non-GPA course units)

An alpha numeric code is used to identity a course unit. The code consists of four digits prefixed by the two letters, namely AT, to denote 'Agro-Technology'.

The first digit denotes the 'Year' at which the course unit is offered and the second digit denotes the 'Semester' in which the course unit is offered. The third digit denotes the 'Serial number' assigned for the course unit (Table 06).

Curriculum - Bachelor of Agro-Technology

The Curriculum was revised and recommended by the 426th meeting of the Senate held on 30.01.2018.

Table 06 : Course Outline

T: Theory, P: Practical, IL: Individual Leaning through LMS

Subject code	Subject Name	GPA credits	NGPA credits	Total contact hours T:P:IL
Level 3 (Year 1) - Semester I				
AT1101	Principles of Agronomy and Horticulture	3	-	15:60:90
AT1102	Principles of crop biology	2	-	15:30:60
AT1103	Irrigation and water resource engineering	3	-	15:60:60
AT1104	Anatomy and Physiology of Farm Animals	2	-	15:30:60
AT1105	Principles of Agricultural Economics and Extension	2	-	15:30:60
AT1106	Principles of Soil Science	2	-	15:30:60
AT1107	Agricultural meteorology	1	-	00: 30:60
AT1108	English	0	2	15:30:90
Total Credits		**15**	**2**	**105:300:540**
Level 3 (Year 1) - Semester II				
AT1201	Production and Management of Vegetables &Field crops	2	-	15:30:60
AT1202	Pest and disease management	2	-	15:30:90
AT1203	Management of Farm Animals	3	-	15:60:60
AT1204	Farm power and Mechanization	2	-	15:30:60
AT1205	Commercial Floriculture	2	-	15:30:60
AT1206	Soil and plant nutrient Management	2	-	15:30:90
AT1207	Introduction to Food and Nutrition	2	-	15:30:90
AT1208	Information Communication Technology	0	2	00:30:30
Total Credits		**15**	**2**	**105:270:540**
	Total Credits at Level 3	**30**	**4**	**210:570:1080**
Level 4 (Year 2) - Semester I				
AT2101	Production and Management of Plantation crops	3	-	15:60:90
AT2102	Crop improvement and Biotechnology	2	-	15:60:90
AT2103	Production and Management of Fruit crops	2	-	15:30:60
AT2104	Post Harvest Handling and Food technology	2	-	15:30:90
AT2105	Agrostology and Grassland management	2	-	15:30:60
AT2106	Agribusiness Management	2	-	15:30:60
AT2107	Basic statistics	2	-	15:30:60
AT2108	Computer Assisted Language Learning (CALL)	0	2	15:30:90
Total Credits		**15**	**2**	**120:270:600**

Level 4 (Year 2) - Semester II				
AT2201	Production and Management of Export Agricultural Crops	2	-	15:30:90
AT2202	Protected Agriculture	2	-	15:30:60
AT2203	Animal Breeding & Stock Management	3	-	15:60:60
AT2204	Farm planning and designing	2	-	15:45:90
AT2205	Agricultural extension and communication Technology	2	-	15:30:90
AT2206	Aquaculture production technology	2	-	15:30:60
AT2207	Plant tissue culture technology	2	-	15:30:60
AT2208	Life-Skills Development	0	1	00:30:30
Total Credits		**15**	**1**	**105:285:540**
	Total Credits at Level 4	**30**	**3**	**225:555:1140**
Level 5 (Year 3) - Semester I				
AT3101	Landscape horticulture	3	-	30:60:90
AT3102	Agro-ecology	2	-	15:30:60
AT3103	Animal Product Processing Technology	2	-	15:30:60
AT3104	Food Processing & Value Addition	2	-	15:30:90
AT3105	Applications of crop improvements and Bio-technology	2	-	15:30:90
AT3106	Production and Management of Medicinal plants	2	-	15:30:60
AT3107	Agro forestry and silviculture	2	-	15:30:60
AT3108	Principles of Humanities and Social Sciences	0	2	15:30:60
Total Credits		**15**	**2**	**135:270:570**
Level 5 (Year 3) - Semester II				
AT3201	Crop Production Practices	4	-	00:120:90
AT3202	Livestock production practices	3	-	00:90:90
AT3203	Agriculture Engineering practices	2	-	00:60:90
AT3204	E-Commerce for Agriculture	2	-	30:30:60
AT3205	Precision Agriculture	2	-	30:30:60
AT3206	Entrepreneurship & Business Planning	2	-	30:60:90
AT3207	Case study	2	-	30:30:60
AT3208	Presentation Skills	0	1	
Total Credits		**17**	**1**	**120:420:540**
	Total Credits at Level 5	**32**	**3**	**255:690:1110**

Level 6 (Year 4) - Semester I				
AT4101	Research Methodology & Proposal Development	2	-	15:30:90
AT4102	Agricultural experimentation and data analysis	3	-	15:60:90

AT4103	Agricultural Project Analysis & Management	2	-	15:30:90
AT4104	Agricultural Waste Management	2	-	15:30:90
AT4105	Renewable Energy Systems	2	-	15:30:60
AT4106	Crop modeling	2	-	15:30:60
AT4107	Applications of e-agriculture	2	-	30:30:60
AT4108	Bio-ethics	1	-	15:00:60
AT4109	English	0	2	15:30:60
Total Credits		**16**	**2**	**150:270:660**
Level 6 (Year 4) - Semester II				
AT4201	Agro-Technology Research Project	12	0	0
Total Credits		**12**	**0**	0
Total Credits at Level 6		**28**	**2**	**150:270:660**

Optional courses

T: Theory, P: Practical, IL: Individual Leaning through LMS

Subject code	Subject Name	GPA credit	NGPA credit	Total contact hours T:P:IL
AT1109	Career Guidance and Development	2	-	15:30:60
AT1209	Agro-tourism	2	-	15:30:60
AT2109	Electronics and Instrumentation	2	-	15:30:60
AT2209	Disaster Management	2	-	15:30:60
AT3109	Industrial training	2	-	00:60:60
AT3209	Animal welfare and ethics	2	-	15:30:60
AT4209	Wild life management	2	-	15:30:60

All the components of this programme such as, practical, assignments, theoretical contribution as well as the learner support services have highly been contributed towards the personal and professional development of rural farming community to develop as agricultural entrepreneurs.

Further this Degree programme is providing motivational opportunity to the young generation to remain in agriculture having gained social recognition in the society.

Admission Requirement to the Academic Programme

Admission is done by calling applications from interested parties through newspaper advertisements published in the national newspapers in Sri Lanka.

- Enrolment is open to any person engaged in the field of Agriculture/Agro-business at least for a period of 05 years and who have successfully passed the GCE A-Level Examination;

Or

- Any person engaged in the field of Agriculture/Agro-business at least for a period of 07 years and who have successfully passed the GCE O-Level Examination.

Eligible applicants will be summoned for an aptitude test for selection. According to the results of the aptitude test, registration is done after having an interview.

Table 07 : Total Number of Students in the year 2018 for Bachelor of Agro-technology Degree program

Batch	Student No	Remarks
4th Batch	23	Degree level
5th Batch	25	Higher Diploma level
6th Batch	55	Higher Diploma level
7th Batch	56	Diploma level
8th Batch	80	Diploma level
9th batch	168	1st year, second year and 3rd year
10th batch	268	1st year, second year and 3rd year

Staff of the Academic Programme as at 31.12.2018 is given below.

Table 08 : Academic (Permanent) staff description

S/n	Name	Designation
1	Dr(Mrs.)N.P.Vidanapathirana	Senior Lecturer Grade II, Head/Department of Agro-technology
2	Dr(Mrs.) Sujatha Weerasinghe	Senior Lecturer Grade I
3	Mr.U.I.Samarawickrama	Lecturer (Probationary) (w.e.f. 01.10.2018)

Table 09 Academic (Assignment Basis) staff description

S/n	Name	Designation
1	Ms. S.A.P. Nelka	Course Coordinator
2	Ms. S.L. Navarathna	Course Coordinator
3	Mr. H.K.R.S. Kumara	Assistant Course Coordinator
4	Mr. T.G.B. Dhanushka	Assistant Course Coordinator
5	Mr. B.P. Siriwardena	Assistant Course Coordinator
6	Mr H. Rohanadeera	Research Assistant

Table 10 : Non-Academic staff description

S/n	Name	Designation
1	Mr. P.B. Darshana	Computer Application Assistant
2	Mr.S.A.R.Lakmal	Computer Operator cum IT Lab Technician

- Mr.H.R.Chamara, Government Teacher and former Assistant Course Coordinator of UCIARS served as IT Officer of UCIARS on part-time assignment basis during the year 2018.

- Subject Experts were appointed by the Senate of University of Colombo with the recommendation of Board of Management/UCIARS for each course of the academic programme to get the expertise knowledge in each subject area as well to maintain the standard of each course.

Development of Teaching, Training and Research Facility of the Institute

The teaching, training and research facility has developed (40 acre land) with the financial assistant from Budget proposal 2018, funds given by Ministry of Higher Education (25 Mn). Progress at the end of year 2018 is as follows (Table 11).

Table 11: Progress of Teaching, Training and Research facility

Activities in the project	Expected output	Performance Indicator/s	Year 2018 – Allocation 2018 (Rs Mn)	Progress as of 31/12/2018 – Financial (Rs. Mn) (With Bills in Hand)	Physical – In word	Physical – %
Construction of water reservoir	•Establishment of high-tech farmland with modern facilities for conducting practical training for students and farming community • To assist the farming community to giving improved new technologies through the institute's extension arm. • Enhance the fruit production to meet national fruit requirement • To provide modern facilities to conduct research for the students, staff and other interested persons.	• Increased fruit production • Increased water use efficiency by adapting modern micro-irrigation systems for crop models • Increased teaching, learning and research environment • Increased income generation of the institute	2.50	2.50	Construction of water reservoir has already completed	100%
Boundary fence			10.00	10.00	Boundary fence construction has started is progressing	85%
Establishment of micro-irrigation system			3.00	3.00	establishment for micro-irrigation system has started and near to complete	80%
Establishment of crop models including fruit crops in farm land for research and commercial purposes			3.50	3.50	Three crop model has already completed. Land clearing , purchasing plants and other works are going on for other crop models	75%
Establishment of livestock models including cattle and poultry			5.00	5.00	Construction of livestock model (Cattle shed) has started and near to complete	90%
Labor			1.00	1	Electric fence construction is going on and Agronomic practices are going on	100%
Total			**25Mn**			

Following pictures illustrated the progress of the facility development under above project.

Land clearance and development

Boundary Fence construction started

Construction of Reservoir step by step up to completion

Water Stream coming from Lunugamwehera lake is used for reservoir construction

Evening beauty of the reservoir from road side

Construction of Paddy field (03 acres) already completed and has obtained the first harvest

Establishment of other crop models

Banana and papaya and some vegetable cultivation have already been started with the irrigation by the reservoir.

2.2 Plant Nursery/Laboratories Performance

Although the Institute for Agro-technology and Rural Sciences was established in 2008 according to the Ordinance, the Tissue Culture Unit was started in 1998 as a project of the University of Colombo by aiming poor and rural farming community to encourage developing their socioeconomic status. In 2001, Department of Plant Sciences, Faculty of Science introduced Tissue Cultured banana and yam plantlets at the Institute as demonstration. Since 2003 the Institute was able to carry out its own production under the guidance and supervision of the University of Colombo. On the job training is conducted by the institute to train newly appointed laboratory staffs.

Table 12: Staff of the Plant Nursery and Laboratory as at 31.12.2018 is given below

S/n	Name	Designation
1	Mr. H. Rohanadheera	Research Assistant (Production Incharge)
2	Mr. T.A.K.Y. Indunil	Filed Incharge
3	Mr. H.K.S. Ishara	Field Assistant
4	Mr. P.W.A. Chaminda Jayalath	Technical Assistant
5	Mr. B.G. Susira Kumara	Technical Assistant
6	Mrs. A.N. Abeygunawardhana	Tissue Culture Assistant
7	Mrs. H.K. Samanthi Nilini Kumari	Tissue Culture Assistant
8	Mrs. M.G.C. Sudarshani	Tissue Culture Assistant
9	Mrs. A. Priyanga Sudarshi	Tissue Culture Assistant
10	Miss. U. Anusha Ruwani	Tissue Culture Assistant
11	Mrs. W.H. Disna Sandamali	Tissue Culture Assistant
12	Miss. I.G. Dilini Nirosha Kumari	Tissue Culture Assistant
13	Miss. O.P. Niluka Subashini	Tissue Culture Assistant
14	Miss. D. Ishadi Nimalga	Tissue Culture Assistant
15	Miss. K.P. Udeni Nisansala	Tissue Culture Assistant
16	Miss. R.A. Madhusarani Dilhari	Tissue Culture Assistant
17	Miss. W.G. Dulanjali	Tissue Culture Assistant
18	Miss. W.H. Vichithra Kalpanie	Tissue Culture Assistant
19	Miss. Isanka Chamedani Dodampe	Tissue Culture Assistant
20	Ms.N.S.Perera	Tissue Culture Assistant
21	Ms.H.R.Akeesha Madumali	Tissue Culture Assistant
22	Ms.W.S.Madhushani	Tissue Culture Assistant
23	Miss. K.L.A. Anuradha	Tissue Culture Assistant
24	Ms.P.M. Thusitha	Tissue Culture Assistant
25	Ms.W.H.U.Kaushalya	Tissue Culture Assistant
26	Mr.N.S.Pradeep	Field Assistant

Performance in year 2018

Table 13: Plant Production Records from three Laboratories (Nos.)

Month	Lab 01	Lab 02	Lab 03	Total
January	10,875	5,937	2,014	18,826
February	13,312	9,045	2,525	24,882
March	10,478	9,324	4,878	20,680
April	8,808	7,132	2,933	18,873
May	10,587	11,222	5,705	27,514
June	15,164	8,144	196	23,504
July	4,377	-	4,296	8,673
August	6,563	1,885	2,870	11,318
September	14,192	7,506	1,072	22,770
October	14,880	4,714	8,216	27,810
November	4,621	4,372	-	8,993
December	2,882	2,906	2,034	7,822
Total	**116,739**	**72,187**	**36,739**	**225,665**

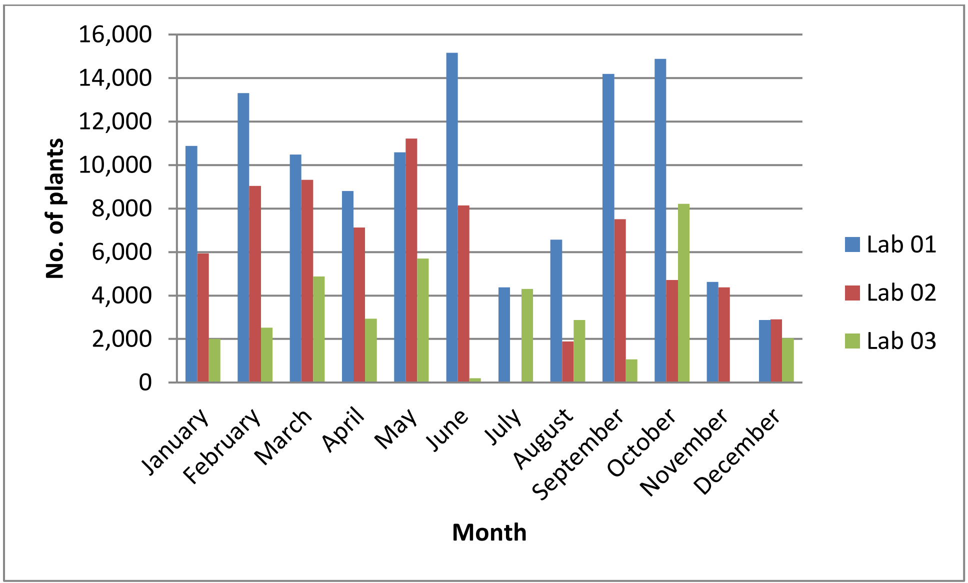


Figure 02: Comparison of plant production from three laboratories

Laboratory 01 and 02 carried out work to produce 8000 plants per month and in laboratory 03 is targeting to produce 4000 plants per month. Laboratory 01 has achieved 121.6 percent of the target and laboratory 02 has achieved 75.2% from their target. Laboratory 03 has achieved 76.5% of their target and when considering all three labs, they have achieved 94.02% of their 2018 target.

Table 14: Comparison of plant production for last seven years (Nos.)

Months	2012	2013	2014	2015	2016	2017	2018
January	15,077	15,388	18,514	20,315	20,594	20,386	18,826
February	16,370	15,923	18,209	20,127	20,476	21,527	24,882
March	15,561	15,709	18,960	20,611	16,918	25,150	24,680
April	15,105	12,015	14,275	12,580	10,815	19,703	18,873
May	12,055	21,158	10,043	14,852	19,079	24,351	27,514
June	6,953	12,042	10,550	14,218	19,359	23,260	23,504
July	4,957	13,370	12,791	12,029	19,750	25,184	8,673
August	9,161	17,665	7,770	14,021	20,875	22,151	11,318
September	7,870	15,769	18,831	18,030	24,180	25,420	22,770
October	12,731	20,617	25,300	22,427	23,481	21,732	27,810
November	17,157	21,961	23,106	21,557	18,807	24,481	8,993
December	15,129	10,878	26,409	21,339	18,100	18,180	7,822
Total	**1,48,126**	**1,92,495**	**2,04,758**	**2,12,106**	**2,32,434**	**2,71,525**	**2,25,665**

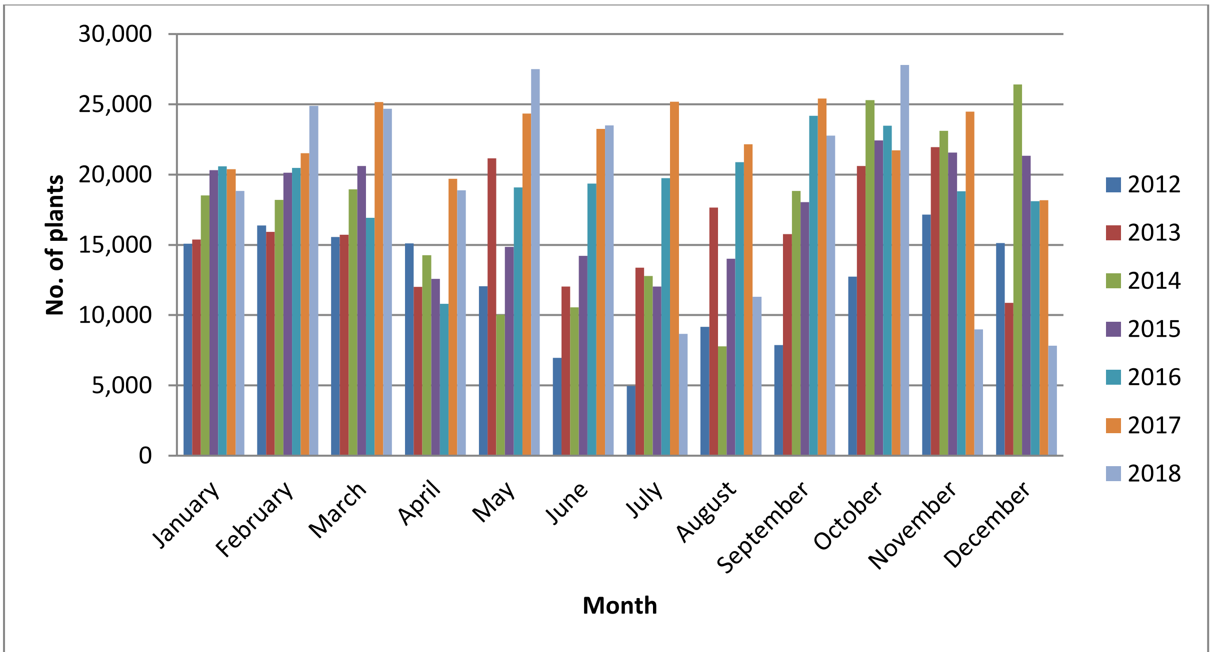


Figure 03 Plant Production Comparison 2012 - 2018

The data collected during the period of last seven years, it showed the pattern of high demanding period during the month of January to April and September to December. But in 2018, the common pattern has deviated. Therefore, production plans has been changed to maximize the plant issues to the nursery during the high demanding period. Plant issues from the lab varies according to the plant sales throughout the year and it depends on environmental factors such as rain and drought, market price of the banana fruit and other factors such as community perception.

Banana Production Comparison in the year 2018

Proportion of the total production, 90 % accounts for Embul Banana and 10 % for Kolikuttu banana plants were produced during the year 2018.

Plant Sale Comparison

Typically, demand for the Tissue Cultured banana is highly depended on the climatic conditions while highest demand is recorded in the rainy season (September to April) and low demand in the dry season (May to August). Raining pattern directly influence on cultivation; farmers cultivate bulk quantity of Tissue Cultured banana plants on rainy season. High demand for banana bunches occurs in this season especially targeting December and April festivals. Therefore, farmers purchase more tissue cultured banana plants considering these favorable climatic conditions and demand in the market. But in 2018, demand for the banana plantlets has fluctuated throughout the year.

Table 15: Comparison of plant sale for last six years (Nos.)

Months	2013	2014	2015	2016	2017	2018
January	14080	10,823	14,672	21,738	17,980	17,759
February	13119	6,816	18,427	17,950	22,141	12,738
March	13241	2,715	19,835	14,924	22,536	26,232
April	15641	7,697	20,579	13,721	21,467	15,259
May	9410	7,113	12,531	12,830	19,652	18,968
June	8419	3,381	15,132	13,527	20,780	6,489
July	14592	3,680	12,682	11,490	20,576	11,049
August	11242	18,404	12,954	19,465	21,097	13,454
September	12992	11,766	20,943	18,837	20,877	7,697
October	14812	18,498	15,151	22,040	22,302	19,692
November	15676	25,705	16,656	17,327	21,137	19,349
December	14491	13,369	24,595	20,884	20,530	14,405
Total	**1,57,715**	**1,29,967**	**2,04,157**	**2,04,733**	**2,51,075**	**1,83,091**

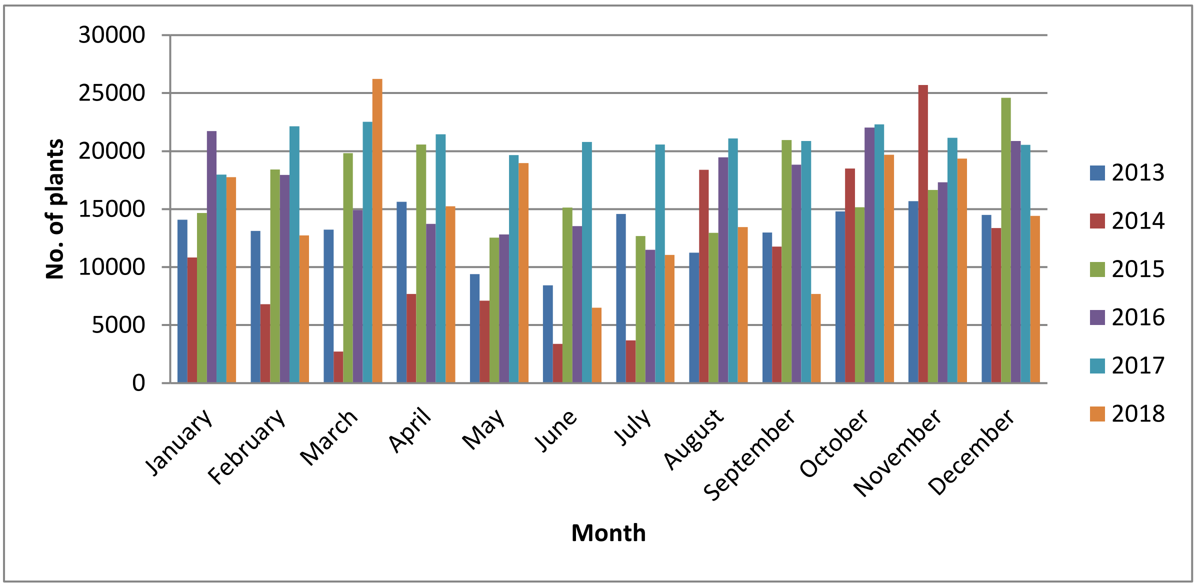


Figure 04 : Plant Sale Comparison 2013-2018

Table 16: Plant sale comparison in no. of plants sale basis – 2018

Description	No. of Plants
Plant sale 100>	60,160
Plant sale 100<	165,505

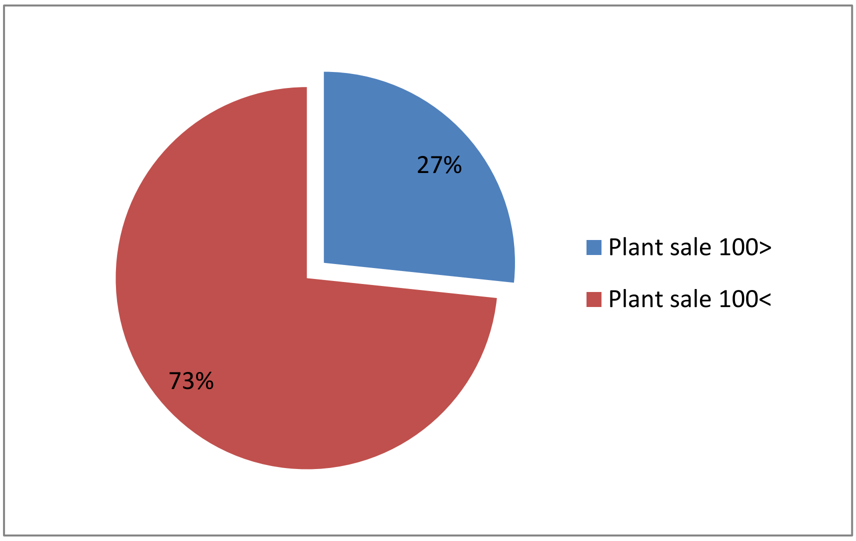


Figure 05: Plants sale - 2018

Table 17: Plant Sale in Variety Basis – 2018

Variety	No. of Plants
Ebul	202,727
Kolikuttu	21,925
DC	1,013

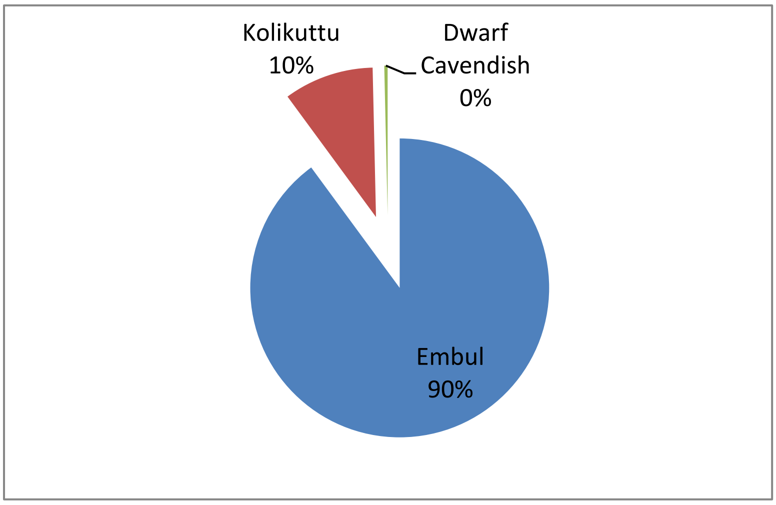


Figure 06 : Plant sale in variety basis

Income generation through Tissue cultured banana sale was 14.5 Mn. in 2018. Embul banana (Sour banana) is the highest demanded variety due to low disease incidence in the field level and continues high yielding capacity up to five years. Farmers cultivate Kolikuttu banana in single plant management system due to severe *Fusarium* wilt disease conditions in second generation. Draft Cavendish banana has recommended only for wet zone shows low demands with limited number of wet zone farmers facilitate by the Institute.

Demand for the tissue cultured banana is higher than conventional plant productions and farmer's major requirement was Embul banana (Sour Banana) due to higher long term profitability and less disease susceptibility. Majority of farmers engaged with the Institute were low purchasing power farmers (69%) while engaged low percentage of high purchasing power farmers (31%).

Table 18: Purchasing power of the farmers - 2018

Purchasing power of the farmers	No. of farmers
No. of farmers purchased less than 100 plants	439
No. of farmers purchased more than 100 plants	195

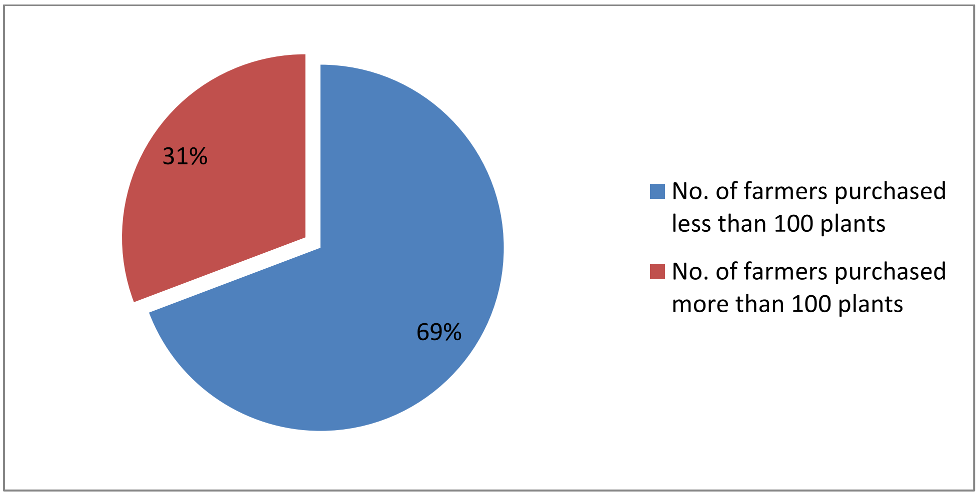


Figure – 07: Purchasing power of the farmers - 2018

The Institute provides banana plants to the local farmers with low cost and farmers are engaged with the institution representing remote areas in Sri Lanka. Field staffs regularly monitor their cultivations and provide necessary instructions and guidance they need. Field officers attached to the institute have arranged regular field visits to expand Tissue Culture banana farming community in the country.

Production Process of the Tissue Culture Banana plants

Plant Tissue culture technology is production of virus free samplings using artificial medium under aseptic conditions. So, the technology is specific and it is needed competent and skilled staff for handle all activities from ex-plant establishment to hardening initiation. In generally, Tissue culture plant production process divides in to five stages as Selection of healthy and vigorous mother plant, Establish the ex-plant in artificial medium, Multiplication/proliferation stage, Regeneration/rooting stage and Acclimatization stage. The Institute produces of Tissue cultured banana samplings through meristem culture and utilizes strategies to keep quality of the products and reduce mutations. Highly recognized standards are followed in sterilization process, in handle propagation stage (8-10 subculture stages) and maintain all records to trace back if necessary. Staff of the unit has recruited in every stage of the process according to their suitability and capacity.

Selection & maintain mother plants (Ex-stocks) → Field In-charge / Field Assistant

Establish the ex-plant in artificial medium under aseptic conditions

Proliferation Stage

Regeneration Stage

03 Lab In-charges & Tissue culture Assistants

Acclimatization → Nursery In-charge, Technical Assistants & workers

Figure 08 : Production Process of Tissue Culture Banana Plants

Achievements in the Year 2018 (Tissue Culture Production Unit)

1. Represented on Exhibitions to introduce novel technologies,
    i. Ruhunu Rasa Saraniya, Galle

2. The unit has started to produce Spine Gourd plants by stem cuttings, produced 12,792 no. of plants with 0.16 Mn. income generations. Number of farming entrepreneurs engaged with the Institute through Spine Gourd plants purchasing was 115.

3. The unit has produced 300 no. of papaya plants by seeds, "Red Royal" an imported hybrid variety. Income generated through the sale was 0.035 Mn. and 05 no. of new farming entrepreneurs engaged with the Institute.

4. Distribution of row materials utilized for mushroom productions is a supportive service conducted by Tissue culture production unit for mushroom entrepreneurs in "Ruhunu Bimmal" mushroom society. The society is consisting with 55 no. of skilled and competent mushroom growers. The unit was able to distribute row materials for mushroom production among rural mushroom entrepreneurs.

Mushroom seed packets	- 244 nos.
$MgSO_4/CaCO_3$	- 105 Kg
Cotton	- 22 Kg
Rubber Bands	- 2.1 K g
Poly Propylene	- 21,300 nos.

5. Staff competency development programs participated,

    i. One day workshop on "Minimize contaminations in Tissue culture Technology", Plant Virus Indexing Centre, Department of Agriculture, Homagama.

6. Training programs conducted,

i. 03 months In-plant training for Biotechnology Specializing student, Faculty of Agriculture and Plantation Management, Wayamba University of Sri Lanka.

ii. Tissue culture Technology training program, Divisional Secretariat, Thanamalwila.

7. Conducted awareness programmes and workshops for University undergraduates, School students and to the public.

Table 19 : Awareness programmes and workshops conducted during the year 2018

Category (workshops/training programmes/field demonstrations/media programmes)	Title of the Programme	Number Participated	Target group
Conducting workshops	Workshop on Tissue cultured Banana production Technique	56	Students, G/Neluwa National School
	Workshop on Tissue cultured Banana production Technique	40	Students, H/Theraputta Maha Vidyalaya, Ambalantota
	Workshop on Tissue cultured Banana production Technique	56	Students, R/Rahula National School, Godakawela
	Workshop on Tissue cultured Banana production Technique	95	Students, R/Elapatha Maha Vidyalaya
	Workshop on Tissue cultured Banana production Technique	300	Students, Southland Collage, Galle
	Workshop on Tissue cultured Banana production Technique	75	Students, H/Migahajandura Maha Vidyalaya, Sooriyawewa
	Workshop on Tissue cultured Banana production Technique	75	Students, G/Niyagama Vijitha Maha Vidyalaya, Thalgaswala
Other (Specify)	Awareness program on introduction of novel technologies	190	Farmers in Project Integrated Farmer Organization, Ridiyagama Project
	Awareness program on working structure of Tissue culture Production Unit	150	Students, H/Badagiriya Maha Vidyalaya, Weligatta

2.3 Technology Developments of the UCIARS during the year 2018

- **Development of a Mushroom Bag Filling Machine**

The machine has been developed by Mr. G. Pathum Hashan an undergraduate in the seventh batch as a manually operated machine with 25% efficiency. He is planning to convert this manually operated machine for an electrical version. This machine fills 400 polythene bags per day and it costs only about 2.50 Rs to fill a bag. Whereas, in manual filling it is about 100 bags per day and costs about 10 Rs per bag. This machine has been developed by this student as a part of his study programme at the institute and presently he is an entrepreneur mainly engage with mushroom production.

Views of the Machine

- **Production of a dual purpose machine for curing of bio wrappers and fabrication of bio plates with Banana leaves**

Environmentally friendly bio food wrappers with banana leaves are commercially produced using this machine The capacity of bio wrapper production of this machine is about 5,000 wrappers per eight hours working day. The cost of production including purchasing fresh banana leaves and curing with the machine is about 6.50 Rs per wraper. To develop this machine all scientific information, principles and the technology was given by the Dr. Sujatha Weerasinghe, Senior Lecturer, UCIARS and it was assembled and manufactured by Mr. Sumith Amarawickrama, Bataatha, Hungama and Ms W.W.A. Thamara Dhammika,an Agriculture Instructur, Seed testing Laboratory of the Department of Agriculture at, Bataatha, Hungama. This machine is a dual purpose machine and it can cure banana leaves as food wrappers and fabricate bio plates with leftovers of banana leaves concurrently which serves the energy of electricity very effectively. These machine has grasped the attention of several entrepreneurs and Mr. Amarawickrama is manufacturing this machine on commercial scale. The bio wrapper production manually is popular as a cottage level industry among small scale entreprenures and they produce daily for the hotels in Colombo.

These bio plates can be fabricated by green leaves, ripen leaves, dried leaves and torn leaves too. They are environmentally friendly and attractive at a glance.

Bio food wrapper producing machine

Commercial scale Bio Wrapper Producers as cottage level industries





- **Introduction of instant Herbal Poridge**

The institute has developed an instant poridge with Karapincha, Traditional rice and spices mixing an appropriate amounts. This product has been commercialized by the institute acccompanying a youth Mr. N.L.Udugamasooriya , Hittatiya, Matara and he is continuing this production on commercial scale.

3. RESEARCH AND INNOVATIONS

Researches done by IARS in 2018 (Academic division)

Postgraduate research

1. Topic: Effect of K fertilizer, plant growth regulators and grafting on induction of female flowers of *Momordica diocia* (Thumba Kariwila)

   Progress: Research has already completed and thesis has submitted

2. Topic: Study on growth and yield of *abelmoschus esculentus* (okra) and *solanum melongena* (eggplant) as affected by application of different concentration of wood vinegar / pyroligneous acid produced by using different wood species

   Progress: Research has already completed

3. Topic: Growth and yield performances of *solanum melongena var. Insanum* (ela batu) as affected by type of planting materials, polythene mulching and drip irrigation

   Progress: Research has already completed

Researches under following topics were conducted by Department of Agro-technology.

- Study of antagonistic effect of spent pleurotus mushroom substrate
- Enhancing Red Palm (*Crytostachys renda*) Seed germination by pre-plant treatments
- Development of a biscuit with ripe Embul banana as a value addition
- Identification of an effective vegetative propagation technique for *Bavunia cociana*
- Development of a machine for bagging rice to minimize the cost of production in rice
- Development of an automated drip irrigation system for the dry zone

- Identification of promising Banana accessions for fiber extraction from pseudostems of Banana
- Assembling of an effective machine to fabricate bio plates with banana leaves
- Development of a cost effective machine to cure banana leaves as bio food wrappers
- Evaluation of the effect of black coloured bags as bunch covers on performances of Cavendish banana

Publications

1. Hirimburegama, K. and Vidanapathirana, N., 2018. Panel Keynote Speech. **Women** Participation in Tertiary Education in Sri Lanka with Special Emphasis on Science Education *H. Li, R. Suomi, Á. Pálsdóttir, R. Trill, H. Ahmadinia (Eds.)*, p.1.

2. B.P. Siriwardena, T.G.B. Dhanushka, N.P. Vidanapathirana (2018) THE ADOPTION OF E-LEARNING TECHNOLOGY FOR FARMERS USING EXTENSIONS TO TECHNOLOGY ACCEPTANCE MODEL (TAM), *EDULEARN18 Proceedings*, pp. 6461-6464.

3. T.G.B. Dhanushka, B.P. Siriwardena, N.P. Vidanapathirana (2018) EVALUATION OF E-LEARNING EFFECTIVENESS FOR FARMERS: THE RELATIONSHIP BETWEEN USER CHARACTERISTICS, DESIGN FEATURES AND USER SATISFACTION, *EDULEARN18 Proceedings*, pp. 6510-6515.

4. TRAINING, WORKSHOPS AND STAFF DEVELOPMENT

The academic members participated special training programmes as follows:

- A one day training programme on “Scientific writing “was conducted at IARS on 28/09/2018 by Dr. L. Nugaliyadda, a retired Professor from the Faculty of Agriculture, University of Ruhuna.
- A workshop on "Agricultural innovations for food security and environmental sustainability 3rd to 5th April 2018 in Taiwan" was participated by Dr. SujathaWeerasinghe
- Issues and trends of pesticide management on 08, 09/11/2018 at IARS by Crop Life Company
- New technologies for fertilizer management on 10/12/2018 at IARS by Uni Powers Company
- Farm machinery and their uses on 18,19.12.2018 at IARS by Browns company

The non-academic members participated special training programmes as follows:

Administrative Staff members

Ms S.A.S. Priyadarshani, Assistant Registrar participated following programs;

- International Programme in Management at Gadjah Mada University in Indonesia from 28th January to 4th February 2018
- Disciplinary procedures in the public sector at MILODA
- Essence of public procurement Management at MILODA
- Bid evaluation in IT related goods and service procurement at MILODA
- Preparation of bid documents and tender procedures at MILODA

Other non-academic members

- Preparation of financial statements at MILODA
- File management and general office administration , E-code at MILODA
- Personal file management at MILODA
- Financial regulations in the public sector at MILODA
- Board of survey and losses &Write Offs at MILODA
- Public financial regulations at MILODA
- Government Auditing Standards and Answering Audit Queries at MILODA

5. RENOVATIONS AND CONSTRUCTION PROJECTS

Table 20: Renovation and construction projects

No.	Project Name	Remarks
01	Design and Construction of three storied Building for Tissue Culture Laboratories (Design & Build)	Project Cost Rs.150 Million (with VAT) Contractor : KSJ Construction (Pvt) Ltd Physical Progress : 82% Financial Progress : 60%
02	Extension of existing Net House	Project Cost :2.3 Million (without VAT) Contractor : Vidana Arachchi Builders Physical Progress : 100% Financial Progress :90%
03	Extension and renovation of existing quarters building for constructing lecture halls and elementary lab for Agro-technology degree program	Project Cost :26 Million (without VAT) Contractor : Vidana Arachchi Builders Physical Progress : 100% Financial Progress : 77%
04	Rehabilitation of Cafeteria	Project Cost : 4.3 Million (with VAT) Contractor : Wijesinghe Construction Physical Progress : 100% Financial Progress : 91%
05	Construction of Electric Fence	Project Cost : 13.2 Million (with VAT) Contractor : Shan Electronic Physical Progress : 60% Financial Progress : 59%
06	Construction of overhead Electrical system at lake side	Project Cost : 1.8 Million (with VAT) Contractor : Sun Power Engineering

		Physical Progress : 100% Financial Progress : 97%
07	Establishment of Drip Cum Sprinkler Irrigation System	Project Cost : 3.8 Million (with VAT) Contractor : Jinasena (Pvt) Ltd. Physical Progress : 80% Financial Progress : 0%
08	Construction of Entrance Watcher Hut & Boundary Fence	Project Cost : 1.1 Million (with VAT) Contractor : Erodha Enterprises Physical Progress : 95% Financial Progress : 0%
09	Construction of Mushroom Seeds Production House	Project Cost : 0.4 Million (with VAT) Contractor : Wijesinghe Construction Physical Progress : 90% Financial Progress : 0%
10	Construction of Diary Shed	Project Cost : 6.8 Million (with VAT) Contractor : Wijesinghe Construction Physical Progress : 35% Financial Progress : 16%
11	Construction of Proposed Staff Quarters (Phase I)	Project Cost : 9.9 Million (with VAT) Contractor : Erodha Enterprises Physical Progress : 65% Financial Progress : 12%
12	Construction of Dryer House	Project Cost : 0.6 Million (with VAT) Contractor : Wijesinghe Construction Physical Progress : 15% Financial Progress : - 0%
13	Rehabilitation of old Admin Building for construction Staff Quarters (Phase II)	Project Cost : 14.2 Million (with VAT) Contractor : Samikta Construction Physical Progress : 10% Financial Progress : 0%
14	Construction of Garage for Vehicles & Motor Bikes	Project Cost : 0.5 Million (with VAT) Contractor : Kamburupitiya Industries Physical Progress : 5% Financial Progress : 0%

6. FINANCE

Table 21 : Details of Recurrent Expenditure

Subject	2017 (Rs)	2018 (Rs)
Personal emoluments	33,191,619.00	41,046,865.00
Travelling	887,150.00	919,723.00
Supplies	4,298,109.00	4,323,763.00
Maintenance	949,250.00	1,471,764.00
Contractual Services	6,807,301.00	8,839,855.00
Other	4,714,783.00	5,109,697.00
Total	**50,848,212.00**	**70,711,667.00**

Table 22 : Details of Capital Expenditure

Subject	2017 (Rs.)	2018 (Rs.)
Acquisition and Improvements of Buildings & Structures	24,791,520.00	3,042,186.00
Rehabilitation of Building & Structures	-	4,366,029.00
Vehicles	-	35,000.00
Lab and Teaching	252,305.00	539,905.00
Plant Machinery & Equipment	1,103,540.00	900,563.00
Fixtures & Fittings	-	-
Furniture & Office Equipment	-	-
Hostel Project	-	-
House Hold Equipment's	-	623,316.00
Office Equipment's	3,406,700.00	4,287,200.00
Furniture & Fittings	9,855,174.00	5,603,061.00
Sport Goods	222,000.00	-
Books	430.00	-
Land Initial Cost	2,344,670.00	-
Work In Progress	-	131,627,625.00
Musical Instruments	-	373,925.00
Total	**79,156,261.00**	**151,398,810.00**

Table 23: Details of Project Expenditure (Local/Foreign Funded)

Name	TCE Rs.	Exp in 2018 Rs.	Cumulative Exp as at 31.12.2018	% of Physical Progress (2018)
Extension and Rehabilitation to the Existing Vidatha Building (GOSL Funded)	29,079,639.60	1,250,177.50	26,041,697.91	100%
Completion of Extension work to the Vidatha Building (GOSL Funded)	4,290,181.19	-	4,068,327.72	100%
Extension & Rehabilitation of quarters building for constructing lecture halls and elementary lab (GOSL Funded)	29,803,414.53	9,768,583.76	23,020,870.76	100%
Design & construction of building complex for tissue culture laboratories (GOSL Funded)	150,000,000.00	48,499,628.95	86,726,717.95	82%
Extension of Existing Net House (GOSL Funded)	2,545,446.38	1,563,068.51	2,287,130.36	100%
Rehabilitation of Cafeteria	4,363,542.75	4,002,049.01	4,002,049.01	100%
Construction of Electric Fence	13,207,746.00	7,921,763.23	7,921,763.23	60%
Construction of overhead Electrical system at lake side	1,822,500.00	1,772,975.00	1,772,975.00	100%
Establishment of Drip Cum Sprinkler Irrigation System	3,835,413.60	-	-	80%
Construction of Entrance Watcher Hut & Boundary Fence	1,176,701.87	Nil	Nil	95%
Construction of Mushroom Seeds Production House	499,931.45	Nil	Nil	90%
Construction of Diary Shed	6,845,761.51	1,109,750.00	1,109,750.00	35%
Construction of Proposed Staff Quarters (Phase I)	9,999,879.48	1,268,164.64	1,268,164.64	65%
Construction of Dryer House	665,964.09	-	-	15%
Rehabilitation of old Admin Building for construction of Staff Quarters (Phase II)	14,274,961.32	-	-	10%
Construction of Garage for Vehicles & Motor Bikes	577,788.75	-	-	5%
Total	**272,988,872.52**	**77,156,160.06**	**158,219,446.58**	

Table 24 : Details of Financial Progress (Generated Income)

Source of Revenue	Provision in 2018 Rs.	Collecting in 2018 Rs.	(Deficit)/Surplus Rs.
Certificate Courses-IARS	24,835,000.00	16,224,075.00	(8,610,925.00)
Sales in Tissue Culture Banana Plants	19,000,000.00	14,815,758.00	(4,184,242.00)
Other Income	2,276,200.00	2,896,319.00	620,119.00
Total	**46,111,200.00**	**33,936,152.00**	**(12,175,048.00)**

Table 25 : Financial Performance Analysis-2018

Subject	Formula	Exp.per Student(Rs)
Recurrent Expenditure per Student (RE)	RE/No of Student strength	243,798.41
Capital Expenditure per Student (CE)	CE/No of Student strength	113,867.42
Total		**357,665.83**

Table 26 : Details of Infrastructure Facilities Received in 2018

Infrastructure Details	Expenditure (Rs)	Physical Progress (%)
Building and Structures Extension	Nil	
Other (specify)	Nil	

Final Account – 2018

University of Colombo

Institute for Agro-Technology and Rural sciences

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கொழும்புப் பல்கலைக்கழக கமத்தொழில் தொழில்நுட்பவியல் மற்றும் கிராமிய விஞ்ஞானங்களுக்கான நிறுவனம்
University of Colombo Institute for Agro-Technology and Rural Sciences

22th February 2019

Deputy Auditor General,
Auditor General's Department,
No: 306/72, Polduwa Rd,
Baththaramulla.

Dear Sir,

Financial Statements – 2018

I hereby submit financial statements for University of Colombo, Institute for Agro Technology and Rural Sciences for the year 2018, with following statements.

01. Statement of Financial Position as at 31-12-2018
02. Statement of Production and Trade for the year ended 31-12-2018
03. Statement of Financial Performance for the year ended 31-12-2018
04. Statement of Changes in Equity for the year ended 31-12-2018
05. Cash flow statement for the year ended 31-12-2018
06. Statement of Responsibility
07. Notes to Financial Statements

Thanking you,

Prof.S.Subasinghe
Director
Institute for Agro- technology & Rural Sciences
University of Colombo
Weligatta – Hambantota

Prof. S. Subasinghe
Director
University of Colombo, Institute for Agro Technology and Rural Sciences

INSTITUTE OF FOR AGRO - TECHNOLOGY AND RURAL SCIENCES

UNIVERSITY OF COLOMBO

STATEMENT OF RESPONSIBILITY

FOR THE YEAR ENDED 31ST DECEMBER 2018

The Accounting policies on pages 06 To 09 and notes on pages 10 to 15 Form and integral part of these Financial Statements. The Board of Directors is responsible for the preparation and presentation of these Financial Statements. These Financial Statements were approved by the Board of Directors and signed on their behalf.

Prof.S.Subasinghe
Director
University Of Colombo
Institute For Agro Technology And Rural Sciences

Prof.S.Subasinghe
Director
Institute for Agro- technology & Rural Sciences
University of Colombo
Weligatta – Hambantota

Members of Board Of Management

Name	Capacity	Signature
Prof.K.R.R.Mahanama	Dean/Faculty of Science University of Colombo	
Ms.A.S.P.Weerasuriya	Nominee of the Secretary to the Ministry of Higher Education	
Mr. P.S.K.R. Weerakoon	Nominee of the Secretary to the Ministry of Agriculture	
Prof.Tara D Silva	UGC Nominee	
Prof.Saman Abeysinghe	UGC Nominee	
Mr.Anil Rajakaruna	Council Nominee	A Rajakaruna
Mr.Mahinda Madihahewa	Council Nominee	

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3.	Financial Statements –Statement of Financial Performance And Other Comprehensive Income	02
4.	Financial Statements – Manufacturing Cost & Trade Accounts	03-05
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Introduction

The establishment of the Institute for Agro-technology and Rural Sciences heralded an era of affirmative action on the part of the Government of Sri Lanka to "uplift agro industry in Sri Lanka as a prestigious occupation through arming the rural community with modern knowledge on agro-technology with information technology" [1].

The University of Colombo Institute of Agro-Technology and Rural Sciences (UCIARS) (here-in-referred to as the Institute) was established as an Institute with blended distance mode of teaching to provide opportunities of higher education to agricultural/farming community across barriers of age, space, time and academic background, under Section 24 A and Section 18 of the Universities Act no 16 of 1978 and the University of Colombo Institute of Agro technology and Rural Sciences Ordinance No. 02 of 2008[2]. The Order under Section 24 A came into operation with effect from 23rd August 2008.

The Institute incorporated within its system the Magampura Agro-Technology and Community Services Center in Weligatta, Hambantota affiliated to the University of Colombo in 2000 by the UGC[3]. The Institute is located 250 km away from Colombo very close to the Colombo-Kataragama main road. The Centre's history dates back to 1998[3] through which the university and researchers were able to build over the years close collaborative links with the community in order to transfer technology / knowledge and know-how directly to the end-users and thereby improve efficiency in agriculture and agro-industry in the region.

The Institute has a mandate to "providing, promoting and developing among persons presently engaged in Agriculture and Agro-Technology, higher education in the discipline of Agro-Technology and Rural Sciences"[2]. It will cater to the changing individual and social needs by taking higher education through a blended learning mode to the doorsteps of the rural agricultural community who never dreamt of entering the portals of higher education. However they have aspiration and potential to pursue higher education but could not utilize the opportunities for personal, family or economic reasons. With the flexibility in the entry requirements and choice of courses the Institute demonstrates that it is possible to impart quality higher education using modern information communication technologies to learners of the agricultural communities of poor rural sectors to pursue education at a pace and place convenient to them and realize their academic, professional and social aspirations.

The will and commitment of the Institute to engage with society is evidenced by clear statements in institutional objectives, strategic planning and, teaching and learning processes.

Organization and management

As the education system moves from elite to mass systems and from emphasis on teaching to a focus on learning, students become more important actors – as primary clients, consumers, and learners. This shift will require the establishment of appropriate organizational and management mechanisms to handle those new roles and the new challenges that they represent. The Organogram illustrates the organizational structure of the Institute.

Administrative Organization

The Institute is headed by the Director who is the Principal Executive Officer and the principal academic officer and accounting officer of the Institute. The Director is also an ex-officio member of the Board of Management, the Academic Syndicate and all Boards of Study of the Institute, and presides at all meetings of the Board. The Director is also a member of the Senate and brief the Senate on the academic performance of the Institute. The Board of Management is the academic and executive body of the Institute. The Institution has the financial autonomy from the University and the Board of Management is responsible for finances. Under the Director is the Deputy Director. Director and Deputy Director are officers of the Institute.

It is the duty of the Director on behalf of the Board of Management to ensure that provisions of the Act, the ordinance or any other instrument, are duly observed. It is also the duty of the Director to give effect to the decisions of the Board and responsible for the maintenance of discipline within the institute.

Academic Organization

The Academic Syndicate chaired by the Director has the control and general direction over instruction, training, research and examinations of the Institute.

There are three Boards of Study chaired by the Director in respect of Research Higher Degrees; Internal Academic Programs; External and Extension Programs. The Boards of Study have control and general direction over instruction, training, research and examinations of the Institute.

There are three Departments of Study in respect of the disciplines of (i) Agro-Technology; (ii) Food Technology; and (iii) Entrepreneurship, Agro-business and Rural Sciences. Each Department of study is led by a Head.

The three Centers, Agribusiness and industry cell; the Science Park; Extension programs, are led by a Coordinator.

Faculty and support staff of the Institute and from collaborating partner institutions and universities assists the development of learning material, delivering and support of academic courses / program.

Statement Of Financial Position

Rs. As at December 31		2018	2017
ASSETS			
CURRENT ASSETS			
Bank Balances	**Note 01**	13,703,823	32,815,061
Inventories	**Note 02**	6,385,138	4,799,056
Interest Receivable on Investments	**Note 03**	365,902	1,221,933
Receivable Loan Account	**Note 04**	1,936,180	2,111,726
Advance A/C		129,580	75,000
Other current assets		129,589	25,000
		22,650,211	41,047,776
NON CURRENT ASSETS			
Property Plant And Equipment	**Note 05**	297,112,139	300,319,539
Deffered Expenditure	**Note 06**	2,936,743	3,463,396
Deposit for Transformer		500,000	500,000
Work in Progress		131,627,625	51,479,376
Investments		17,336,713	-
		449,513,219	355,762,311
TOTAL ASSETS		472,163,430	396,810,087
LIABILITIES			
CURRENT LIABILITIES			
Accrued Expences	**Note 07**	3,830,119	3,349,885
Other current liabilities		14,559	-
		3,844,678	3,349,885
NON CURRENT LIABILITIES			
Non Current Liabilities	**Note 08**	6,802,165	6,402,117
		6,802,165	6,402,117
TOTAL LIABILITIES		10,646,842	9,752,002
NET ASSETS/EQUITY		461,516,588	387,058,085
Accumulated Funds			
Capital Grant Spent		217,873,391	152,287,459
Capital Grant Unspent		1,376,143	5,118,024
IT Grant		3,160,390	3,160,390
Other Grant Spent		18,705,311	7,373,365
Other Grant Unspent		5,916,580	769,672
Accummulated Reserves		762,450	5,072,990
Revaluation reserves		446,139	
Special Grant Spent		213,276,184	213,276,184
TOTAL NET ASSETS/ EQUITY		461,516,588	387,058,085

Certified by
A.D.P De Zoysa
Assistant Bursar (IARS)

Assistant Bursar
Institute for Agro - Technology & Rural Sciences
University of Colombo
Weligatta - Hambantota.

Prof. S. Subasinghe
Director (IARS)
For and on behalf of the Board of Management

Director
Institute for Agro- technology & Rural Sciences
University of Colombo
Weligatta – Hambantota

Statement Of Financial Performance and Other Comprehensive Income

Rs. For the year ended December 31		2018	2017
Revenue		15,219,211	19,550,958
Cost of sales	**Note 09 - 10**	(16,641,606)	(16,732,360)
Gross Profit		(1,422,395)	2,818,598
Othet income			
Govt. Grant for Recurrent Expenditure		30,000,000	28,100,000
Generated Income	**Note 11**	17,623,404	5,565,396
Interest Income	**Note 12**	1,502,520	3,968,763
Amortization		21,227,095	18,936,312
		68,930,624	**59,389,069**
EXPENDITURE			
Personal Emoluments	**Note 13**	(28,762,248)	20,940,844
Travelling	**Note 14**	(919,723)	887,150
Supplies	**Note 15**	(4,323,763)	2,515,311
Maintenance Expenditure	**Note 16**	(1,471,764)	949,250
Contractual Services	**Note 17**	(8,839,855)	6,807,301
Other Recurrent Expenses	**Note 18**	(5,109,697)	4,714,783
Human Capital Development	**Note 19**	(325,160)	382,978
Gratuity		(1,220,954)	798,729
Write Off Amount Of Defferd Expenditure		(526,653)	526,653
Depreciation		(21,896,299)	19,664,783
		(73,396,115)	**58,187,782**
Surplus/ (Deficit)for the year		**(4,465,491)**	**1,201,287**
Other comprehensive income			
Valuation Reserves - Fixed assets		416,000	-
Valuation Reserves - Live stock		30,139	-
Total comprehensive income		**(4,019,352)**	**1,201,287**

Spine Gourd Plants
Manufacturing cost & Trade Account

Rs. For the year ended December 31		2018
Cost of Raw materials		7,414
Other Direct cost	**Note - 09**	221,668
Prime Cost		229,082
Indirect / Overhead cost	**Note - 10**	26,334
Total Cost of Production		**255,417**
<u>Cost of Sales</u> Papaya plants as at 01.01.2018 1178 unit cost of Rs. 9.38		**11,050**
Add: Cost Of Production		255,417
		266,467
Spine Guard plants as at 31.12.2018		
		266,467
Sales income		**156,450**
Profit / Loss		110,017

Papaya Plants
Manufacturing cost & Trade Account

Rs. For the year ended December 31		2018
Cost of Raw materials		11,161
Other Direct cost	**Note - 09**	81,447
Prime Cost		92,608
Indirect / Overhead cost	**Note - 10**	9,676
Total Cost of Production		**102,284**
<u>Cost of Sales</u> Papaya plants as at 01.01.2018 549 unit cost of Rs. 22.74		**12,484**
Add: Cost Of Production		102,284
		114,768
Papaya plants as at 31.12.2018		-
		114,768
Income from sale of plants		**82,935**
Profit / Loss		(31,833)

Banana Plants
Manufacturing cost & Trade Account

Rs. For the year ended December 31		2018
Cost of Raw materials		2,352,049
Other Direct cost		11,981,502
Prime Cost		14,333,551
Opening Work In Progress (18,180)		835,070
Closing Work In Progress (30,009)		(816,917)
Total Prime Cost		14,351,704
Indirect / Overhead cost		1,423,416
Total Cost of Production (225,665)		**15,775,120**
SALES		14,472,423
<u>Cost of Sales</u>		
Banana plants as at 01.01.2018 20,169 unit cost of Rs. 73.47		**1,510,073**
Add: Cost Of Production		15,775,120
		17,285,193
Banana plants as at 31.12.2018 38,750 unit cost of Rs. 69.9		(2,708,820)
		14,576,373
Profit / Loss		**(103,950)**

Statement Of Changes In Equity

Rs.

For the year ended December 31, 2018	Capital grant spent	Capital grant unspent	IT grant	Other grant spent	Other grant Unspent	Accumulated Surplus	Special grant	Revaluation Reserves	TOTAL
Balance as at 01.01.2018	152,287,459	5,118,024	3,160,390	7,373,365	769,672	5,072,990	213,276,184	-	387,058,084
Prior Year Adjustment debit						(4,981)			(4,981)
Prior Year Adjustment credit						159,931			159,931
Restated Balance	152,287,459	5,118,024	3,160,390	7,373,365	769,672	5,227,941	213,276,184	-	387,053,103
Changes in Equity for Year 2018									
Deficit/Surplus For the period						(4,465,491)			(4,465,491)
Capital grant received during the year		71,950,000			27,600,000				99,550,000
Capital expenditure during the year	75,691,881	(75,691,881)		22,453,092	(22,453,092)				-
Amortization	(10,105,949)			(11,121,146)					(21,227,095)
Live stock revaluation								30,139	30,139
PPE revaluation								416,000	416,000
31.12.2018 Balance carried forward	**217,873,391**	**1,376,143**	**3,160,390**	**18,705,311**	**5,916,580**	**762,450**	**213,276,184**	**446,139**	**461,356,657**

Statement of Cash Flows

Rs. For the year ended December 31	2018	2017
Surplus/(Deficit) for the year	(4,019,352)	1,201,286
Adjustments for items not involving movement of Funds		
Prior year adjustments	-	699,028
Depreciation	22,978,583	20,212,536
Write Off Amount of Deffered expenditure	526,653	526,653
Amortization	(21,227,095)	(18,936,312)
Interest Income	(1,502,520)	(3,958,365)
Provission for Gratuity	1,220,954	798,729
Accrued expenses	3,830,119	-
Other comprehensive reserves	(446,139)	-
Operating excess before working capital changes	1,361,203	543,555
CASH FLOWS FROM OPERATING ACTIVITIES		
Increase/Decrease in Inventories	(1,586,082)	(23,313)
Increase/Decrease in Receivables	1,066,341	833,715
Increase/Decrease in Loan Receivable	621,686	621,199
Increase/Decrease in Other current assets	(159,169)	2,208,391
Increase/Decrease in Payables	(3,335,326)	27,540
Net cash flow from operating activities	**(2,031,347)**	**4,211,095**
CASH FLOWS FROM INVESTING ACTIVITIES		
Increase/Decrease of Deffered Expenditure	-	(31,751,968)
Increase/Decrease Working Progress	(80,148,249)	-
Increase/Decrease in Loans	-	(47,032,352)
Increase/Decreas Acquisition of Fixed Assets	(19,771,183)	3,958,365
Interest Income For The Year	1,292,210	-
Increase/Decrease investments	(17,336,713)	-
Net cash flow from Investing activities	**(115,963,934)**	**(74,825,955)**
CASH FLOWS FROM FINANCING ACTIVITIES		
Gratuity Payments	(237,576)	-
Government Grant for Capital Expenditure	99,704,950	8,300,000
Increase/Decrease of Borrowings	(583,330)	(1,041,667)
Withdrawal of Investment	-	1,537,339
Net cash flow from Financing activities	**98,884,044**	**8,795,672**
NET INCREASE IN CASH EQUIVALENTS	**(19,111,238)**	**(61,819,188)**
Cash & cash equivalents at the beginning of the period	**32,815,061**	**94,634,249**
Cash & cash equivalents at the end of the period	**13,703,823**	**32,815,061**

Notes to the Financial Statement

Institute for Agro- Technology and Rural Sciences (IARS)

University Of Colombo

1. **Significant Accounting Policies**

   1.1 Reporting Entity

   IARS has been incorporated under the Ordinance No: 02 of 2008 and gazette on 16th October 2008. The main administration is at Weligaththa New Town, Hambanthota. The Financial Statement of the IARS is prepared for the year ending 31/12/2018.

   1.2 Basis of Preparation

   The Financial Statements are prepared on the historical basis of accounting. Whereby the transactions are recorded at values prevailing at the dated when the assets were acquired, the liabilities were incurred and funds obtained in accordance with **Sri Lanka Public Sector Accounting Standards** laid down by the Institute of Charted Accountants of Sri Lanka.

   The financial statements are prepared in Sri Lanka Rupees, which is the functional and presentation currency. Figures and phrases relating to the previous year have been restated where necessary, for comparison with the current year presentation.

   1.3 Assets and the bases of their valuation

   1.3.1 Property Plant and Equipment (PPE)

   Land is occupied to The Divisional Secretariat, Lunugamwehera. It is rented out by the Institute since 1998, for 30 years lease basis. Value of Buildings and Structures are shown based on the valuation is given by Department of Valuation.

   Property Plant and Equipment and Lab & Teaching Equipment's include the items purchased out of government grant, research grants and internally generated funds.

   Property Plant and Equipment are recorded at cost of purchase together with any incidental expenses thereon. The assets are shown at cost less accumulated depreciation.

Subsequent Cost.

Subsequent costs are included in the asset's carrying amount or recognized as a separate asset, as appropriate, only when it is probable that future economic benefits associated with the items will flow to the institute and the cost of items can be measured reliably. All other repairs and maintenance are charged to income statement during the financial period in which they are incurred.

Stocks

Stock of Raw Materials and consumables, Stock of Work in Progress, Stock of Tissue Culture Banana Plats as at 31.12.2018 are measured at the lower of cost and Net Realizable value. Net Realizable value is the estimated cost of completion and selling expenses. Stock Valuation method is First in First out (FIFO) method.

1.3.2 Depreciation

Depreciation has been charged to the Statement of Financial performance on all Property Plant & Equipment and Lab & Teaching Equipment's on the straight line basis over their estimated useful lives.

Description		**Estimated useful Life**
• Building & Structures	-	20 years
• Hostel Projects	-	20 Years
• Fixtures & Fittings	-	10 years
• Vehicles	-	5 Years
• Laboratory & Teaching Equipment's	-	5 years
• Electrical Equipment's	-	5 Years
• House Hold Equipment's	-	10 Years
• Office Equipment's	-	10 Years
• Furniture & Fittings	-	10 Years
• Plant Machinery And Equipment's	-	10 Years
• Books	-	10 years
• Sports Goods	-	10 Years

Depreciation is provided from the year of purchased and up to the year of sale based on the period used, with full depreciation being provided in the month of purchase and no depreciation being provided in the month of sale.

1.3.3 Amortization

Amortization has being provided for Depreciation for Capital Assets which purchased by using government capital grants.

1.3.4 Deferred Expenditure

Expenditure incurred for plant Transformer from Ceylon Electricity Board has being identified as Deferred Expenditure, Which will be written off to Statement of Financial Performance equally.

1.3.5 Gratuity

Provision is made in the accounts for retirement of gratuities at rates applicable under the payment of gratuity act No 12 of 1983 although employees should complete a minimum period 05 years of continued employment to qualify for Gratuity payment under the act. Provision is made at the complete one year of employment on the assumption that all employees indent to continue in employment to act last 05 years.

1.4 Income and Expenditure

1.4.1 Government Grant

The total Capital Grant received for the year was Rs.71.95Mn. The Recurrent Grants that have been used for the operational activities for the year was Rs.30Mn and have been recognized as revenue in the Income Statement.

1.4.2 Revenue Recognition

(a) Government Grants (Recurrent)

The Government Recurrent grants are recognized in the period in which they are received.

(b) Course Fees

Course fees are recognized over the period of instruction. Where adequate information is not available to make such allocation to different financial periods, fees are recognized as income on a cash basis.

(c) Investment Income

Interest income received out of Investment is accounted on accrued basis.

1.5 Receivables

Receivables are stated at the amounts that they are estimated to realize.

1.6 Cash and Cash Equivalents

Cash and Cash equivalents comprise bank balances.

1.7 Current Assets

Current Assets classified in the balance sheet are those which will be recovered within one year after the Balance Sheet date.

1.8 Current Liabilities

Liabilities classified as current liabilities in the balance sheet are those that fall due for payment within one year from the Balance Sheet date. All known liabilities have been accounted for in preparing the final statements.

1.9 Cash Flow Statement

The Cash flow statements have been prepared using the "Indirect Method" for the purpose of the statement of Cash flow. Cash & Cash equivalents are comprised bank balances.

Notes to the Financial Statements - 2018

Note - 01
Bank Balances

	2018 Rs.	2017 Rs.
Current Accounts		
Plant Sale Collection	808,212	-
Cetificate Course Collection	3,898,216	4,842,393
Government Grant (Capital) Collection	7,697,722	9,202,828
Farmers Trust Fund Collection	18,200	82,640
Personal Emolument Remmitance	1,068,191	803,980
Recurrent Expenditure Remmitance	213,282	7,762,324
Short term investments		
Call Deposits	-	10,120,895
	13,703,823	**32,815,061**

Note - 02
Inventory

	2018 Rs.	2017 Rs.
Raw material	478,966	960,586
Work In Progress	816,917	816,917
Banana Plants	2,708,820	1,510,073
Papaya Plant	-	12,484
Spine Guard Plant	-	11,050
Consumable Stock Stationery	640,907	326,338
Consumable Stock Electric & Hardawre itmes	625,929	839,096
Consumable Stock Consumable & glassware	1,113,600	304,359
Chemicals & Coir pallets	-	-
	6,385,138	**4,780,903**

Note - 03
Interest Receivable

	2018 Rs.	2017 Rs.
RED	1,092	2,410
Farmers Trust Fund	154,500	201,500
3 months investment interest	210,310	-
call deposit		1,018,023
	365,902	**1,221,933**

Note - 04
Loan Account

	2018 Rs.	2017 Rs.
RED Loan	49,174	84,416
Farmers Trust Fund Loan	1,346,215	1,769,385
Distress Loan	540,791	257,925
	1,936,180	**2,111,726**

Note - 05
Property Plant & Equipment

Table I

Rs.	Electrical Equipments	Hostel Project	Buliding & Structures	Buliding & Structures Rehabilitation	Vehicles	Lab and Teaching Equipment	Plant Machinery & Equipment	Musical Instrument	Total
Cost / Valuation									
Balance as at January 01, 2018	137,821	222,422,928	78,857,657	5,002,077	10,439,921	9,797,770	4,924,457	-	331,582,631
Additions/Improvements	-	-	3,042,186	4,366,029	-	539,905	700,563	373,925	9,022,608
Valuation on assets					35,000		200,000		
Capital Grant									
Other Grant									
Disposals									
As at December 31, 2018	137,821	222,422,928	81,899,843	9,368,106	10,474,921	10,337,675	5,825,020	373,925	340,840,239
Accumulated Depreciation									
Rate of Depreciation	20%	5%	5%	5%	20%	20%	10%	10%	
Balance as at January 01, 2018	61,304.00	33,660,011.00	8,922,871.00	28,970.00	8,714,788.00	3,672,525.00	1,001,225.00		56,061,694.00
Adjusted Opening Balance									
Depreciation for the Year	27,564	11,121,146	4,035,827	307,510	507,752	1,831,059	545,866	8,499	18,385,224
As at December 31, 2018	88,868	44,781,157	12,958,698	336,480	9,222,540	5,503,584	1,547,091	8,499	74,446,918
Net book value as at December 31, 2018	**48,953**	**177,641,771**	**68,941,145**	**9,031,626**	**1,252,381**	**4,834,091**	**4,277,929**	**365,426**	**266,393,321**

Note - 05
Property Plant and Equipment

Table II

Rs.	House Hold Equipments	Office Equipment	Furnitures And Fittings	Sport Goods	Books	Land Initial Cost	Total from Table II	Total from Table I	Total
Cost / Valuation									
Balance as at January 01, 2018	372,184	11,748,572	16,790,196	223,200	643,498	2,928,385	32,706,035	331,582,631	364,288,666
Additions/Improvements	623,316	4,106,200	5,603,061	-	-		10,332,577	9,022,608	19,355,185
Valuation on assets		181,000							
Capital Grant							-		-
Other Grant							-		-
Disposals							-		
As at December 31, 2018	995,500	16,035,772	22,393,257	223,200	643,498	2,928,385	43,038,612	340,840,239	383,643,851
Accumulated Depreciation									
Rate of Depreciation	10%	10%,20%	10%	10%	10%				
Balance as at January 01, 2018	149,395.00	4,484,861.00	3,182,748	902.00	89,529.00		7,907,434.71	56,061,694.00	63,969,129
Depreciation for the Year	56,052	2,435,416	2,015,222	22,320	64,350		4,593,360	18,385,224	22,978,583
As at December 31, 2018	205,447	6,920,277	5,197,970	23,222	153,879	-	12,500,794	74,446,918	86,947,712
Net book value as at December 31, 2018	**790,053**	**9,115,495**	**17,195,287**	**199,978**	**489,619**	**2,928,385**	**30,537,817**	**266,393,321**	**296,696,139**

Note - 06
Deffered Expenditure

	2018 Rs.	2017 Rs.
Transformer - Ceylon Electricity Board	1,299,300	1,559,160
Electrical Equipments	1,637,443	1,778,116
	2,936,743	**3,463,396**

Note - 07
Accrued Expences

	2018 Rs.	2017 Rs.
Electricity	238,080	161,529
Water	8,622	11,026
Postal And Telecommunication	222,639	141,959
Salaries	220,652	194,575
EPF	360,037	344,450
ETF	78,598	64,013
Extra Working Day Payments	60,672	39,867
Domestic Travelling	43,546	7,200
Fuel & Lubricant	57,535	-
Maintenance - Buildings		-
UPF Loan		2,470
UPF		-
Over Time	61,021	29,067
Transport	109,030	6,500
Organic Products Project	-	-
Professional Fee		135,661
Staf Development	17,000	-
Examination fee	140,300	3,700
Stamp Duty		4,880
Other Services		2,238
Other Deduction Salary	23,100	-
Other Contractual Services	116,000	2,176,400
Staff union fee	17,650	2,250
Visiting Lectures Fee	10,125	10,800
Welfare	11,000	11,300
PAYEE TAX		-
Cleaning Service	461,440	
Printing & Advertising	214,711	
Field Visit	6,750	
Expenditure on certificate course	7,330	
Stock Stationery	6,400	
Stock Consumable & Glassware	50,010	
Entertainment Expenditure	96,652	
Stock Electric & Hardware Items	1,430	
Office Equipments	812,792	
House Hold Equipments	377,000	
	3,830,119	**3,349,885**

Notes to the Financial Statements - 2018 (Contd.)

Note - 08
Non Current Liabilities

	2018 Rs.	2017 Rs.
Farmers Trust fund	875,003	1,458,333
Provision for gratuity	5,917,162	4,933,784
Refundable Deposit	10,000	10,000
	6,802,165	**6,402,117**

Production Unit Expenses

Note - 09
Personal Emoluments

	2018 Rs.	2017 Rs.
Salaries & Wages	10,682,276	10,657,335
E.P.F	1,281,873	1,274,752
E.T.F.	320,468	318,688
	12,284,617	**12,250,775**

Note - 10
Over Heads

	2018 Rs.	2017 Rs.
Telephone	36,473	41,554
Water	329,263	264,990
Depreciation for Lab Equipment	1,082,285	547,753
Electricity	1,614,178	1,308,955
Expenditure On Plant Production	2,449,904	80,059
	5,512,103	**2,243,311**

Note - 11
Generated Income

	2018 Rs.	2017 Rs.
Certificate Course - IARS	11,206,250	4,978,750
Unidentified course income	5,017,825	73,096
Other Income	399,079	5,750
Non Recognised Income Course Fee	-	
Tender Fee	66,000	152,000
Hostel Fee	934,250	355,800
	17,623,404	**5,565,396**

Note - 12
Interest Income

	2018 Rs.	2017 Rs.
Distress Loan Interest	5,531	10,398
Employee Loan Interest	-	
Interest in investment	1,496,990	3,958,365
	1,502,520	**3,968,763**

Notes to the Financial Statements - 2018 (Contd.)

Note - 13

Personal Emoluments

	2018 Rs.	2017 Rs.
Salaries & Wages	25,410,849	17,899,258
E.P.F	1,363,665	1,603,684
UPF	650,365	377,629
Pension	254,261	182,642
E.T.F.	523,405	493,519
Extra Working Day Payments	297,727	241,600
Over Time	261,975	142,513
	28,762,248	**20,940,845**

Note - 14

Travelling

	2018 Rs.	2017 Rs.
Foriegn	423,451	350,000
Domestic	496,273	537,150
	919,723	**887,150**

Note - 15

Supplies

	2018 Rs.	2017 Rs.
Mechanical and Electrical Goods	781,004	100,711
Stationery & Office Requisites	738,851	428,382
Medical Suplies	-	-
Uniform	77,560	48,750
Fuel and Lubricant	1,226,408	1,077,796
Other	740,935	665,640
Consumable And Glass ware	759,004	194,032
	4,323,763	**2,515,311**

Note - 16

Maintenance Expenditure

	2018 Rs.	2017 Rs.
Plant, Machinery Equipment	253,747	113,733
Furniture	-	-
Vehicles	1,042,007	479,153
Buildings & Structures	15,570	33,535
Electrical equipment	124,750	-
Other	35,690	322,830
	1,471,764	**949,251**

Note - 17

Contractual Services

	2018 Rs.	2017 Rs.
Transport	1,034,715	504,056
Postal & Telecommunication	2,454,686	1,896,741
Electicity	869,173	546,413
Water	329,263	264,988
Cleaning Service	1,962,490	-
Rates, Taxes & Local Authorities	-	-
Other Contractual Services	1,521,376	2,933,500
Printing, Advertising etc.	668,154	661,602
	8,839,855	**6,807,301**

Note - 18

Other Recurrent Expenditure

	2018 Rs.	2017 Rs.
Visiting Lectues Fee	189,975	178,650
Special Services - Board Meeting & Committees	402,500	605,167
Workshops, Seminars	372,487	201,575
Bank Charges	6,433	1,000
Expenditure on Certifictre Courses IARS	1,436,693	432,600
Entertainment Expenditure	399,922	366,469
Staff Development	343,533	558,125
Expenditure on RED	-	-
Director Entertainment Expenditure	-	-
Proffesional Fee	1,178,190	974,845
Organic Farming Project	-	33,000
Expenditure On Mushroom Sales	59,800	241,090
Examination Expenditure	422,200	281,610
Field Visit Expenditure	11,550	17,400
Animal Husbandry	253,540	163,520
Other	-	638,899
Interest Paid	11,670	20,833
ETF Surcharge	21,204	-
	5,109,697	**4,714,783**

Note - 19

Human Capital Development

	2018 Rs.	2017 Rs.
Strenghthing Research	325,160	382,978
Postgraduate Dcoctoral Project	-	-
	325,160	**382,978**

A FUTURE PROJECTION REPORT BASED ON SUSTAINABLE DEVELOPMENT

University of Colombo Institute for Agro-Technology and Rural Sciences has taken steps to develop the Strategic Management Plan to meet the Sustainable Development Goals. Accordingly, the following objectives of the Strategic Management Plan prepared for the year 2019-2023 are set out in such a way that it has minimal negative impact on the environment and protects the environment.

Goal 01: Enhanced production of graduates with the requisites attributes
Goal 02: Increased industry partnerships and international cooperation
Goal 03: Enhanced academic profile and impact of research and outreach
Goal 04: Improved infrastructure facilities and amenities
Goal 0**5**: Improved governance and financial management/discipline and reduced financial dependence

As the institute is an agriculture based organization, it is an organization which focuses on protecting the environment and modeling agriculture for the community.

Accordingly, the steps taken by the Institute for the protection of the environment and sustainable development during the year 2018 can be summarized as follows.

1. Development of a Mushroom Bag Filling Machine

   The machine was developed by Mr. G. Pathum Hashan, a student of the 7th batch, who is pursuing a degree in Agro- Technology at the Institute. It works manually so there is no fuel burn and no harm to the environment.

2. Introduction of instant leaf porridge commercially.

   The company has introduced commercially instant kale porridge blended with the appropriate quantities of curry leaves, traditional rice and spices. Since there is no chemical in it, it is not harmful to the body.

3. Production of a dual purpose machine for processing biofilms (dishwashers) using biofilms and banana leaves.

   This machine has been introduced to reduce the use of environmentally damaging polythene.

4. Construct a 30 acre reservoir to collect water needed for the development of the 40 acre farm of the institute for student practical activities under the farm training program.

The reservoir was built for the use of water released from the Lunugamvehera reservoir to the paddy fields and released into the lagoon. Through this the institute has managed the maximum water management without wasting water resources.

5. Two acres of paddy was cultivated using the water of the reservoir. In addition, Tissue Planting Banana and Red Lady (papaya) cultivation were carried out on the farm of the institute. The yield generated a significant contribution to the institute's earnings.

6. Organic crop production is another specialty of the plantations carried out by the Institute. Therefore, pollution is minimal.

7. The institute was able to create many essential infrastructure facilities in 2018.

   I. Establishment of the canteen that has been a major drawback for many years, opening in 2018 has enabled the students and the staff of the institute to obtain nutritious food at very low prices. Also, the sale of bread products in this canteen is completely prohibited. Local food is given priority.

   II. Since the institute is located in a very difficult area, the construction of the staff quarters, which was a major shortage for academic and administrative officers, was started.

   III. Expansion of WiFi Internet Facilities to the Administrative Building, which was limited to the academic department.

   IV. Commencement of construction work of the Buddha shrine to nurture the spiritual cultivation of the institution.

   V. Construction of Dairy shed, Dryer house and Mushroom was commenced for practical and practical teaching activities for students who are pursuing Bachelor of Agro-Technology.

8. Using Bio Gas and Solar Energy. (Solar panels have been installed for the elephant fence to save electricity).

9. To cultivate suitable plants that can protect the soil by removing thorny plants which destroy the quality of the soil while developing the 40 acre farm to protect the terrestrial ecosystems.

10. Preparation of drainage systems at appropriate places to minimize soil erosion during landscaping.
11. Establishment of Drip irrigation system to protect the environment.

12. Putting and maintenance of street lamps at public expense as the street lighting system on the main road around the institute has been dysfunctional for many years.

13. Since there is no safe drinking water in Hambantota area (due to the presence of kidney and other infections), there are 400 students in the hostel, providing a water purification plant to obtain drinking water for the residents has increased water security.

14. Conducting awareness programs to educate the community on the agricultural technologies of the institute.

15. Introduction of new farming systems through agricultural research.

16. A follow up service for farmer entrepreneurs who purchase tissue culture plantains from the institute is provided free of charge until they are harvested. The farming community has the ability to use the right technology to enable them to get high yields.

17. There is no age limit for recruiting to pursue the degree in Agro-Technology offered by this institute. Interested parties in agriculture have access to higher education. It provides incentives for all to learn for a lifetime of sustainable development.

    For example, the oldest person to complete this year's degree is approximately 52 years old.

18. Reduce paper usage in office work (by making more use of email) and reuse one-sided paper.

The steps to be taken in the future to protect the environment and sustainable development can be summarized as below.

1. Improving health and nutrition through the sale of organic food to the community through the commercial development of organic farming and crop cultivation after the entire development of the institute's 40 acre farm.

2. Introduction of new technologies in Agro-Entrepreneurship through Agro-technical Research.

3. Taking steps to save solar energy by introducing solar power to the entire organization.

4. Introducing water treatment technology for the entire organization. This will reduce the cost of obtaining drinking water outside and also conserve water.
5. Increasing the introduction of soil conservation plantations that can protect terrestrial ecosystems

6. Provide Internet access to all essential areas within the premises of the institute and to provide access for the latest technology to students and employees of the institute.

7. To avoid as much as possible the pollution of the environment during the administrative and ceremonial activities of the institution.

8. Directing students to plant trees in agro-practical activities within the institution as much as possible to create a greener environment.

9. It was organizes an International Conference on Minor Fruits and Medicinal Plants and it was possible to present research on the above topic at the conference.

10. Conduct an EIA before commencing the construction work and if the environmental impact is minimal.

11. Using energy and water resources economically.

Director

Institute for Agro – Technology and Rural Sciences

Affiliated to the University of Colombo

Auditor General's Report on the Financial Statements and other Legal and Regulatory Requirements for the year ended as at 31^{st} of December 2018 of the Institute for Agro – Technology and Rural Sciences Affiliated to the University of Colombo in terms of Section 12 of the National Audit Act No. 19 of 2018

1. Financial Statements

1.1. Qualified Opinion

The audit of Financial Statement of the Institute for Agro – Technology and Rural Sciences Affiliated to the University of Colombo for the year ended as at 31^{st} December 2018 comprising the Statement of Financial Performance and Production and Trading Statement and statement of changes in equity for the year then ended and cash flow statement, and explanations for the financial statements and a summary of significant accounting policies was carried out under my direction in pursuance of provisions in the National Audit Act No. 19 of 2018 and the Finance Act No. 38 of 1971 to be read in conjunction with Article 154 (1) of the Constitution of the Democratic Socialist Republic of Sri Lanka .My audit report will be tabled at the parliament in due course in terms of Article 154 (6) of the constitution.

I am of opinion that except for the effect of the matters referred to in the section of qualifies opinion, financial statement of the institute as at 31^{st} December 2018 and its financial performance and cash flows for the year then ended give true and fair view in accordance with the Sri Lanka Accounting Standards (SLAS) / Sri Lanka Public Sector Accounting Standards.

1.2. Basis for the Qualified Opinion

The following observations were made.

1.2.1. Following of Sri Lanka Public Sector Accounting Standards

Even though property, plant and equipment of Rs. 1,989,274/- have been totally depreciated, they had been further used due to non-review of the useful life of the noncurrent assets. Accordingly, measures were not taken to revise the estimated error in terms of the Sri Lanka Public Sector Accounting Standards 03.

1.2.2. Accounting Deficiencies

(a) Even though the capital grants received from the Treasury and other parties were specified in cash flow statement as Rs. 99,704,950/- , since the value was Rs. 99,550,000/- in accordance with the bank account, cash flow statement had been overstated by Rs. 154,950/- under financial activities.

(b) Even though the cash outflow on the purchase of fixed assets and the works in progress is Rs. 99,919,432/- as per cash flow statement, since the value was Rs. 100,564,540/- when examining expenditure vouchers, a difference of Rs. 645,108/- was observed.

(c) Expenditure on payment of gratuity was understated by Rs. 237,526/-.

(d) 38 items of plant, machinery and office equipment have been depreciated considering their life as 5-6 years, even though their useful life is 10 years under fixed assets and consequently the depreciation expense for the year under review was understated by Rs. 87,374/-.

(e) Comparing the statement of changes in equity and the ledger accounts, Ledger Account (Other Expenditure Grants) was overstated by Rs.11,121,,146/- and that amount has been understated in Special Expenditure Grant Account.

(f) The balances of Asset Donation Accounts of the institute were Rs. 213,276,184/- and Rs. 3,160,390/- respectively and they had not been amortized to an equal value of depreciating relevant assets.

I carried out the audit in pursuance with the Sri Lanka Audit Standards. My responsibility under these audit standards has been further explained in the part of Auditor's responsibility on auditing the financial statements of this report. I believe that the audit evidence I have obtained to provide a basis for my qualified opinion is sufficient and appropriate.

1.3 Responsibility of the Management and the Governing Parties for financial statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Sri Lanka Public Sector Accounting Standards 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 and error.

When preparing financial statements, it is a responsibility of the management to determine the ability of continuous operation of the institute and in case the management determines to liquidate the institute or unless take action to cease the operations in the absence of other alternative, the management is responsible for accounting based on the continuous operation and to disclose the matters on the constant operation of the institute in future.

The governing parties are responsible for the process of reporting finance.

As per sub section 16 (1) of the National Audit Act No. 19 of 2018, the institute is required to maintain books and reports of all income , expenditure, assets and liabilities enabling to prepare the annual and periodic financial statements.

1.4 Auditor's Responsibilities for the Audit of the Financial Statements

My objective is to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but it is not a guarantee that an audit conducted in accordance with Sri Lanka Auditing Standards will always detect a material misstatement when it exists. Misstatements can arise from fraud and error are considered material if, individually or in aggregate they could be expected to influence the economic decisions of users taken on the basis of these financial statements.

I carried out the audit in accordance with Sri Lanka Auditing Standards exercising professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements whether due to fraud or error, design and perform audit procedures responsive to these risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk resulting from a fraud is higher than the risk of not detecting a material misstatement and as fraud may involve collusion, forgery, intentional omissions or the override of internal control.
- Obtain an understanding of internal control relevant to the audit 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 internal control.
- Evaluate whether the applicability of the detections of the fairness and the management of the accounting policies and accounting statements which were used.
- Determine the applicability of the continuous operation of the institute for accounting, based on the audit evidence received whether material uncertainty on the continuous operation of the institute due to circumstances and situations. In case I conclude that material uncertainties prevail, consideration should be given on the related disclosures of the financial statement, and if such disclosures are not sufficient my opinion should be modified. However, continuous operation could be terminated based on the future circumstances and situations.
- Evaluate whether the overall presentation, structure and content of the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I informed the governing parties regarding the significant audit findings, including any significant deficiencies in internal control and other matters I identified during my audit.

2. Report on the Legal and other Regulatory Requirements

- Special provisions on the following requirements are included in the National Audit Act No.19 of 2018.
  - As per the requirements specified under section 12 (a) of the National Audit Act No. 19 of 2018, I have obtained all the information and explanations required for auditing, except the impact of the matters explained under the basis for the qualified opinion in my report, I have made evident through my audit examination that the institute has maintained proper financial reports.
  - As per the requirement of Section 6(1) d (III) of the National Audit Act No. 19 of 2018, financial statements presented by the institute are consistent with the preceding year.
  - As per the requirement of Section 6(1) d (iv) of the National Audit Act No. 19 of 2018, recommendations made by me in preceding year are included in the financial statements.

  Based on the procedures followed and evidence obtained and being limited to the material facts, I did not focus anything to make the following statements.

2.1. As per the requirement of Section 12 (d) of the National Audit Act No. 19 of 2018, any member of the governing body of the institute has any direct or indirect interest in any contract entered into by the institute apart from their regular position within the business.

2.2. As per the requirement of Section 12 (f) of the National Audit Act No. 19 of 2018 , the institute has not complied with any applicable written law or other general or special directions issued by the governing body of the institute

Reference for the Laws, Rules, Regulations or the Provisions issued by the governing body	Non compliance
(a) Regulation 371 of the Financial Regulations of the Democratic Socialist Republic of Sri Lanka and Public Finance Circular No. 3/2015 dated 14th July 2015	Even though advances must be settled after immediate completion of the relevant task, a term of 65 – 180 days have been spent on settling the aggregated advance value of Rs. 477,500/- that obtained eight times.

(b) Public Finance Circular dated 17th October 2014	Even though Boar of Survey of the physical items should be completed by 15th January of every financial year and should submit the Board of Survey Report of the preceding year to the Auditor General with a copy to the Chief Accounting Officer before 17th March, it was not performed.

2.3 As per the requirement of Section 12 (g) of the National Audit Act No. 19 of 2018, the institute has not performed according to its powers functions and duties.

2.4 As per the requirement of Section 12 (h) of the National Audit Act No. 19 of 2018, the institute had not been procured and utilized economically, efficiently and effectively within the time frames and in compliance with the applicable laws.

(a) Not recovered the loan balance of Rs.1, 582,935/- from the loan of Rs. 3,024,000/- granted to 16 farmers by the Farmers' Trust Fund, the loan balance of Rs.58, 1000/- from the loan of Rs. 312,000/- granted to three farmers under Rural Enterprise Development Programme in 2012 and the loan balance of Rs. 420,810/- from six farmers from the loan granted under "planting material" loan scheme.

(b) The gross profit of the year under review has decreased by Rs. 1,422,395/- compared to the preceding year and it is 150% unusual decrease of the operations.

(c) As per the procurement plan of the institute, 21 procurements of the aggregated value of Rs. 47,870,000/- were not carried out in the year under review and even though reviewing and granting approval for the specifications for the procurements prepared comply with the guideline 2.8.11 of the Procurement Guidelines is a responsibility of the Technical Evaluation Committee (TEC), the institute has to obtained TEC approval for 06 procurements at the examination of the samples. Further, although as per the guideline 6.3.3 (b) of the Procurement Guidelines, bids should be obtained soon after the closure of calling bids there were 06 occasions that bids were opened with a delay of 02 -38 days.

(d) The institute possessed 145 books at the value of Rs. 643,498/- purchased in 2016 and 2017 and the students could not use them until the end of 145 the year under review due to the unavailability of a library.

3. Other Observations

(a) At the examination of the progress of the activities in the action plan of the institute in accordance with the performance criteria of 2018, there was not any progress in 11 activities and progress of 06 activities have decreased 06% - 33%.

(b) It was planned to name this institute, which is an affiliated institute of the University of Colombo as Agro Technical Faculty of University of Colombo in 2018. Presently, this institute offers only one degree and even though it had been proposed to conduct two degree programmes as per this new proposal, approval of the University Grants Commission was not received until the end of the year under review.

(c) The land which this institute has been constructed in the extent of 50 Acres belongs to the Department of Wildlife Conservation, but the possession had not been transferred to the institute even by the end of the year under review.

(d) Approved cadre of the institute in 2018 was 36 and the actual cadre was 11. Accordingly, the shortage of the staff was 25 and among them shortage of the academic staff was 05.

(e) Comparing the budget and the actual expenditure of the year under review, internal income had decreased by 45 per cent from the estimated income and the difference between the budgeted and actual amounts of the expenditure of 05 votes was in the range of 23% - 42%.

(f) An amount of Rs. 30,302/- had been paid to a Course Coordinator for research activities out of the budget amount of Rs. 30,000,000/-. The research proposal was submitted on 22nd September 2017 and even though the research should have been submitted on 22nd September 2018, it had not been completed by the end of the year under review and even the term had not been extended.

W.P.C. Wickramarathne

Auditor General

University of Colombo Institute for Agro – Technology and Rural Sciences

Paragraph of the audit report	Matter specified in the audit query	Answers for the Audit Query
1.	**Accounts**	
1.2.1	**Sri Lanka Public Sector Accounting Standards**	
	Sri Lanka Public Sector Accounting Standards 07 Even though property, plant and equipment of Rs. 1,989,274/- have been totally depreciated, they had been further used due to non-review of the useful life of the noncurrent assets. Accordingly, measures were not taken to revise the estimated error in terms of the Sri Lanka Public Sector Accounting Standards 03.	Agreed with your observations. I inform you that measures will be taken to correct them when preparing the final accounts of 2019.
1.**2.2**	**1.1.1. Accounting Deficiencies**	
	<u>Cash Flow Statement</u>	
(a)	Even though the capital grants received from the Treasury and other parties were specified in cash flow statement as Rs. 99,704,950/- , since the value was Rs. 99,550,000/- in accordance with the bank account, cash flow statement had been overstated by Rs. 154,950/- under financial activities.	By an oversight an amount of Rs. 154,950 from last year adjustments has been included to the opening balance of Statement of Changes in Equity as capital receipts in the cash flow statement and measures will be taken to correct in the coming fiscal year.
(b)	Even though the cash outflow on the purchase of fixed assets and the works in progress is Rs. 99,919,432/- as per cash flow	As per the cash flow statement, cash outflow on the purchase of fixed assets and works in progress is Rs. 99,919,432 and an observation has

	statement, since the value was Rs. 100,564,540/- when examining expenditure vouchers, a difference of Rs. 645,108/- was observed.	been submitted that its value is Rs.100, 564,540 at the examination of expenditure vouchers. It was detected when examining vouchers that 12 months salaries of the Technical Officer have been added and will take action to check the changes other than that, if any, and remove such changes from the accounts.
(c)	Expenditure on payment of gratuity was understated by Rs. 237,526/-.	The under state amount is the payable gratuity payment of Ms. S.V.G.N. Priyadarshani. These understated provisions will be further corrected in the coming fiscal year.
(d)	38 items of plant, machinery and office equipment have been depreciated considering their life as 5-6 years, even though their useful life is 10 years under fixed assets and consequently the depreciation expense for the year under review was understated by Rs. 87,374/-.	Agreed with your observations. This will be corrected in the final accounts of 2019.
(e)	Comparing the statement of changes in equity and the ledger accounts, Ledger Account (Other Expenditure Grants) was overstated by Rs.11,121,,146/- and that amount has been understated in Special Expenditure Grant Account.	Even though the balance was Rs. 213,276,184 as per the financial statements of the Special Expenditure Grant Account, the balance as per the ledger accounts was Rs. 202,155,038 and a difference of Rs. 11,121,146 was observed.
(f)	The balances of Asset Donation Accounts of the institute were Rs. 213,276,184/- and Rs. 3,160,390/- respectively and they had not been amortized to an equal value of depreciating relevant assets.	Agreed with your observations. I inform you that measures will be taken to correct this in the final accounts of 2019.
2.2	**Laws, Rules and Regulations**	
(a)	Even though advances must be settled after immediate completion of the relevant task, a term of 65 – 180 days have been spent on settling the aggregated advance value of Rs. 477,500/- that obtained eight times.	By an oversight it has been missed to settle advances and will not allow occurring the same again.

(b)	Public Finance Circular dated 17th October 2014	
	Even though Board of Survey of the physical items should be completed by 15th January of every financial year and should submit the Board of Survey Report of the preceding year to the Auditor General with a copy to the Chief Accounting Officer before 17th March, it was not performed.	Even though Board of Survey of the physical items should be completed by 15th January of every financial year and should submit the Board of Survey Report of the preceding year to the Auditor General with a copy to the Chief Accounting Officer before 17th March, it was not performed. Since this task should be performed much properly, it has been assigned to the Accounts Division of Hambantota District Secretariat as an external party and they could on complete it on time due to the busy work schedule and they have been frequently sent reminders to avoid further delays. However, they were unable to complete it on time due to urgent duties and sending the copies got delayed. The institute has taken measures to avoid the same next fiscal year.
2.4		
(a)	Not recovered the loan balance of Rs.1, 582,935/- from the loan of Rs. 3,024,000/- granted to 16 farmers by the Farmers' Trust Fund, the loan balance of Rs.58, 1000/- from the loan of Rs. 312,000/- granted to three farmers under Rural Enterprise Development Programme in 2012 and the loan balance of Rs. 420,810/- from six farmers.	Agreed with your observations. At the 56th Management Board Meeting held on 12.12.2017, it was decided to take legal action against who have neglected settling loans in arrears as it is difficult to settle them. All information in this regard has been sent to the University of Colombo in order to get clarified the legal status from the Legal Officer. She has replied us that it should be forwarded to the Legislation Committee to obtain relevant judiciary concurrence. It is expected to get legal action against the students who have neglected payment of loan in arrears after the receipt of the approval of the Legislation Committee.
(b)	The gross profit of the year under review has decreased by Rs. 1,422,395/- compared to the preceding year and it is 150%	Unexpected downfall in the tissue culture sector highly influenced on the decrease of gross profit.

	unusual decrease of the operations.	
(c)	As per the procurement plan of the institute, 21 procurements of the aggregated value of Rs. 47,870,000/- were not carried out in the year under review and even though reviewing and granting approval for the specifications for the procurements prepared comply with the guideline 2.8.11 of the Procurement Guidelines is a responsibility of the Technical Evaluation Committee (TEC), the institute has to obtained TEC approval for 06 procurements at the examination of the samples. Further, although as per the guideline 6.3.3 (b) of the Procurement Guidelines, bids should be obtained soon after the closure of calling bids there were 06 occasions that bids were opened with a delay of 02 -38 days.	Procurements were carried out whilst non receipt of government grants on time and the approved total amount. Under these circumstances most of the planned procurements get delayed and Rs. 3.05 Mn should be received in 2018 has not been released yet. Further, as only limited employees are in all the divisions of the institute it is difficult to carry out all activities cannot as scheduled. Agreed with your observations and will take measures not to occur the same again. Agreed with your observation. Due to the insufficiency of the staff, such requirements cannot be met and will take action not to occur such errors again.
(d)	The institute possessed 145 books at the value of Rs. 643,498/- purchased in 2016 and 2017 and the students could not use them until the end of 145 the year under review due to the unavailability of a library.	These books are given for the use of students by the academic staff and measures will be taken immediately to reserve a place for them.
3	**2. Other Observations**	
(a)	At the examination of the progress of the activities in the action plan of the institute in accordance with the performance criteria of 2018, there was not any progress in 11 activities and progress of 06 activities have decreased 06% - 33%.	Some activities specified in the action plan have been concluded without any progress, due to not approving sufficient capital funds to the capital funds and non receipt of approved total amount. Action plans will be prepared to carry out these activities effectively during the coming fiscal year.
(b)	It was planned to name this institute, which is an affiliated institute of the University of Colombo as Agro Technical Faculty of University of Colombo in 2018. Presently, this institute offers only one degree and even though it had been proposed to conduct two degree programmes as per this new proposal, approval of the University Grants Commission was not received until the end	Approval for this has been received by the Quality Assurance Council and presently being discussed at the Standing Committee of the University Grants Commission.

	of the year under review.	
(c)	The land which this institute has been constructed in the extent of 50 Acres belongs to the Department of Wildlife Conservation, but the possession had not been transferred to the institute even by the end of the year under review.	Agreed with your observations. All the required reports; Contour survey, Master Plan, Drainage plan, Building plans, waste water management plan, landscape plan and etc. have been prepared with much effort spending a huge cost and submitted on 19.02.2018 ion the request of the Department of Wild Life conservation in order to get possession of the land of 50 Acres legally. However, since there is no response a reminder was sent on 12.10.2018. This institute has completed everything to be done from the part of the institute to acquire the possession of the land of 50 Acres legally. Further, a lease payment of Rs. 1,080,000.00 has been made to Lunugamwehera Divisional Secretariat on behalf of this 50 Acre land. In addition, even though legal documents were signed at the Land Commissioner's Department in respect of this 50 Acre land, still we have not received relevant documents.
(d)	Approved cadre of the institute in 2018 was 36 and the actual cadre was 11. Accordingly, the shortage of the staff was 25 and among them shortage of the academic staff was 05.	From the approve cadre of the instate, 24 posts are non- academic and persons should be recruited for them following a prescribed method by a list of the Ministry of Higher Education in terms of the circular 876. Accordingly, the required list of names was received only for a few posts and there were no adequate number of candidates to be recruited by a competitive examination. Further, even though a new list was requested it has not been received. Hence, the vacancies in the non-academic posts could not be filled and if the name lists for all the vacancies will be received on time all the vacancies non- academic posts could be filled before the end of 2019.

		Relevant recruitment procedure was followed to recruit for three posts out of the five vacancies in the academic staff and recruited one lecturer. Even though approval of the University Grants Commission was sought for the other two posts and waited for a long time, as they were not approved as per the UGC reply at the beginning of 2019, applications have been called through vacancy advertisements. It is expected to fill all the vacancies before the end of 2019. The lecturer recruited in 2018 has resigned at the end of February 2019.
(e)	Comparing the budget and the actual expenditure of the year under review, internal income had decreased by 45 per cent from the estimated income and the difference between the budgeted and actual amounts of the expenditure of 05 votes was in the range of 23% - 42%.	Could be agreed with the observation that expenditures have been over forecasted when comparing the budget and the actual expenses of the year under review and the expeditious development projects of the institute are in progress. When carrying out activities, capital and recurrent expenditures have to be borne and it is not practical to depend on budgeted estimates. Further, unexpected downfall in the tissue culture sector caused the change of income forecast and attention will be paid strictly when preparing budget of next year.
(f)	An amount of Rs. 30,302/- had been paid to a Course Coordinator for research activities out of the budget amount of Rs. 30,000,000/-. The research proposal was submitted on 22nd September 2017 and even though the research should have been submitted on 22nd September 2018, it had not been completed by the end of the year under review and even the term had not been extended.	A request has been made to the Head of the Division to extend the term, since further time s required to complete the research. However financial provisions have not been received by the institute for these research activities. The research is in progress and the finance of the institute is not utilized on it.