



ANNUAL REPORT

&

ACCOUNTS OF THE

PGIS

2010

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1. Vision Statement

To be an internationally renowned centre of excellence in Asia for postgraduate education and research in Science

2 Mission Statement

To contribute to the development of a knowledge - based society with social sensitivity, ethical rectitude and economic prosperity through postgraduate level education and research in science and dissemination of knowledge in an intellectually stimulating, efficiently managed and harmonious academic environment

3. Director's Review

a. Introduction

The Postgraduate Institute of Science (PGIS) is a National Institute attached to the University of Peradeniya, Sri Lanka. The PGIS was established in 1996 by an ordinance from the Ministry of Higher Education in order to promote science education and research & development (R&D) in scientific disciplines in Sri Lanka. The principal objective of the Postgraduate Institute of Science is to promote and provide postgraduate instruction, training and research in various scientific specialties, enhancing the graduate academic experience.

The PGIS conducts M.Sc., M.Phil. and Ph.D. degree programmes as well as postgraduate diploma and certificate courses while conducting in-service training programmes, short courses, workshops, etc. These programmes of the PGIS are conducted through 10 Boards of Study in

close collaboration with the Faculty of Science, University of Peradeniya. The members of the teaching panels are drawn from eight faculties of the University of Peradeniya, as well as from other universities and institutes. The Institute also offers consultancy services to local industry and public/private sector institutions. Sandwich and collaborative research programmes have also been launched with international institutions in USA, UK, France, Sweden, Japan, Italy, Thailand, South Korea and other countries.

b. Achievements

Nine M.Sc. programmes with a total of 301 students were commenced on 31.12.2010. In addition, 20 new M. Phil students were enrolled during the year. Seven Ph.D students, 11 M.Phil students, 138 M.Sc. students and 119 Postgraduate Diploma students were graduated in 2010. Mr. K Velauthamurthy (Prof. R M G Rajapakse & Prof. H M N Bandara), Mr. R G U Jayalal (Dr. S Wijesundara & Mr. P Wolseley), Mr. T M W J Bandara (Prof. M A K L Dissanayake & Prof. B E Mellandar), Mr. M I M Jafeen (Prof. M A Careem & Prof. M A K L Dissanayake), Mr. A M D B Senevirathna (Dr. N D Fernandopulle, Dr. P Samaraweera & Prof. S Jayasinghe), Ms. W W M A B Mannapperuma (Dr. D R I B Werellagama, Dr. (Mrs.) C L Abayasekara & Dr. G B B Herath) & Ms. G D Sinniah (Prof. N K B Adikaram & Dr. (Mrs.) C L Abayasekara), were awarded Ph.D degrees through the Boards of studies in Chemical Science, Physics, Biochemistry & Molecular Biology and Plant Sciences respectively. The names of the supervisor/s are given in brackets.

Prof. Vasantha Amarakoon, Director, NYS Centre for Advanced Ceramic Technology (CACT) of Alfred University, USA delivered a lecture series on Nanoceramics for Solid States Lighting Applications on January 4th Monday 2010. M.Sc. students in Physics, Chemistry and Nanoscience and Nanotechnology as well as the undergraduates have participated. Prof Robin Pollard, President of Monash University in Malaysia visited the PGIS in October 2010 to discuss the possible collaborations. Prof. Tomonori Kawakami, Department of Environmental Engineering, Toyama Prefectural University, Japan visited the PGIS in October 2010 to discuss the possibility in organizing an international symposium on sustainable use of water. Prof. Fumihiko Imamura and his research group of Tohoku University, Japan conducted a one day Workshop on Practical Community countermeasures for Tsunami and Earthquake Disaster Risk Reduction Knowing the risk, taking action to mitigate, and living with risk for the M.Sc students of the Disaster management programme on 28th October, 2010. Dr. Sivananthan Sarasandarajah, Medical Physicist, RAH Cancer Centre, the University of Adelaide visited the Institution on 03.12.2010 and had discussions with the Director about the Medical Physics M.Sc. programme.

To conduct research work in addition to the normal laboratory practical work, the facilities at the analytical laboratory at the PGIS were upgraded by purchasing more research equipment. A soil and rock mechanics laboratory for Engineering Geology and other related

disciplines in Earth Sciences and Materials Science was also established in December 2010. A permanent Scientific Officer was also recruited.

The new fully equipped GIS and computer laboratories in the new building of the PGIS started its activities in November, 2010. These laboratories are equipped with more than 100 computers together with state of the art remote sensing software and equipment. As such, the PGIS can now cater its present requirements of computer facilities, needed particularly for the M.Sc and Diploma of Computer Science students without depending on external computer facilities. In the long run the PGIS will be able to save funds spent on paying to the external computer units as in the past. We also provide these facilities to undergraduate programmes.

A total of 20 activities of national importance (workshops, short courses, conferences, Symposiums etc.) successfully conducted during 2010. From these activities 1085 participants with different backgrounds were benefited. Out of these activities, 6 Short Courses were on GIS & Applications (167 participants); 3 Advanced Short Courses on GIS & Applications (51 participants); Intensive Course on Applied epidemiology (50 participants); 5th Short course on Health and Anesthesia in Captive Elephants (63 participants).

A Health Camp was organized by the PGIS for its staff and the university community. This had a very good response with a total number of participants around 170. The Health Camp followed by a key note lecture delivered by Prof V L.U. Ilangasekera, Consultant, Teaching Hospital, Peradeniya

To ensure automation and immediate response to requests for statutory processes, such as admissions, examinations, ID cards, transcripts, etc., setting up a student computer data base was initiated and completed.

c. Failure and Justification

Non-availability of funding for major research equipment and for research grants are the main obstacles in strengthening postgraduate research. This is further amplified by the non-access to science journals on line. Already requests have been made to the donor agencies (KOICA, Treasury, NSF) regarding these issues. A low graduation rate due to weak students, obtaining leave when necessary from their respective workplaces, and long delayed administrative procedures/bottlenecks are the problems that delay in completing the research project/thesis in particular at the writing stage. Several remedial measures have been taken to improve the quality of the project report/thesis and to complete them in time. As a result, we managed to clear most of the cases up to the 2006 batch. Similar efforts were implemented to

educate M.Phil and Ph.D. students through the Young Researchers Forum (YRF) of the PGIS. Consequently 7 Ph.D. students, 11 M.Phil students and 139 M.Sc. students were graduated at the last convocation.

Revaluation of assets and maintaining a proper fixed asset register is a long standing problem faced by the PGIS. Necessary steps have been taken to revalue the assets through the government Valuation Department and maintain a fixed asset register by purchasing a user friendly computer package.

d. Future Plans

In keeping with the vision and mission of the PGIS, activities have been planned for the next few years (**Details are given in the Corporate Plan and the Master Plan**). This includes equipping laboratories with major research equipment, construction of a hostel, a library, purchasing of a bus for field excursions and improving infrastructure facilities for disabled students.

The **Core Initiatives** are given below.

1. Construction of an extension (T-shaped) to house a library, a cafeteria /canteen and a common room, adjacent to the existing PGIS
2. Improving infrastructure facilities for disabled students.
3. Constructing a hostel to provide accommodation facilities (male/female)
4. Purchasing a bus to strengthen and promote student centered approach to learning and teaching by expanding the field work, study visits, etc.
5. Identify eminent Scientists particularly Sri Lankan scholars abroad willing to spend their sabbatical at the PGIS. Make every effort to invite local and foreign scientists to visit the PGIS on short-term assignments to contribute to on-going postgraduate programmes and to develop new programmes.
6. Establish a postgraduate scholarship fund to attract students with high aptitude. Strengthening split M.Phil./PhD programmes in collaboration with centers of excellence overseas and arrange scholarships and exchange visits for students.
7. Explore the possibility of collaborating with experts overseas for online supervision of MPhil/PhD students.
8. Analytical / characterizing equipment generally required for most of the research fields are not available in Sri Lanka and this is a major hindrance to perform research work effectively but also militates against the achievement of the global standards in science in our

country. For the PGIS laboratory development project, the possibility of obtaining funds from Korea and Japan will be explored. Preliminary discussions have already started with the officials of the KOIKA office in Sri Lanka.

9. Introduce quality assurance for the PGIS programmes and accreditation process for PGIS laboratories.
10. Facilitate the transfer of technology stemming from research conducted at the PGIS to the public/private sector. Already the PGIS provided necessary funds and other assistance to obtain a local Patent. PGIS encourages Boards of Study to organize national/regional/international research conferences at the PGIS.
11. Arranging capacity building training programmes for the PGIS staff to enhance the efficiency to perform their day to day activities with latest IT-based administration/accounting procedures.
12. Initiate a research grant scheme to promote Ph.D. research programmes and request local industries to collaborate in development research projects. Strengthen partnerships with both private and public sectors to attract funding for research.

13. The New M.Sc. Programmes to be initiated

- M.Sc. in Management Information Systems
- M.Sc. in Molecular Biology and Bioinformatics
- M.Sc. in Science and Technology Management
- M.Sc. in Computational and Financial Mathematics
- M.Sc. in Computational Statistics
- M.Sc. in IT
- Postgraduate Diploma in Mathematics

14. Initiation of Postgraduate Courses Integrated with Industry

Designing curriculum to enhance the quality of postgraduate courses and research programmes of national importance and global relevance helps to fill the gap between postgraduate programmes provided and the requirements of local industry. Efforts have been taken to seek industrial internships for PG students.

15. Establishing PGIS Alumni Association

Steps were taken to establish alumni association of PGIS. We have already started collecting the data of past students of the PGIS and would help postgraduates to find employment, industrial training and to improve University-industry interaction.

Prof. B S B Karunaratne

Director

Postgraduate Institute of Science

Current Performance of the Postgraduate Institute of Science (PGIS), University of Peradeniya-2010/2011

CATEGORY	CURRENT PERFORMANCE	PERFORMANCE INDICATORS/ REMARKS
Institution Profile		
	The Postgraduate Institute of Science (PGIS) was established in 1996 by an ordinance made by the University Grants Commission under section 18 with section 24A of the Universities Act No. 16 of 1978 for the purpose of providing, promoting and developing higher education in science.	<input type="checkbox"/> The Board of Management of the PGIS consists of 40 members that include Secretaries of relevant ministries, Deans of Faculties of Science of Universities, Chairmen of Boards of Study, Directors of relevant research institutes and five UGC nominees <input type="checkbox"/> All postgraduate programmes and other related activities of the PGIS are carried out through ten Boards of Study
Academic		
1. Postgraduate programmes	<input type="checkbox"/> At present PGIS conducts 20 M.Sc. programmes and several research programmes (Ph.D/M.Phil) <input type="checkbox"/> Two new M.Sc. programmes to be commenced soon (Environment Management and Applied Epidemiology) <input type="checkbox"/> Revision of M.Sc. curricular to suit the new trends and national requirements based on student and industry survey <input type="checkbox"/> Improved laboratory facilities <input type="checkbox"/> Split postgraduate programmes with institutions given under international links. <input type="checkbox"/> Exposure of M.Sc. students to foreign laboratories specialized in relevant disciplines. <input type="checkbox"/> Increased number of foreign examiners for Ph.D. and M.Phil. programmes. <input type="checkbox"/> Establishment of soil and rock and soil mechanics laboratory for Engineering Geology and other related disciplines in Earth Sciences and Materials Science.	<input type="checkbox"/> Nanoscience & Nanotechnology, Biodiversity, Ecotourism & Environment Management, Computer Science, Applied Statistics, Disaster Management, Environmental Science, GIS and Remote Sensing, Medical Physics, Science Education, Analytical Chemistry, Clinical Biochemistry, Medical Microbiology are some of the popular M.Sc. programmes. <input type="checkbox"/> Research Equipment, IT facilities, consumables, etc.) <input type="checkbox"/> About 6 split programmes are operated at present <input type="checkbox"/> Geographic Information Systems (GIS) student's laboratory training at Asian Institute of Technology (Thailand) and ITC, the Netherlands <input type="checkbox"/> More than 10 foreign examiners and several foreign supervisors served during 2010/11 <input type="checkbox"/> Providing applied and industrial research facilities
2. Students	<input type="checkbox"/> Initiated and completed setting up a student computer data base <input type="checkbox"/> A record room has been established <input type="checkbox"/> Increased number of scholarships has been awarded to the M.Sc. students through the improved income.	<input type="checkbox"/> Automation and immediate response to requests for statutory processes, such as admissions and examinations, ID cards, transcripts, etc. <input type="checkbox"/> For easy access to students files and other records <input type="checkbox"/> About 8 scholarships for the best performed students

	<ul style="list-style-type: none"> <input type="checkbox"/> Increased number of student enrolments, award of degrees and reduced number of dropouts and failures <input type="checkbox"/> Rigorous selection of applicants for postgraduate programmes. <input type="checkbox"/> Arranging collaborative research work with other national institutions. <input type="checkbox"/> Strengthening of student skill development programmes (scientific writing, CV writing, presentation, communication, etc.) <input type="checkbox"/> Carrying out counseling <input type="checkbox"/> Fulfill the needs of the job market and inculcate high moral values among the students in addition to learning skills 	<ul style="list-style-type: none"> <input type="checkbox"/> For details see annexure I <input type="checkbox"/> Aptitude and subject area admission examinations <input type="checkbox"/> IFS, ITI, NIE, Dept. of Agriculture and some private organizations <input type="checkbox"/> Scientific writing as an Annual activity and presentation skill under each study programme <input type="checkbox"/> Reduction of dropouts and completion within the stipulated time limit <input type="checkbox"/> Industrial training, field visits, group activities, etc.
3. Training programmes	<ul style="list-style-type: none"> <input type="checkbox"/> Increased the no. of worksops/training programmes, etc. with national and global relevance- annexure II <input type="checkbox"/> Improved publicity campaign for PGIS activities <input type="checkbox"/> Service to national institutions (Project Directors form North and East, Army, Navy, Air Force, Census and Statistic, Survey Department, etc.) 	<ul style="list-style-type: none"> <input type="checkbox"/> GIS, Applied Epidemiology, "Gamaneguma" project on Dairy and cattle Management, "Gamaneguma" project on Environment Management, Bird Flu, Cut Flowers, Disaster Management, Water Quality, etc <input type="checkbox"/> Through Website improvements and strengthening active support of the PGIS past students. <input type="checkbox"/> For details see annexure III
4. Research	<ul style="list-style-type: none"> <input type="checkbox"/> Engage active researchers as supervisors of M.Phil./Ph.D. research programmes <input type="checkbox"/> Provide information and guidance to researchers affiliated to PGIS for applying for local/foreign research grants <input type="checkbox"/> Identify and evaluate priority areas of research for national development <input type="checkbox"/> Efficient administration of research grants and explore ways to generate more matching funds to support proposals <input type="checkbox"/> Providing funds to urgent repairs and pay VAT to clear equipment donated by donor agencies <input type="checkbox"/> Maintaining and enhancing the physical facilities and equipment which support quality research <input type="checkbox"/> Establishing and expanding laboratories at the PGIS <input type="checkbox"/> Initiating of accreditation process <input type="checkbox"/> Strengthening collaborative research <input type="checkbox"/> Disseminating technical know-how <input type="checkbox"/> Enhancing interaction with young researchers/ advisors through Young Researchers' Forum (YRF) <input type="checkbox"/> Encourage researchers affiliated to PGIS to disseminate knowledge through publications <input type="checkbox"/> obtain ethical clearance for research 	<ul style="list-style-type: none"> <input type="checkbox"/> Screening process in selecting supervisors and research projects <input type="checkbox"/> Circulate and forward documents related to research grants <input type="checkbox"/> Obtaining necessary permission from Dept of External Resources to operate foreign research grants <input type="checkbox"/> Organizing workshops on research topics on national and global relevance <input type="checkbox"/> At present PGIS handles about 75 research grants(Rs.9 Min). Increase transparency <input type="checkbox"/> During last year Rs 1.5 Min. spent on clearing and VAT <input type="checkbox"/> Building extension worth Rs 40 Min, and equipment/furniture worth Rs.20 Min <input type="checkbox"/> GIS, Computer, Analytical and rock and soil mechanics laboratories <input type="checkbox"/> Several MoUs signed with Korea, Germany, Japan <input type="checkbox"/> two patents obtained during 2010 <input type="checkbox"/> Encourage students to complete their research work efficiently through YRF meetings. As a result 8 PhD and 17 MPhil students were graduated at the last convocation <input type="checkbox"/> About 60 publications <input type="checkbox"/> Having regular ethical clearance committee meetings

Infrastructure and Physical resources		
	<input type="checkbox"/> Construction of the New Building extension <input type="checkbox"/> Establishing the GIS and computer laboratories equipped with more than 100 computers together with state of the art remote sensing software and equipment. <input type="checkbox"/> A record room has been established for easy access to student files and other records. <input type="checkbox"/> Initiated preliminary processing to develop the top floor of the new building as a multipurpose utility area.	<input type="checkbox"/> Increased space for lecture rooms, laboratories, etc <input type="checkbox"/> PGIS can now cater its present requirements of computer facilities, needed particularly for the M.Sc and Diploma of Computer Science students without depending on external computer facilities. In the long run the PGIS will be able to save funds spent on paying the external computer units as in the past.
Human Resources and Human resource development programmes		
Recruitment Training Performance evaluation Welfare	<input type="checkbox"/> Cadre 70 % filled with DMS approval. (23 out of 36) <input type="checkbox"/> Selection of best suited candidates <input type="checkbox"/> 90% training/workshop participation by end of 2010 <input type="checkbox"/> Development of attitudes towards service focused on client satisfaction <input type="checkbox"/> Performance based evaluation system <input type="checkbox"/> Regular staff meetings and awareness programmes <input type="checkbox"/> Welfare	<input type="checkbox"/> Filling of posts of Technical officer in progress. For others the DMS approval sought. <input type="checkbox"/> Selection through aptitude tests, practical tests and structured interviews <input type="checkbox"/> Efficient and effective service to the clients <input type="checkbox"/> For staff from lower grades to management levels on annual increments, promotions <input type="checkbox"/> Bi-monthly and internal memo, regular instructions to update PGIS activities, regular updating of institutional website <input type="checkbox"/> PGIS contribution to staff annual trips/welfare activities undertaken by them, Health campaign for staff, Participation in Inter Faculty/Institutional sports tournaments
Finance		
	<input type="checkbox"/> Substantial increase of General Reserve <input type="checkbox"/> Minimize the funds received from Govt. for Recurrent Expenditure(annexure IV) <input type="checkbox"/> Strong Development towards to be a self financed institution <input type="checkbox"/> Increasing Net Surplus <input type="checkbox"/> Increased PGIS contributions to research projects and scholarships for students <input type="checkbox"/> Good audit opinion with less queries <input type="checkbox"/> Minimum Accounting errors <input type="checkbox"/> Working within the Budget allocation	<input type="checkbox"/> Up to Rs. 155 Min <input type="checkbox"/> About 25% of the total income from the Treasury <input type="checkbox"/> By 2015 <input type="checkbox"/> By Rs 20 Min. <input type="checkbox"/> Recurrent expenditure always within the limits
International links/Contacts		
	<input type="checkbox"/> International Programme in Physical Science (IPPS), Uppsala University (Sweden), Chalmers University of Technology (Sweden), Denmark Technical University (Denmark) <input type="checkbox"/> DAAD Programme (Germany), <input type="checkbox"/> University of Warwick (UK),	<input type="checkbox"/> Two Ph.D students and 2 M.Phil students completed their degrees under the IPPS programme. Totally more than 15 Ph.D. students Several senior researchers were benefited from this link and most of them serving as lectures in the Universities, Sri Lanka <input type="checkbox"/> One Ph.D. student completed her degree and another M.Phil student will be leaving soon to Germany under the DAAD programme <input type="checkbox"/> One Ph.D. student is about to finish her work under a split programme with the University of Warwick

	<ul style="list-style-type: none"> <input type="checkbox"/> University of Aberdeen (UK), <input type="checkbox"/> Asian Institute of Technology (Thailand) and ITC (Netherlands) <input type="checkbox"/> National Physical Laboratory, New Delhi, India, <input type="checkbox"/> Abdus Salam International Centre for Theoretical Physics – ICTP (Italy) <input type="checkbox"/> Helmholtz Centre for Environmental Research in Germany <input type="checkbox"/> The Disaster Control Research Center (DCRC), Tohoku University, Japan <input type="checkbox"/> Toyama Prefectural University, Department of Environmental Engineering Japan. <input type="checkbox"/> European Union(Erasmus Mundas), Negotiations are progressing to obtain Scholarships/Fellowships <input type="checkbox"/> Korea Institute of Materials Science, Korea. <input type="checkbox"/> 	<ul style="list-style-type: none"> <input type="checkbox"/> Two Ph.D. students and one M.Sc. student came from Aberdeen to Sri Lanka to conduct their research under the Aberdeen link. <input type="checkbox"/> Several M.Phil and M.Sc. students benefited from this link. <input type="checkbox"/> One Ph.D. student is undergoing training at National Physical Laboratory, New Delhi <input type="checkbox"/> One Ph.D. student is undergoing training in Germany <input type="checkbox"/> National workshop and a seminar, were organized <input type="checkbox"/> International conference was organized and collaborative research was initiated <input type="checkbox"/> Preliminary arrangements have been arranged to initiate partnership <input type="checkbox"/> An MoU has been signed
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National Links/Contacts

	<ul style="list-style-type: none"> <input type="checkbox"/> National Gem and Jewelry Authority, Industrial Technology Institute (ITI), National Water Supply & Drainage Board, Department of Agriculture, Irrigation Department, Ministry of Forestry and Environment, Ministry of Vocational Training & Rural Industries, Board of Investment (BOI), National Institute of Education (NIE), National Science Foundation (NSF), Institute of Fundamental Studies (IFS), Council for Agriculture Research Policy (CARP), Ministry of Indigenous Medicine, Ministry of Education and Ministry of Health. Dept. of Animal Production and Health 	<ul style="list-style-type: none"> <input type="checkbox"/> Grants for research, Financial support to organize conferences , workshops, short courses were received through these contacts <input type="checkbox"/> Studentships from these organizations to selected candidates <input type="checkbox"/> Resource persons for Specialized areas <input type="checkbox"/> Providing consultancy to these agencies through PGIS affiliated staff
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Consultancy Projects-2010/2011

	Project title	Source of Funds
	<ul style="list-style-type: none"> <input type="checkbox"/> Isolation & Genotypic Characterization of rhizobia from crop wild relatives of vigna <input type="checkbox"/> Petrological Studies on Rock quarries <input type="checkbox"/> Additional Geological Investigations of Moragahakanda Reservoir Project 	<ul style="list-style-type: none"> <input type="checkbox"/> Department of Agriculture <input type="checkbox"/> Access Engineering Ltd. <input type="checkbox"/> Mahaweli Authority of Sri Lanka

Students' Statistics (2005 - 2010)

Year	Yearly Admissions/Enrolments Diploma/M.Sc./ M.Phil./Ph.D.	NO. awarded Diploma/M.Sc./ M.Phil./Ph.D.	Dropped out/Fail Diploma/M.Sc./
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			M.Phil./Ph.D.
2005	179	113	38
2006	418	166	24
2007	378	171	14
2008	348	140	22
2009	273	182	-
2010	325	275	-
Total	1921	1047	98

Postgraduate Diplomas were offered for those who have not reached the required GPA (above 3.00) / unable to complete the research project for the M.Sc. degree.

M.Sc. Minimum 18 months duration

M.Phil. Minimum 2years duration

Ph.D. Minimum 3years duration

4. Details of Resources and Students:

Institute	Course (Coursework)	Intake in 2010	Previous Year intake	Total Academic Staff	Total Non Academic staff
PGIS	M.Sc. in Clinical Biochemistry	-	17	19	03
	M.Sc. in Experimental Biotechnology		15	37	03

M.Sc. in Analytical Chemistry	23		18	03
M.Sc. in Industrial Chemistry	11		27	03
M.Sc. in Nanoscience & Nanotechnology	33		33	03
M.Sc. in Disaster Management	38		40	03
M.Sc. in GIS & Remote Sensing		54	30	05
M.Sc. in Environmental Science	23		39	03
M.Sc. in Biodiversity, Ecotourism & Environment Management	13		20	03
M.Sc. in Industrial Mathematics		16	09	03
M.Sc. in Physics of Materials	08		19	03
M.Sc. in Medical Physics	14		24	03
M.Sc. in Medical Microbiology	21		30	03
M.Sc. in Science Education	30	30	70	04
PG Diploma in Science Education		35	08	04
M.Sc. in Applied Statistics	38		13	04
M.Sc. in Computer Science	62		16	05
PG Diploma in Information Technology		20	12	03

5. Details of Academic Staff (Visiting):

Institute	Subject	Medium	Senior Professor/Professor/Associate Professor	Senior Lecturer	Instructor
PGIS	Clinical Biochemistry	English	06	12	01

Experimental Biotechnology	English	06	21	10
Analytical Chemistry	English	06	10	02
Industrial Chemistry	English	06	15	06
Nanoscience & Nanotechnology	English	13	14	06
Disaster Management	English	09	29	02
GIS & Remote Sensing	English	04	21	05
Engineering Geology and Hydrogeology	English	08	11	-
Gemology and Industrial Minerals	English	08	12	-
Water Resources Management	English	04	08	-
Environmental Science	English	09	19	11
Biodiversity, Ecotourism & Environment Management	English	06	08	06
Industrial Mathematics	English	02	07	-
Physics of Materials	English	05	11	03
Medical Physics	English	05	19	-
Medical Microbiology	English	06	18	06
Plant Sciences	English	05	13	06
Postharvest Technology of Fruits and Vegetables	English	01	11	-
Science Education	English	15	40	15
PG Diploma in Science Education	English	-	08	-
Applied Statistics	English	04	07	02
Computer Science	English	01	11	04
PG Diploma in Information Technology	English	01	05	06

6. Details of Non-Academic Staff:

Institute	Most Senior	Senior Staff	Junior Staff	Minor Staff
PGIS	01	04	13	05

7. Details of Local Students (Medium of instruction is English):

Board of Study	Course Name	Intake2010 Ph.D.	Intake2010 M.Phil.	Intake2010 M.Sc.	No. of Graduated M.Sc/M.Phil./Ph.D. PI see the foot note*
Biochemistry & Molecular Biology	-	01	01	00	10
Chemical Sciences	M.Sc. in Analytical Chemistry	01	05	23	22
	M.Sc. in Industrial Chemistry			11	
	M.Sc. in Nanoscience & Nanotechnology			33	
Environmental Science	M.Sc. in Biodiversity, Ecotourism and Environmental Management	-	02	13	12
	M.Sc. in Environmental Sciences			23	
Earth Sciences	M.Sc. in Disaster Management	01	05	38	28
Plant Sciences	M.Sc. in Medical Microbiology	01	02	21	16
Physics	M.Sc. in Physics of Materials	-	01	08	07
Science Education	M.Sc. in Science Education	-	01	30	11
Statistics & Computer Science	M.Sc. in Applied Statistics	-	04	38	49
	M.Sc. in Computer Science			62	
Mathematics		-	-	-	01
	Total	04	21	300	156

□ Note: Students graduated are from the previous batches

8. Details of Foreign Students:

Institute	Course	Medium	Intake 2010	1 st Year students	2 nd year students	3 rd year students	4 th year students	No of graduated
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	M.Sc. in Medical Physics	English				01		01
	Occasional students	English	02	01				Not applicable

Deails of the Ph.D and M.Phil Degrees with titles

Ph.D. – Biochemistry and Molecular Biology

1. A M D B Senevirathna Molecular detection, quantification and characterization of Hepatitis C Virus strains in Sri Lanka (2010)
Place of Research Work : Genetech Molecular Diagnostics and School of Gene Technology, Colombo
Supervisors : Dr. N D Fernandopulle, Prof. S Jayasinghe and Dr. P Samaraweera

Ph.D. – Chemical Sciences

1. K Velauthamurthy Synthesis of monomers and polymers based on metal [Pd(II), Pt(II), Ru(II), Ni(II) and Cu(II)] functionalized 3,4-ethylenedioxythiophene complexes and their characterization (2010)
Place of Research Work : Department of Chemistry, University of Peradeniya
Supervisors : Prof. R M G Rajapakse and Prof. H M N Bandara
2. R G U Jayalal Study of diversity and taxonomy of lichens in the Horton Plains National Park with a view to biomonitor the ecosystem health (2010)
Place of Research Work : Department of Chemistry, University of Peradeniya
Supervisors : Prof. N L V V Karunaratne, Dr. D S A Wijesundara and Ms. P Wolseley

Ph.D. – Physics

1. M J M Jafeen Stability, strain and speed of polypyrrole actuators (2010)
Place of Research Work : Department of Physical Sciences, South Eastern University of Sri Lanka
Supervisors : Prof. M A Careem, Dr. R L N Chandrakanthi and Prof. S Skaarup
2. T M W J Bandara Synthesis and characterization of Polyethyleneoxide (PEO)-based and Polyacrylonitrile (PAN)-based polymer electrolytes to be used in photo-electrochemical (PEC) solar cells (2010)
Place of Research Work : Department of Physics, University of Peradeniya
Supervisors : Prof. M A K L Dissanayake and Prof. B -E Mellander

Ph.D. – Plant Sciences

1. W M G C K Mannapperuma Comparison of bacteriological methods for detecting total coliforms and *Escherichia coli* in water (2010)
Place of Research Work : Department of Botany, University of Peradeniya
Supervisors : Dr. C L Abayasekara and Dr. G B B Herath
2. G D Sinniah Inflorescence diseases and natural disease resistance in mango (*Mangifera indica* L.) in relation to anthracnose development

(2010)

Place of Research Work : Department of Botany, University of Peradeniya
Supervisors : Prof. N K B Adikaram and Dr. C L Abayasekara

M.Phil. – Chemical Sciences

1. S K Hettihewa High-Speed Counter-Current chromatographic separation and antibacterial activity of proanthocyanidins from tea leaves (2010)
Place of Research Work : Department of Chemistry, University of Peradeniya
Supervisors : Prof. N S Kumar, Prof. B M R Bandara and Dr. G J Panagoda
2. D C Gunawardena Chemistry and bioactivity of the fruits of *Averrhoa carambola* (2010)
Place of Research Work : Institute of Fundamental Studies, Kandy
Supervisors : Prof. U L B Jayasinghe and Prof. N S Kumar
3. S Wijeratne Investigation of green catalytic properties of clay nanocomposites (2010)
Place of Research Work : Department of Chemistry, University of Peradeniya
Supervisors : Prof. B M R Bandara and Prof. R M G Rajapakse

M.Phil. – Earth Sciences

1. T H N G Amaraweera Genesis of pegmatites and use of pegmatite mine waste as fertilizer in Matale District, Sri Lanka (2010)
Place of Research Work : Department of Science and Technology, Uva Wellassa University, Badulla
Supervisors : Dr. H M T G A Pitawala and Dr. G W A R Fernando
2. I K M S C K Illangasinghe Quantification of erosion rates and evolution of geomorphology in the highlands of Sri Lanka (2010)
Place of Research Work : Department of Natural Resources, Sabaragamuwa University, Belihuloya
Supervisor : Dr. T Hewawasam

M.Phil. – Plant Sciences

1. W W M A B Medawatte The invasive potential of *Pinus caribaea* morelet in wet and intermediate agro-ecological zones in the Knuckles Range, Sri Lanka (2010)
Place of Research Work : Department of Botany, University of Peradeniya
Supervisors : Dr. K U Tennakoon, Prof. I A U N Gunatilleke and Prof. P E Hulme

M.Phil. – Statistics and Computer Science

1. A Laheetharan Improved estimation of parameters in probability distributions with known prior information (2010)
Place of Research Work : Department of Mathematics and Statistics, Faculty of Science, University of Jaffna
Supervisor : Prof. P Wijekoon

2.	S S Zahmeeth	Brain Computer Interface (BCI) based on Electroencephalographic (EEG) patterns due to new cognitive tasks (2010)
	Place of Research Work :	Artificial Intelligence Unit, Institute of Fundamental Studies (IFS), Kandy
	Supervisors :	Prof. A Nanayakkara and Dr. S R Kodituwakku

Details of the M.Sc. Degrees with titles

M.Sc. Degrees

M.Sc. – Analytical Chemistry

1. J K P M Jayakody Quantitative X-ray diffraction analysis of polymorphs in mebendazole drug available in the Sri Lankan market (2010)
2. A M Devasurendra Pesticide residue analysis of drinking water in Girandurukotte area where chronic kidney disease is prevalent (2010)
3. N A D J Bandara Isolation and characterization of a trypsin inhibitor from seeds of *Tamarindus indica* (2010)
4. W G D Chandrasiri Purification and characterization of Phospholipase A₂ of Sri Lankan Russell's viper (*Vipera russelli russelli*) (2010)
5. M A K D C Kumara Use of low cost materials for the removal of iron from ground water and designing a low cost on site iron detection kit (2010)
6. C D H Geethika Comparative antioxidant activity and quantification of gymnemic acid from Sri Lankan *Gymnema sp.* (2010)
7. R G N Priyantha Gelatinolytic activity in human whole saliva (2010)
8. P A Gayani Anti-oxidant and anti-tyrosinase natural products of *Nymphaea stellata* (2010)
9. I K Indrasena Chemical substances produced by selected microorganisms and their biofilms (2010)
10. V J Bandaranayake Arsenic determination and removal from drinking water (2010)
11. K M P A H Perera An assessment of heavy metal contamination in the marine sediments of Galle harbour (2010)

M.Sc. – Applied Statistics

1. U C Thalagoda Improving the quality of a soft drink production process using statistical process control (2010)
2. M M M Imran A time series model for wheat flour consumption in Kalutara district (2010)
3. L H S C Menike Growth curve analysis of goat breeds in Sri Lanka (2010)
4. A S N Amarasekara The statistic model for the prediction of the risk level of myocardial infarction (2010)
5. P M S A Ruwan Grass competition and herbivores competition on survivals and growths of transplant seedlings on degraded grassland areas (2010)
6. K A C D Kumbalataru A combined test for the median and the effects of five normality tests of the combined test (2010)
7. E M C P Edirisinghe Analysis of distribution of butterfly species in Sri Lanka (2010)
8. W A N R Silva A software programme for extreme flow predictions - case study of flow at Caledoniya (2010)
9. A A K U Atapattu Comparisons of indicators available for detecting multicollinearity (2010)
10. W L R D Gunathilaka Factors affecting on physical dormancy break of *Ipomeoa hederacea* seeds (2010)
11. A S Kalpage Spatial distribution of soil nutrients in the forest dynamic plot at Sinharaja (2010)
12. N Varathan Statistical modeling of extreme daily rainfall in Colombo (2010)
13. L R Thilakarathne Economic design of Fraction Non-Conforming Quality Control Chart (2010)

M.Sc. – Clinical Biochemistry

1. J M Santhampillai A study on haemoglobin, serum protein concentrations and serum total antioxidant capacity in first year female undergraduates of the University of Peradeniya (2010)

M.Sc. – Computer Science

1. D M W Dissanayake Design and implementation of an automatic people identification system using fingerprints (2010)
2. M A D S S Madurapperuma Design and development of a digital library (2010)
3. K Kohilan Automatic font detection in Tamil document (2010)
4. I U Gunawardana Detecting faces in arbitrary images using a simple technique (2010)
5. T Kishanthan Recognizing low resolution road sign images using multilayer perceptron neural networks (2010)
6. N W A I Thilakasiri Hand written character recognition using image processing and artificial neural network techniques (2010)
7. B T G S Kumara Web based automated system for nurse scheduling (2010)
8. V Sasikumar An automated paddy variety identification system (2010)
9. P Kanagasabapathy A schema driven mapping: managing XML in object-relational database (2010)
10. H M S Herath Development of a transparent network security device (2010)
11. G V D Priyantha E- tendering system for government procurement process (2010)
12. A C P K Siriwardhana Automatic measurement of average length of coconut fiber (2010)
13. W M C K B Wanigasekara Design backup and restore add-on for moodle (2010)
14. W M D Jeewantha Web based project monitoring system (2010)
15. R K A R Kariapper Network based distributed intelligent intrusion detecting system (2010)
16. W D C Weerasinghe Vehicle navigation system based on shortest path (2010)
17. U S Amarasinghe Analysis and comparison of the performances of data compression algorithms for text files (2010)
18. A Thayaparan LAN Manager: a concurrent management of computers in LANs (2010)
19. P G R N J Gamlath Neural network approach to predict milk yield of dairy farm (2010)
20. S P Kasthuri Arachchi Developing an online Shopping Cart System for Saweena beauty centre (2010)
21. H B Kotuwagedara Applying role based access control for intranet security (2010)
22. W N C Perera Network enabled energy measuring system (2010)
23. D I K Solangarachchi Decision support system for the management of patients with community acquired pneumonia (2010)
24. O S R Somaratne Results management system for the Faculty of Science of the University of Peradeniya (2010)
25. H K D D Thilakawansa Cryptographic techniques with artificial intelligence (2010)
26. P C N Tissera Design and development of an online student information and management system for College of Technology, Kandy (2010)
27. P P Premkumar Online internal verification system for Edexcel HND programmes (2010)
28. T A D Nisansala Developing an information system for analysis of morbidity and mortality statistics for a government hospital (2010)
29. A W R M Dharmasiri Cab management system using genetic algorithms (2010)
30. Y D Fernando A reference model for disease surveillance system (2010)

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|-----|----------------------|--|
| 31. | S T W H Wimaladharna | GIS application for weather analysis and forecasting (2010) |
| 32. | N G M G Bandara | A reference model for the design pattern automation (2010) |
| 33. | G A M U Ganepola | A web based inventory management and sales system (2010) |
| 34. | A A I D Athapattu | Information management system for universities (2010) |
| 35. | A M D M Abeykoon | Development of an electronic time sheet (2010) |
| 36. | H L Sirajudeen | Web based information system for the provincial, zonal and divisional education offices of central province (2010) |

M.Sc. – Disaster Management

- | | | |
|----|--------------------------|--|
| 1. | P Thayanathan | Impact of tsunami rehabilitation assistance (special reference to town and gravets divisional secretariat division of Trincomalee district) (2010) |
| 2. | L D R S Kumara | Community disaster response teams for Malawenna village (2010) |
| 3. | K M U Wijeratne | Demining before resettlement a prerequisite; a case study – Mannar Sri Lanka (2010) |
| 4. | W A S M D Weerasinghe | Risk mapping and ecological analysis of human leptospirosis in Kandy, Sri Lanka (2010) |
| 5. | N W A N Y Wijesekara | Establishment of health services for internally displaced persons in Vavuniya, Sri Lanka 2009 (2010) |
| 6. | W A D C H Wickramasinghe | Rabies post exposure treatment: cost reduction through responsible pet ownership (2010) |

M.Sc. – Environmental Science

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|-----|--------------------------|--|
| 1. | S Shanmuganathan | Study on surface-subsurface hydrology in Vavuniya UC limits (2010) |
| 2. | I M A Jayasinghe | Assessment of a risk from exposed acid sulfate soils in the southern highway from Kottawa to Dodangoda (2010) |
| 3. | J S Joseph | A study of the water quality of Diyawanna Oya conducted during the south-west monsoon period (2010) |
| 4. | S B A M B Y Wijayarathna | Levels of polyaromatic hydrocarbons in Kandy city (2010) |
| 5. | E C D A Karunarathne | Bioaccumulation of heavy metals in selected fresh water macrophytes (2010) |
| 6. | S Santharoban | Effect of different industrial effluents on the water quality of Valaichchenai lagoon (2010) |
| 7. | V Ravi | An assessment of drinking water quality of selected dug-wells within the Vavuniya Urban Council of Sri Lanka (2010) |
| 8. | P L C L Liyanage | Distribution of endemic goitre in Kalutara district (2010) |
| 9. | U D Manawadu | Water quality variations of villages around serpentinite bodies at Indikolapelessa, Udawalawa (2010) |
| 10. | S P Thavakiruba | Assessment of nitrate pollution of well water in relation to distance of toilet pit in Vauniya (2010) |
| 11. | T Piranavamalar | Assessment of pollution sources of the Vavuniya tank and proposing remedial measures (2010) |
| 12. | T Sumanenthiran | Socio-environmental interaction in water quality variations - case study from coastal villages in Ampara district (2010) |

M.Sc. – Experimental Biotechnology

- | | | |
|----|--------------------|--|
| 1. | M S Maliyadde | A study on <i>in vitro</i> culture conditions for plant regeneration of <i>Santalum album</i> (white sandalwood) (2010) |
| 2. | N T Wickramasinghe | Development of single step reverse transcriptase polymerase chain reaction (RT-PCR) assay to detect Chikungunya virus in clinical samples (2010) |

3. H M I P Herath Molecular characterization of some Chikungunya virus isolates from 2007/08 outbreak in Sri Lanka (2010)
4. D M S Sugeeshwari Effect of nucleotides on some nutritional parameters of mice (2010)
5. S L D Jayaweera Genetic diversity and population structure of wild banana (*Musa balbisiana*) populations in Sri Lanka (2010)
6. H A Walisinghe Effect of selenium on some nutritional parameters of mice (2010)
7. D R Gimhani Identification of a microsatellite marker linked to thrips (*Stenchaetothrips biformis*) resistance in rice using bulk segregant analysis (2010)

M.Sc. – GIS and Remote Sensing

1. N Thananjeyan Application of GIS to mitigate soil erosion in upper Kotmale area (2010)
2. D T De S Wijesundara Application of aeromagnetic and remote sensing data to map Ranna rock unit (2010)
3. A K Hettiarachchi Spatial analysis of soil fertility for better agricultural land management (2010)
4. H K Gunasekara GIS based slope stability models for rain triggered landslide hazard mapping: case study - Rathnapura, Sri Lanka (2010)
5. S M D A Bandara A study of urban development in city of Galle using GIS and remote sensing (2010)
6. E M P U Ekanayake Site selection for waste disposal using GIS (2010)
7. H M P Jayantha Manual of Geographic Information Systems: Volume 1 and 2 (2010)
8. T Sunthararajah A web-GIS application for spatial identification of community development projects (2010)
9. J M P P Jayasooriya Assessment of data quality and map accuracy of topographic maps (2010)
10. G W Chandraratne Cadastral index mapping of temple lands - Udunuwara divisional secretary division (2010)
11. K P D A K S Jayasinghe Characterization of thunderstorms over Sri Lanka using weather data in GIS (2010)
12. P H M P K Senarathne Sustainable management of natural resources using GIS: a case study in Anamaduwa divisional secretariat division (2010)
13. C S Rathnayake Real time GIS mapping solution for GPS enabled remotely operated demining platforms (2010)
14. B A U I Kumara Participatory GIS for rural development planning - a case study (2010)
15. M P Madanayake Dengue incidence in Mawanella area – a case study (2010)
16. S H M Manjula GIS for rural planning in Hambantota district (2010)
24. B S M Piyasiri Use of GIS for indexing urban hierarchy (2010)

M.Sc. – Industrial Chemistry

1. R S Sooriyage Mosquito larvicidal activity of selected plant extracts and isolation of active ingredient from *Pogonanthus dichotoma* (2010)

M.Sc. – Industrial Mathematics

1. B G S A Pradeep Statistical techniques for soap production process in a local industry (2010)

M.Sc. – Medical Microbiology

1. M B Amunugama Comparison of clinical and laboratory parameters in the early diagnosis of dengue fever (2010)
2. S A H Attanayake Presence of *Trichomonas vaginalis*, *Candida*, *Gardnerella vaginalis* among symptomatic women attending sexually transmitted diseases clinic in Colombo (2010)
3. L S D Medis Application of polymerase chain reaction for diagnosis of *Dirofilaria repens* in dogs (2010)

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|----|------------------|---|
| 4. | U T N Senaratne | Establishing a rapid isolation method for <i>Mycobacterium tuberculosis</i> (2010) |
| 5. | F H Thahir | Establishment of PCR based assay to detect <i>Dirofilaria</i> transmission in mosquitoes (2010) |
| 6. | R A P Rupasinghe | Identification of pathogenic <i>Leptospira</i> serovars in Sri Lanka using polymerase chain reaction (2010) |
| 7. | A B S H Jameel | <i>Cryptosporidium</i> infection in buffaloes and cattle with special reference to factors contributing to infection (2010) |

M.Sc. – Medical Physics

- | | | |
|----|--------------|---|
| 1. | S Balamurali | Dosimetric characteristics and optimization for a multislice Computed Tomography (2010) |
|----|--------------|---|

M.Sc. – Nanoscience and Nanotechnology

- | | | |
|----|---------------------|--|
| 1. | D M B P Ariyasinghe | Instrument and software development for measuring size of nanoparticles using dynamic light scattering (2010) |
| 2. | D S K Liyanage | Zinc oxide thin films for dye-sensitized solar cell applications (2010) |
| 3. | J Akilawasan | Dye sensitized solar cell based on hydrothermally synthesized TiO ₂ nanotubes (2010) |
| 4. | A P Mahavithana | Design, manufacture and implantation of custom-made orthopedic bioprotheses for needy patients: nano-range hydroxyapatite coating on roughened stainless steel surfaces (2010) |

M.Sc. – Physics of Materials

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|----|--------------------|---|
| 1. | S K Galappaththige | Application of dynamic light scattering to probe molecular dynamics in polymer gels (2010) |
| 2. | G Gnanapragasam | Development and characterization of macroporous ceramic structures (2010) |
| 3. | L H C Krishantha | Drying behavior of few commercially available paint samples using dynamic light scattering (2010) |
| 4. | H M S N Herath | Construction of supercapacitors based on activated carbon (2010) |

M.Sc. – Plant Sciences

- | | | |
|----|--------------------|---|
| 1. | W A T L Weerakkody | Impact of Weligama Coconut Leaf Wilt Disease (WCLWD) on morphological, physiological and yield aspects of affected coconut palms (2010) |
|----|--------------------|---|

M.Sc. – Postharvest Technology of Fruits and Vegetables

- | | | |
|----|------------------|--|
| 1. | S S Piyasiri | Extending the storage life of mukunuwenna (<i>Alternanthera sesilis</i>) in simulated air freight transportation system (2010) |
| 2. | N D V Champika | Application of calcium chloride on management of internal browning of pineapple (<i>Ananas comosus</i> cv. Mauritius) fertilized with urea (2010) |
| 3. | J B L Jayasinghe | Effect of variety and handling practices on postharvest disorders and diseases of cassava (2010) |
| 4. | S V Ranatungage | Optimization of technology to control bitterness development of dehydrated jak fruit flour (2010) |
| 7. | Y M Perera | Suitability study on different maturity stages of <i>Averrhoa carambola</i> L. variety (Honey Sweet) in processing fruit juice |

M.Sc. – Science Education

1. S M Saluwadana A case study of strengths and weaknesses of Advanced Level Science Education in Sri Lanka (2010)
2. M Balakrishnan Designing simple activities in fluid mechanics for easy learning for G.C.E. A/L students (2010)
3. E A R Kumarasinghe Introducing field based teaching technique as a teaching tool for the biodiversity unit in the G.C.E (A/L) syllabus (2010)
4. R M C K Ratnayake Evolution of organic chemistry content in Sri Lankan schools with special reference to Advanced Level syllabus (2010)
5. E M W G P Ekanayake Improvement of performance of students through an activity oriented approach to teach enzymes for G. C. E. Advanced Level biology students (2010)
6. D Prabakaran Developing a supplementary study guide in physics applications in biology and medicine for intermediate level physics (2010)
7. B A S Kumara Developing and testing the influence of demonstrations in teaching electrostatic unit for G. C. E. A/L students (2010)
8. V Kanagasabapathy Enhancing student achievement on major biological processes in living organisms through problem based learning (2010)
9. S I S Wickramasinghe Enhancing student understanding of unit 4: diseases associated with the main systems of the human body by introducing worksheets (2010)
10. D M T Dissanayake Building students' interest in chemistry through simple experiments using household chemicals (2010)
11. Rev. Fr. K G H B Wijeratne Study of conceptual understanding of physics of grade 10 students in the district of Matale (2010)

M.Sc. – Water Resources Management

1. H M J M K Herath Hydrogeochemistry of groundwater from two dry zone regions of Sri Lanka (2010)
2. E G D Dayawansa Groundwater resources for community water supply schemes: a case study from Minipe - Muttettutenna in the Kandy district of Sri Lanka (2010)
5. D G S W Pitakumbura Availability of water resources within the Attanagalla Oya basin – a review (2010)

9. Summary of Programmes**(Short courses, advance/certificate courses, seminars, workshops)**

Subject	Attended
Short Courses	230
Certificate Courses	49
Advance Short Courses	51
Workshops	223
Teacher Training Programmes	402

Intensive Courses	50
Conferences	81
Discussions	19
PURSE	42

10. DETAILS OF WORKSHOPS, TRAINING PROGRAMMES, SHORT COURSES, ETC. (January 2010 – November 2011)

<i>Event</i>	<i>Participants</i>	<i>No. of Participants</i>
6 Short Courses on GIS & Applications (24 th -29 th)	See Annexure I	167
3 Advanced Short Courses on GIS & Appns. (4 th -6 th)	See Annexure I	51
Certificate Course on Applied Epidemiology	Government Veterinary Surgeons from several districts, Veterinary Research Institute (VRI) and Department of Animal Production & Health (DAPH) participated.	28
Intensive Course on Applied Epidemiology	Veterinary Surgeons from several provinces, private sector and Veterinary students from University of Peradeniya participated.	50
Discussion meeting on Solar Photovoltaics	20 Research scientists from the following institutions participated: EPIR Technologies, Bolingbrook, Illinois, USA; Microphysics Laboratory, University of Illinois at Chicago, USA; University of Peradeniya; University of Jaffna; University of Ruhuna.	19
Workshop on Tissue Culture Applications	There were 13 participants, 4 from Universities, 3 from Department of Agriculture, 2 from Department of National Botanic Gardens, 1 from Coconut Research Institute, 1 from Ministry of Science and Technology and 2 from Private sector.	13
Workshop on Scientific Writing	M.Sc., M. Phil. and Ph.D. students of the PGIS	170
5 th Short Course on Health and Anesthesia in Captive Elephants	There were 63 participants including 42 veterinary students and 21 veterinarians. The 21 veterinarians were from Wayamba, Uwa, Central, Western and North Western provinces, and the Department of Animal Production and Health.	63
3 Teacher Training Programmes (Central Province) - GCE A/L New Syllabi for Physics, Biology & Chemistry	402 GCE (A/L) teachers from the schools of central province participated (Physics - 121; Biology - 121; Chemistry - 160).	402
Workshop on Practical Community Countermeasures for Tsunami and Earthquake Disaster Risk Mitigation	PGIS students of MSc/Disaster Management participated. Workshop was funded by JICA Partner Project for 'Practical Community Countermeasure for Earthquake and Tsunami Disaster Mitigation through Participatory Technology Assessment (PTA) in Sri Lanka' awarded to Tohoku University and Miyagi Prefecture Office, Japan.	40
2 nd Certificate Course on Applied Epidemiology	Veterinary Surgeons from Government Vet. Offices, VRI, Vet. Investigation Centre, National Livestock Development Board, DAPH, Public Health & Vet. Services and Epidemiologists from the office of Regional Director of Health Services (RDHS),	22
Indian Ocean Comparative Education Society (IOCES) Conference	There were 16 foreign participants and 67 local participants. Foreign participants were from Italy (1), Australia (1), Iran (1), India (11), Singapore (1) and Maldives (1).	83
Symposium to Felicitate the International Programmes in the Physical Sciences (IPPS), Uppsala University, Sweden	10 Foreign participants were from Chalmers University of Technology (Sweden), Malaysia, Singapore, Uppsala University (Sweden), Technical University (Denmark) & University of Copenhagen. President of Materials Research Society of Singapore, President of Asian Society of Solid State Ionics, Director and Former Director of IPPS were among them. 31 Sri Lankan scientists also participated.	41
5 Short Courses on GIS & Applications (30 th -34 th)	See Annexure I	158
Advanced Short Course on GIS & Applications (7 th)	See Annexure I	23
International Conference in Applied Epidemiology	Officers of Department of Animal Production & Health (DAPH) & Ministry of Health, Government Veterinary Surgeons, Veterinary Research Officers from DAPH, VRI, RDHS, DPCC, Students and academic staff of Universities participated.	94
International Symposium on 'Sustainable use of Water: Challenges ahead'	9 Japanese Scientists and 58 Sri Lankan researchers / academics / students participated. Researchers were from universities, Institute of Fundamental Studies and National Water Supply and Drainage Board (NWSDB).	67
1 st Short Course on Analysis of Experimental Data	Undergraduate/postgraduate students and junior/senior academic members of Faculties of Science, Medicine, Agriculture, Dental Sciences, Veterinary Medicine and Animal Sciences and research institutes participated.	31

Training Programme on Dairy Management for Gamaneguma Officers	22 Officers of "GAMANEGUMA" 2 nd Community Development & Livelihood Improvement Project of Ministry of Economic Development participated (9 District Livelihood Facilitators, 3 Regional Technical Officers, 4 Dairy Consultants and 6 from National Team).	22
12 Short Courses on GIS & Applications (30th-41st)	See Annexure I	392
3 Advanced Short Courses on GIS & Applications (7 th -9 th)	See Annexure I	89
International Conference in Applied Epidemiology	Officers of Department of Animal Production & Health (DAFH) & Ministry of Health, Government Veterinary Surgeons, Veterinary Research Officers from DAPH, VRI, RDHS, DPCC, Students and academic staff of Universities participated.	94
International Symposium on 'Sustainable use of Water: Challenges ahead'	9 Japanese Scientists and 58 Sri Lankan researchers / academics / students participated. Researchers were from universities, Institute of Fundamental Studies and National Water Supply and Drainage Board (NWSDB).	67
3 Short Courses on Analysis of Experimental Data (1 st - 3 rd)	Undergraduate/postgraduate students and junior/senior academic members of Faculties of Science, Medicine, Agriculture, Dental Sciences, Veterinary Medicine and Animal Sciences and research institutes participated.	110
Training Programme on Dairy Management for Gamaneguma Officers	22 Officers of "GAMANEGUMA" 2 nd Community Development & Livelihood Improvement Project of Ministry of Economic Development participated (9 District Livelihood Facilitators, 3 Regional Technical Officers, 4 Dairy Consultants and 6 from National Team).	22
2 Workshops on Scientific Writing	M.Sc., M. Phil. and Ph.D. students of the PGIS	243
6 th Short Course on Health and Anesthesia in Captive Elephants	Government Veterinary Surgeons	15
Workshop on Human Growth and Maturation - Clinical Applications	Senior medical officers, pediatric postgraduate students and academic staff of pre-clinical and clinical departments of the universities	56
SAARC Training Programme on Urban Risk Management	18 Participants from SAARC countries	18
<i>Workshop on Electrochemistry</i>	Academics and research students/scientists from universities and research institutes	54

Annexure I

Details of the Participants for GIS Short Courses by their Institutes		
	2010/2011	
No.	Institute	No of Participants
1	Sri Lanka Army and Navy	87
2	Irrigation Department	72
3	Disaster Management Centre (DMC)	42
4	Dept. of Census & Statistics	40
5	Mahaweli Authority, CEB, WRB, RDA, Land Reclamation Dept. etc.	67
6	Ministries of Eastern Province - Batticaloa & Trincomalee Districts	64
7	Ministry of Education	26
8	Universities (Undergrates and Postgraduates)	48
9	Ministry of Health	21
10	National Water Supply & Drainage Board	25

11	Sri lankan Telecom	10
12	Sri Lanka Wildlife Conservation Dept.	5
13	Other Private Sector Organizations	26
14	NGOs & INGOs (including FAO, UNDP, US Aids etc.)	20
15	Dept. of Valuation	5
16	Foreign Participants	6
		564

11. Details of Research, Innovation and Publications:

Subject	Published	Commercialized	Presented
a. No. of Researches	35	01	78
b. No. of Innovations	01	01	-
c. No. of Journals	-	-	-
d. No. of Books	-	-	-
e. No. of Articles	-	-	01
f. Others (News Letter)	01	-	-

12. Details of Awards Received

Subject	No. of Awards	No. of Academics*	No. of Students
a. Local Awards (PGIS Scholarships)	06		06
b. National Awards	-	-	-
c. International Awards	-	-	-
d. Others	-	-	-

* PGIS has only Visiting Academics

13. Details of New Courses Started

Institute	Course	Medium	Certificate	Diploma	PG Diploma	Masters	M.Phil	Ph.D.
PGIS	NO							

14. Details of Recurrent Expenditure:

Subject	2009 Rs	2010 Rs
a. Personal Emoluments	17,869,206	18,905,498
b. Traveling	748,544	733,653
c. Supplies	3,890,570	2,440,640
d. Maintenance	849,594	1,102,308
e. Contractual Services	2,620,748	3,186,738
f. Others	2,870,507	4,297,232

15. Details of Capital Expenditure:

Subject	2009 Rs	2010 Rs
a. Acquisition of Furniture & Office Equipment	1,456,026	12,566,358
b. Acquisition of Machineries		
c. Acquisition of Building & Structures	37,674,925	
d. Others	117,004	

16. Details of Projects (Local/Foreign Funded) in 2010:

Name and Details	Loan/Grant	Funding Agency*	TCE Rs	RFA Rs	DF Rs
Prof. A Wickramasinghe	Grant	NSF	1,537,500		
Prof. IAUN Gunathilake	Grant	SLUSA		Euro 50,000	

*(GOSL/ADB/IDAWB/...)

17. Details of Project Expenditure (Local/Foreign Funded):

Name	TCE Rs	Exp. In 2009 Rs	Exp. In 2010 Rs	Cumulative Exp. As at 31.12.2010	% of Physical Progress
Not received					

18. Details of Financial Progress (Expenditure)

Subject	Provision in 2010 Rs	Exp. In 2010 Rs	Savings / Excess Rs
a. Recurrent except Project	*38.300.000	30,666.069	7,633,931
b. Capital except Project	**18.500.000	12,566,358	5,933,642
c. Project – Local funded	-	-	-
d. Project – Foreign funded	-	-	-

* Rs. 24.3 Million from PGIS earnings

** Rs. 16.0 Million from PGIS earnings

19. Details of Financial Progress (Generated Income)

Subject	Provision in 2010 Rs	Collection in 2010 Rs.	Deficit / Surplus Rs
a. Undergraduate Students			
b. Postgraduate Students	37,650,000	36,305,181	1,344,819
c. Consultancies			
d. Others			

20. Financial Performance Analysis - 2010:

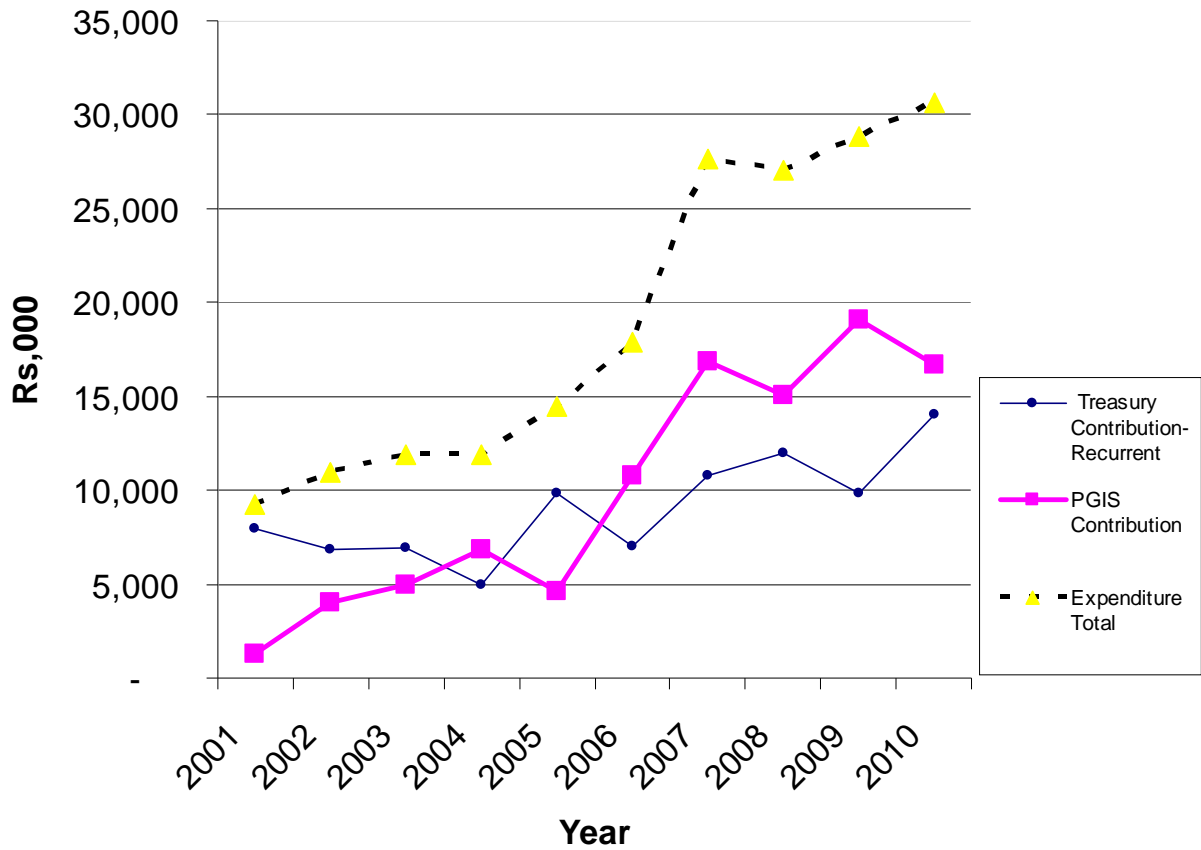
Subject	Formula	Exp. Per student Rs
a. Recurrent Expenditure per Student (RE)	Total recurrent exp./No. of Students	19,299
b. Capital Expenditure per Student (CE)	Total capital expenditure/No. of students	7,908

21. Details of Infrastructure Facilities Received in 2010:

Subject	Expenditure Rs	Physical Progress
Indicated under 14 (a)		

22. Expenditure analysis - from 2001 - 2010

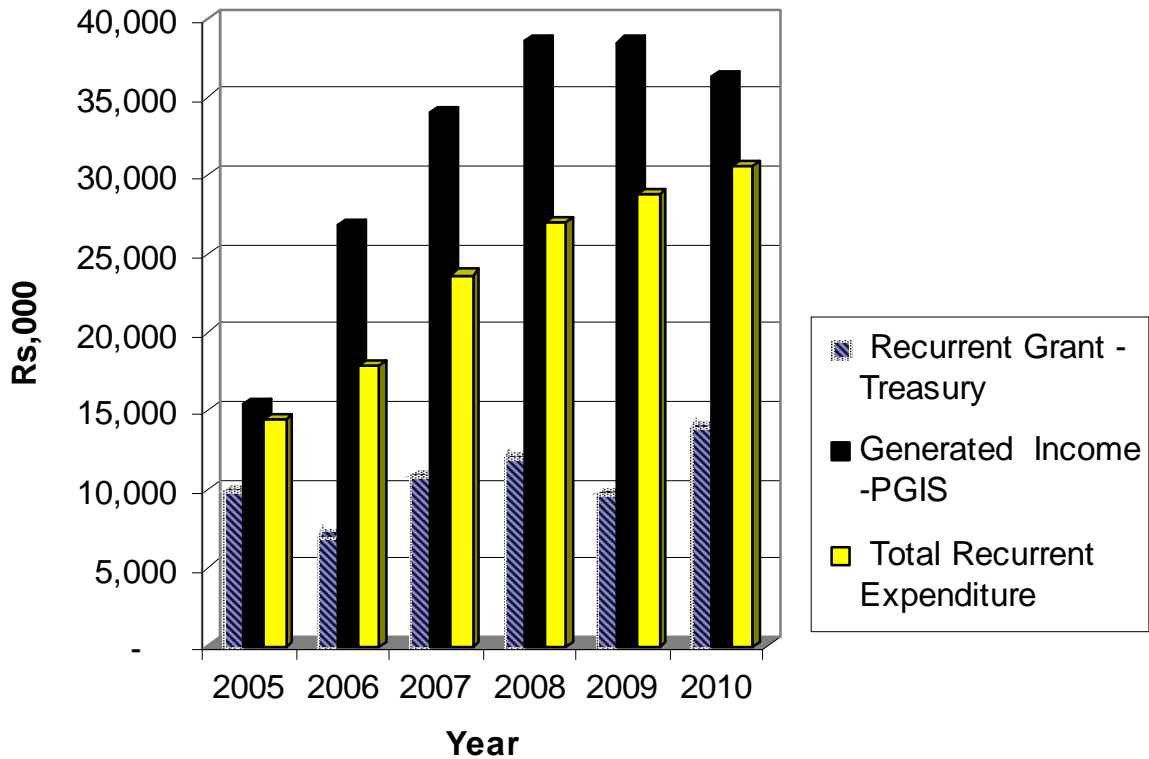
Expenditure analysis- From 2001-2010



23. Financial Performance - 2005 - 2010

Financial Performance 2005-2010

2005-2010



24. Any Other Details / Performance Relevant to this Report:

NO



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கணக்காய்வாளர் தலைமை அறிபுதி திணைக்களம்
AUDITOR GENERAL'S DEPARTMENT



මගේ අංකය } CI/KD/1/02,06/PGIS
 எனது இல } /10/58
 My No. }

ඔබේ අංකය }
 உமது இல }
 Your No. }

දනය } 25 August 2011
 திகதி }
 Date }

The Director,
 Postgraduate Institute of Science

Report of the Auditor General on the Financial Statements of the Postgraduate Institute of Science for the year ended 31 December 2010 in terms of Section 108(2) of the Universities Act No.16 of 1978 and Section 13(7) (a) of the Finance Act No.38 of 1971

The audit of Financial Statements of the Postgraduate Institute of Science for the year ended 31 December 2010 was carried out under my direction in pursuance of provisions in Article 154(1) of the Constitution of the Democratic Socialist Republic of Sri Lanka read in conjunction with Sections 108(1) and 111 of the Universities Act No.16 of 1978 and Sub sections (3),(4) and (7) of Section 13 of the Finance Act No.38 of 1971. My comments and observations in terms of Section 108(2) of the Universities Act and Section 13(7)(a) of the Finance Act appear in this report.

1.2 Responsibility of the Management for the Financial Statements.

Management is responsible for the preparation and fair presentation of these financial statements in accordance with Sri Lanka Accounting Standards. This responsibility includes; designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

විද්‍යාගාර පිහිටීම
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 E-mail. }

1.3 Scope of Audit and Basis for Opinion

My responsibility is to express an opinion on these financial statements based on my audit. Audit opinion, comments and findings in this report are based on review of the financial statements presented to audit and substantive tests of samples of transactions. The scope and extent of such review and tests were such as to enable as wide an audit coverage as possible within the limitations of staff, other resources and time available to me. The audit was carried out in accordance with Sri Lanka Auditing Standards to obtain reasonable assurance as to whether the financial statements are free from material misstatements. The audit includes the examination on a test basis of evidence supporting the amounts and disclosures in financial statements and assessment of accounting policies used and significant estimates made by the management in the preparation of financial statements as well as evaluating their overall presentation. I have obtained sufficient information and explanations which to the best of my knowledge and belief were necessary for the purpose of my audit. I therefore believe that my audit provides a reasonable basis for my opinion. Sub-sections (3) and (4) of Section 13 of the Finance Act No.38 of 1971 give discretionary powers to the Auditor General to determine the scope and extent of the Audit.

2. Financial Statements

2.1 Opinion

So far as appears from my examination and to the best of information and according to the explanations given to me, I am of opinion that the Postgraduate Institute of Science had maintained proper accounting records for the year ended 31 December 2010 and except for the effects on the financial statements of the matters referred to in paragraph 2.2 of this report, the financial statements have been prepared in accordance with Sri Lanka Accounting Standards give a true and fair view of the state of affairs of the Postgraduate Institute of Science as at 31 December 2010 and the financial results of its operations and cash flows for the year then ended.

2.2 Comments On Financial Statements

2.2.1 Sri Lanka Accounting Standards

The following observations are made.

Even though the depreciated value of 06 items of fixed assets costing Rs.30,014,191 as at 31 December 2010 had become zero, action had not been taken to revalue those assets which are continuously being used and brought to accounts in terms of Sri Lanka Accounting Standard 18.

2.2.2 Accounting Deficiencies

The following observations are made.

- (a) Six types of expenditure totaling Rs. 612,277 relating to the year under review and spent in the year 2011 had not been brought to account under accrual basis and as such the expenditure of the year under review and the expenditure creditors had been understated by that amount.
- (b) As the provision had not been made in the financial statements of the respective year for two items of expenditure totaling Rs.42,050 spent in the year 2011 for the preceding year, the accrual expenditure account and the value of capital fund account had been understated and overstated respectively by that amount.

2.2.3 Non-reconciliations

The total amount shown in the financial statements relating to 12 items of accounts was Rs. 26,926,186 while the total according to the relevant control accounts amounted to Rs. 26,887,458.

2.2.4 Accounts Receivable and Payable

- (i) Action had not been taken to recover the staff loan balance of Rs.245,081 remained outstanding for the period 2 to 7 years.
- (ii) Out of the audit fees of Rs.640,117 for the period from 2001 to 2007, a sum of Rs.9,685 had been outstanding even as at the end of the year under review.

2.2.5 Lack of Evidence for Audit

The following items of accounts could not be satisfactorily vouched or accepted in audit due to non-availability of evidence stated against each item.

Item	Value	Evidence not made available
	Rs.	
(a) Library Books	9,724,162	(i) Register of accession (ii) Board of Survey Reports
(b) Fixed Assets (Cost)	122,614,025	(i) Register of fixed assets (ii) Schedules

(c)	Research Grants	12,731,536	Progress Reports
(d)	Foreign Travels - Resarches	711,901	Recommendations for travelling and evidence for approval
(e)	Disposal of Fixed Assets (Laboratory and learning equipment)	1,444,856	Cost of 54 items out of disposed fixed assets

2.2.6 Non-compliance with Laws, Rules, Regulations and Management Decisions

The following non-compliances with the laws, rules, regulations and management decisions were observed in audit.

Reference to Laws, Rules, Regulations etc.,	Non-compliance
(a) (i) Section 8(1) of the Finance Act, No. 38 of 1971	Even - though the budget should be prepared and get approved by the Board of Directots before 3 months, action had not been taken accordingly in respect of the budget for the year under review.

(ii) Section 11 of the Finance Act No. 38 of 1971

Even though the approval of the relevant Minister with the concurrence of the Minister of Finance should be obtained for the investment of excess money of the Institute, it had not been complied with in respect of the investment of fixed deposits totaling Rs. 118,307,817 shown in the final accounts of the year.

(b) Government Financial Regulations

(i) F.R. 371 (2)(c)

(i) Although the ad-hoc imprests should be given only to staff officers, advances totaling Rs. 60,500 had been given to non-staff officers in 11 instances.

(ii) Advances given by the Institute should be settled immediately after the purpose for which it was completed. Nevertheless, advances totaling Rs. 515,692 given in 16 instances had been settled after a delay of 02 to 10 months.

(iii) Advances of Rs.66,000 given in 3 instances had been settled without utilizing for any purpose after retaining in hand for the period ranging from 21 days to 07 months.

(ii) F.R. 135, 136 and 137

Authorities had not been delegated to the officers of the Institute for the year under review.

(c) Sub-section 2.2 of Chapter IX of the Establishments Code of the Democratic Socialist Republic of Sri Lanka

Even though the public servants who do non-official work outside the office time by using the training obtained from public service should credit 10 per cent of the fees that they obtain to the Consolidated Fund, a sum of Rs.48,160 had not been so credited from 4 officers conducted lectures during the year under review.

(d) Treasury Circular No. IAI/2002/02 dated 28 November 2002 and the letter of the Secretary to the Treasury dated 28 November 2002

A Register of Fixed Assets had not been maintained in respect of the computers and accessories.

- (e) Decision No. 88-10-01 dated 18 September 2010 of the Board of Management of Postgraduate Institute of Science. In making payments to resource persons for short term workshops, a sum of Rs.1,250 per lecture hour to a visiting lecturer, Rs.750 for practical training to a lecturer and Rs.400 to a demonstrator for GIS courses should be paid. Nevertheless, lecture fees of Rs.26,250 and the practical training fees of Rs.145,475 had been paid in excess of these limits.

2.2.7 Transactions not supported by Adequate Authority

The following observations are made.

- (a) Contrary to the Circular letter No. PE/1/174/11 (b) dated 10 March 1978 of the Director General of Public Enterprises, allowances of Rs.212,230 had been paid to officers who were not entitled for the second and third language proficiency allowances during the period 1997 to 2010.
- (b) Contrary to the Circular letter No. PD/INS/CLUS-A/078 dated 18 July 2003 of the Director General of Budget, contributions to the Employees Provident Fund and the Employees Trust Fund amounting to Rs.419,550 and Rs.83,910 respectively had been overpaid for the period 1998 to 2010 due to computation of contributions including the academic allowances.
- (c) An overpayment of Rs.80,062 had been made in 16 instances to the lecturers as a result of approving to pay Rs.25 per km by the Decision No. 74 of Board of Management in excess of mileage stated in Section 8.2 of Chapter XIV of the Establishments Code.

- (d) Over time allowance of Rs.59,974 had been paid to 5 officers in 18 instances in excess of the approved 84 hours.
- (e) Action had not been taken to settle a sum of Rs.21,052 incurred by the Fund of the Institute for 4 research projects due to insufficient provisions.

2.2.8 Transactions of Contentious Nature

The following observations are made.

- (a) The grant of Rs.4,646,980 had been given to conduct a research during the period of 3 years since 12 January 2005 by the Executive Director of the Sri Lanka Agricultural Policy Council and the Director of the Postgraduate Institute of Science for the use of the substituted named as "Ranila Sara Armakulaka" in place of fertilizer for the Soya bean plantation. As a result the Institute had produced and distributed that substitute since the year 2008 in place of urea fertilizer. However action had not been taken to make legal provision to the existing Act by which the Institute was established to enable the Institute to manufacture such a product or to run a business.
- (b) Income and expenditure for the period from the starting year to 2007 of the Rysobium project which commenced in the year 2005 had not been brought to accounts due to lack of proper supervision and administration. Even though the Rs.3,883,350 of income earned and the Rs. 4,054,035 of expenditure for the period from 2008 to 2010 respectively had been shown under research grants, the financial statements for this project had not been separately prepared, as this project was a commercial activity.

- (c) According to the Rates of Payment document in respect of the workshops, seminars and short term courses of the Postgraduate Institute of Science effective from 19 January 2010 the approval had been granted to pay an honorarium payment of Rs.6.25 per km as travelling expenses. Contrary to that, a sum of Rs.64,500 had been paid to 2 lecturers as transport expenses in 14 instances for 7 short term courses on the basis of budgeted values.

3. Financial and Operating Review

3.1 Financial Review

3.1.1 Financial Results

According to the financial statements presented, the operation of the Institute for the year ended 31 December 2010 had resulted in a surplus of Rs.5,639,112 before taking into account the government grants for recurrent expenditure. This surplus had increased to Rs.19,639,112 after taking into account the government grants of Rs.14,000,000, as compared with, corresponding that the surplus for the preceding year had been Rs.9,647,381 before taking in to account the government grants for recurrent expenditure and this surplus had increased to Rs.19,447,381 after taking into account the government grants of Rs.9,800,000 received for recurrent expenditure.

3.2 Operating Review

3.2.1 Performance

Out of the number of students registered in each year during the period from 2004 to 2010, the number of students who could not complete the post graduate degree up to 24 May 2011 had been between 10% and 76% of the registered students. Particulars are given below.

Year	Number of Students registered	Number of Students who had not completed the Postgraduate Degree by 24 May 2011	Percentage
2004	277	27	10
2005	159	27	17
2006	385	149	39
2007	351	202	57
2008	330	251	76
2009	187	Not completed the Thesis	-
2010	300	Lectures of the Course not completed	-

3.2.2 Underutilization of Funds

The balance of Rs.1,226,191 remained unutilized out of grants received for 21 external research projects relating to the period 2004 to 2008 had remained in the research grants account.

3.2.3 Corporate Plan and Action Plan

Even though a Corporate Plan and an Action Plan had been prepared for the years from 2010 to 2015 the annual budgets required for the implementation of those plans had not been prepared and as such those plans had become only to the documents.

3.2.4 Uneconomic Transactions

The following observations are made.

- (a) Even though assets should be purchased under the competitive quotations by publishing a newspaper advertisement in terms of Section 3.2.2 (a) of the Procurement Guidelines action had been taken to purchase 73 computers valued at Rs.6,482,745 contrary to this procedure.
- (b) Even though 4 direct telephone lines had not been used by the computer centre of the Institute for the last several years, a sum of Rs.58,707 had been spent therefore.

3.2.5 Cadre

A human resources budget had not been prepared in terms of Paragraph 9 of the Public Enterprises Circular No. PED/12 of 02 June 2003.

3.2.6 Budgetary Control

Significant variances were observed between the budgeted figures and actual figures as given below thus indicating that the budget had not been made use of as an effective instrument of management control.

- (i) Even though the estimated provision of Rs.13,670,000 had been made for the five items of expenditure, any expenditure had not been incurred and saved the entire provision.
- (ii) Even though an expenditure of Rs.8,225,000 had been incurred in excess of the estimated provisions relating to 6 expenditure items ranging from 4 percent to 264 percent, a proper approval therefore had not been obtained.
- (iii) There were savings of Rs.7,847,000 under 7 items of expenditure representing 15 percent to 64 percent.

4. **Systems and Controls**

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

- (a) Accounting
- (b) Fixed Assets Control
- (c) Conducting Workshops and Short Terms Courses
- (d) Payment of Advances
- (e) Maintenance of Registers
- (f) Internal Control
- (g) Progress of Research Projects

H.A.S.Samaraweera

Auditor General

Sc/LA

The matters arose from 2011 Auditor General's report and the present status

Paragraph No. of the Auditor General's Report	Matters that Inquired by the Auditor General	Answers Given by the Institute	Actions that has been taken in relation to that matter and additional Information
2.2.1 (a)	Although the value had been blank after the deduction of depreciation relevant to six fixed assets subjects with the total cost of Rs.30,014,191 as at 31.12.2012, as those fixed assets are continuously used, action had not been taken to state those values in the accounts by re-evaluating in terms of 18 of Sri Lanka Accounting Standard.	Actions are being taken to re-evaluate all assets of the Institute and to prepare the Fixed Assets Register in the year 2011 and when these actions are over this situation will be corrected	All the assets of the Institute has already been re-valued
2.2.2. (a)	Six category of expenses of Rs.612,277 spent in the year 2011 relevant to the year under revive due to no having accounted under accrual basis, expenses and expenses debtors of the year under revive are indicated low of that amount	Grants cannot be allocated due to the Payment Requisitions have not been received to us till the Final Accounts of the Institute are completed. However, actions will be taken to pay our fullest attention on this matter in the coming year	All parties have been inform to submit Payment Requisition for payment to the financial division immediately and then this situation will be prevented
2.2.2 (b)	Due to not having taken action to provide grants in the financial statements of the respective year, two expenses amounting to Rs.42,050 spent for previous year in 2011, the value of Accrual Expenses Account and Capital Fund Account are indicated low out of that amount.	This situation has been created due to not forwarding payment requisitions for lecture fee to the respective date as mentioned in above answer. However action will be taken to pay our serious attention on this matter in the coming year.	All parties have been informed to submit relevant Payment Requisition to the financial division immediately and then this situation will be prevented.
2.2.3	The total amount indicated in the Financial Statement was Rs.26,926,186 relevant to 12 account subjects and	The difference of balances of accounts relevant to Account Nos.	After the fault was corrected by the respective company

	<p>the total according to Control Account relevant to that was Rs. 26,887,458.</p>	<p>00003/00004/30004/30005/0000 and Ledger Accounts as at 31.12.2010 is not a fault of accounts but in computer package. Although balances are correctly matched with the investigating balance when they are printed separately through the package, an imbalance is shown between the pointed five accounts and investigating balance when the Ledger is printed all together. Action has been taken to correct this situation by informing the HFN Information System Ltd from where the Package was received.</p>	<p>such fault did not take place until now.</p>									
2.2.4 (i)	<p>Action had not been taken to recover employees loan amount of Rs. 245,081 relevant to the period of 02 to 07 years</p>	<p>Action has been taken to recover these amounts of loan money as at February 2011.</p>	<p>It has been recovered.</p>									
2.2.4. (ii)	<p>There was an amount of Rs. 9,685 at the end of the year under review from the audit fees amount of Rs. 640,117 from the year 2001 to 2007</p>	<p>Action has already been taken to settle this amount of money</p>	<p>It has been settled</p>									
2.2.5 (a)	<table border="1"> <thead> <tr> <th>Subject</th> <th>Value</th> <th>Evidence not forwarded</th> </tr> </thead> <tbody> <tr> <td>(a) Library Books</td> <td>9,724,162</td> <td>(i) Accession Register</td> </tr> <tr> <td></td> <td></td> <td>(ii) Registrar</td> </tr> </tbody> </table>	Subject	Value	Evidence not forwarded	(a) Library Books	9,724,162	(i) Accession Register			(ii) Registrar	<p>It is not reasonable to state that impossibility of making a satisfactory observation due to non availability of Accession Register and Survey Board</p>	<p>Accession Register and Survey Board Reports have already been prepared</p>
Subject	Value	Evidence not forwarded										
(a) Library Books	9,724,162	(i) Accession Register										
		(ii) Registrar										

	<p>Reports relating to library books. All the documents such as pay vouchers and stock certificates etc are with us and these documents can be forwarded when ever needed for auditing.</p>		
(b)	<p>The Fixed Assets Register is currently being prepared and action will be taken to complete it during the year 2011.</p>	<p>(i) Survey Board Reports Evidence not Forwarded</p> <p>(b) Fixed Assets 122.6: 4.025 (i) Fixed Assets</p>	<p>Fixed Assets Register has been prepared</p>
(c)	<p>Progress Reports of research grants, as we have explained previous years, we perform only their financial control. So we do not maintain files on project proposals, progress reports etc. If these documents are needed for auditing, they can obtain at any time from the respective lecturer who conducts the relevant research. The Account Section of the institute maintains only the documents relating to receiving and payments of these research grants. The Progress evaluation of the research is a direct transaction between the researcher and institute which grants funds for the research and we do not interfere with that. I would like to inform you that the respective</p>	<p>Research Grants 12.731.536</p> <p>(ii) Sub Register Progress Reports</p>	<p>Action has been taken to include a summary report of the progress reports of research grants and a CD which include whole report into relevant files</p>

			research institutes do not extend research or grant funds when progress reports are not forwarded by the researcher	
(d)	Foreign Trips- Research	711,906	Documents proving recommendations and approval needed for trips	<p>The lecturers have been informed to forward leave approval of the respective institute before obtaining foreign travel expenses</p> <p>As these lecturers are not permanent service in our institute, we did not take action to consider the approval of the University of Peradeniya. Those lecturers take their entitle leave, accordingly their foreign leaves needed for them. are approved. We act only within the legal frame work of the respective grants.</p>
(e)	Removal of Fixed Assets (Laboratories and Learning material)	1,444,856	Cost valued relevant to 54 items of removed fixed assets	<p>This situation will be prevented with the preparation of Fixed Assets Register</p> <p>This has been corrected with the preparation of Fixed Assets Register</p>
2.2.6 (a) i	Section 8(1) Financial Act No.38 of 1971		Although the budget document should have been prepared before three months, action had not been taken to do so during the year under revise	<p>This situation was not created by our institute. We can act in such manner if the University Grant Commission gives us details of respective grants before one month</p> <p>As the details of grants allocated for the institute for the year 2010 for recurrent expenditure and to buy fixed assets, issued by the University Grants Commission received to</p>

	<p>us on 18- 12-2009. Hence there is no possibility of obtaining the approval of the Board of Management to the respective budgetary document before three months.</p>		
<p>ii. (i) Section 11 Financial Act No.38 of 1971</p>	<p>Even though it is true that the approval of the Ministry of Finance has not been obtained for this matter, the approval of the Board of Management which constitutes with a representative of the Ministry of Finance has been obtained</p>	<p>Although the approval and agreement of the relevant minister and Finance minister respectively should have been obtained to invest the excess money of the institute, action had not been taken in such a way to invest the fixed deposit total amount of Rs. 118,307,817 stated in the final accounts of the year</p>	<p>A request has been made from the Ministry of Higher Education to revise the University Act to facilitate to maintain these deposits in accordance with the instructions of the COPE held in 2011</p>
<p>2.2.6 (a) 1.1 (i)</p>	<p>There is only one officer in our institute who can receive advances in addition to the Director. Hence it is not a practical task to act by obtaining all the advances relevant to her.</p>	<p>Although could be given only to staff officers, an amount of Rs.60,500 of advances had been granted to non staff officers at eleven occasions</p>	<p>Action has been taken to correct this</p>
<p>ii (ii)</p>	<p>Although it is very difficult to prevent this type of delay in practical situations, however, action will be taken to pay our stern attention on this matter in future.</p>	<p>Ever though the advances granted by the institute should have been repaid immediately after the completion of the task, an amount of Rs. 515,692 had been repaid with the delay of 2 to 10 months at 16 occasions</p>	<p>Action has been taken to correct this</p>

iii		An amount of Rs. 66,000 advance granted at three occasions had been repaid after keeping in hand for a period of 21 days to 7 months without taking any use	Action will be taken to prevent such situations in future
2.2.6. (b) II	(i) F.Regulation 135,136 and 137	The officers employed in the institute were not given authority for the year under review	Action will be taken to correct the assigning of authority by next year onwards
2.2.6 (c)	2.2 Sub section of chapter ix of the Establishment Code of the Democratic Socialist Republic of Sri Lanka	Even though 10% from the fees given for out of hour service by using the training acquired through the government service should be credited to the Joint Fund, an amount of Rs.48,169 from four officers who engaged in lecturing had not been credited to the joint fund during the year under review	Audit query is not correct. Our institute has been affiliated to the University of Peradeniya to enable to obtain the service of the lecturers of the University of Peradeniya
2.2.6 (d)	Treasury circular No. IAI 2002/02 dated 28 th November 2002 and Treasury Secretary's letter dated 28 th November 2002	A Fixed Assets Registrar in relation to computers and equipments had not been maintained	Actions are being taken to prepare a Fixed Assets Register
2.2.6 (e)	Council decision No. 88-01-01- dated 18-09-2010 of Post graduate Institute of Science	Although a sum of Rs. 1,250 per an hour for a visiting lecturer, Rs. 750 for practical training and Rs. 400 for a demonstration of	The Board of Management has not decided to pay the charge for an hour for the resource personnel of short term workshops as has been pointed

Fixed Assets Register has been prepared

It has been referred to the Board of Management

2.2.7 (a)	<p>the GIS courses of the institute should have been paid when paying resource personnel allowances for short term workshops, an amount of Rs. 26,250 for lecture fees and Rs. 145,475 for practical training fees had been paid by exceeding that amount.</p>	<p>out by the audit. The director has been vested the power by the respective committee to decide the relevant charges in accordance with the income of the short term courses and the necessity.</p>
(b)	<p>An amount of Rs. 212,230 allowance had been paid from 1997 to 2010 for officers who are not entitled to receive second and third Language Proficiency Allowance, in contrary to the Public enterprises Director General's Circular Letter No.PRI/174/11 (b) dated 10 March 1978</p>	<p>As our institute is governed by the University Grants Commission, we have acted in terms of the circulars issued by the University Grants Commission</p>
(c)	<p>A contributory amount of Rs. 419,550 and Rs. 83,910 respectively had been over paid from 1998 to 2010 due to the calculation of contribution including Study Allowances on ETF and L.P.F. in contrary to the Budgetary Director General's Circular Letter No. PD/NS/C/US -A/073 dated 18 July 2005</p>	<p>As our institute is governed by the University Grants Commission, we have acted in terms of the circulars issued by the University Grants Commission</p>
	<p>An amount of Rs. 80,062 had been over paid for lecturers at 16 occasions due to the approval granted to pay Rs.25 per a kilometer by the decision N.O. 74 of the Board of Management by exceeding the rate for a mile indicated in section 8.2 of paragraph XIV of the Establishment Code</p>	<p>The Board of Management has to take this type of decisions to obtain the services of particular scholars for the existence of the institute. If not I would like to inform that it is very difficult to maintain the institute</p>

It was the opinion of the COPE held in the year 2011 that the University Grants Commission should act on this matter

This has been referred to the attention of the University Grants Commission

If payments are not made in this manner, it is not possible to get the services of specialist lecturers to continue the study activities of the institute. However this matter will be referred to the attention of the Board of

			Management of the institute
(d)	Over time allowance of Rs. 59,974 had been paid at 18 occasions to five officers who had engaged in service by exceeding the approved 84 over time hours	This type of situations is unavoidable when actions are taken to run daily routines smoothly, as the institute has only a very limited number of employees to perform the heavy workload especially at week ends	As many of the lectures and other activities of the institute are carried out at week ends the institute has to incur this much of expenses. But actions are taken to cover the payment of over time on the works of Research grants from the respective research
(e)	Action had not been taken to recover the sum of Rs.21,052 spent from institutional fund for not having sufficient grants for 04 research projects	Action will be taken in relation to this matter	Actions have been taken to recover this amount
2.2.8 (a)	The grant valued Rs.4,645,980 which had been granted to carry out a research within three years starting from 12-January 2005 on the substitute called 'RANILASARA AAMUKULAKA' in place of fertilizers for cultivation of soya Beans, between Executive Director of Agriculture Policy Council of Sri Lanka and Director Postgraduate Institute of Science, and on its results, the income earned Rs.3,883,350 and the expenditure Rs.4..... by the institute from 2008 - 2010	Actions are being taken to make a decision on this matter on the instructions of the Board of Management	Action has been taken to withhold the research and hand over its administration to university of Peradeniya
(b)	The <u>RISOBIVAM</u> project commenced in the year 2005, the income and expenses relevant to the time duration had not been accounted from its commencement year to 2007 as there had not been a proper supervision and administration. Even though the income of Rs.	Actions are being taken to make a decision on this matter on the instructions of the Board of Management	Action has been taken to withhold the research and hand over its administration to university of Peradeniya

	<p>3.883,350/- earned from 2008 to 2010 had been stated under research projects, the financial statements relevant to this task had not been prepared separately as this project is in commercial nature.</p>		
(c)	<p>Although approval had been granted to pay Rs. 6.25 for a kilometer, an honorarium allowance, as traveling expenditure in terms of the rate payment document for workshops, seminars and short-term courses conduct at Post graduate Institute of Science with effect from 19 January 2010 , in contrary to that two lecturers had been paid Rs. 64,500. at 14 occasions for 7 short term courses</p>	<p>Charge for a mile is not Rs. 6.25 as mentioned in your audit query. It should be corrected as Rs.12.00. I would like to inform you that, as this group of scholars is very special; if they are not paid at least an adequate amount of traveling charge, it is very difficult to obtain their services for these courses.</p>	<p>It has been referred to the attention of Board of Management</p>
3.1.1	<p>According to the forwarded financial statements an excess of Rs.5,639,112/- existed before to count the government grants for recurrent expenditure from the works of the institute as at 31 December 2012. This excess had been increased up to Rs.19,639,112 after the counting of the government grant of Rs. 14,000,000</p>	<p>This paragraph is correct</p>	
3.2.1	<p>The number of students who could not complete post graduate degree was between 10% and 76% out of registered number of students to the date 24th May 2011 from the year 2004 to 2010. Details are given below.</p>	<p>This paragraph is correct and actions are being taken in relation to this matter</p>	<p>The students who enrolled for courses in any year do not leave at the end of the same year (minimum duration of a course is 18 months) and as they obtain degrees in coming years the indicated calculations (%) are wrong. But actions have been taken</p>

			<p>to encourage students who are late to complete degrees and remove the students who have given up degree courses from the Registered Students' Register due to the fact that these numbers have improved in satisfactory manner</p>
3.2.2	<p>An unused sum of Rs. 1,226,191 relevant to the time period of 2004 to 2008, from grants received in relation to 21 external research projects had been remained balanced in the Research Grant Account</p>	<p>This paragraph is correct and actions are being taken in relation to this matter</p>	<p>Actions have been taken to return this balance amount of money of these projects to National Science Foundation</p>
3.2.3	<p>Although a Corporate Plan and Annual Action Plan have been arranged from 2010 – 2015, those plans had been limited only for planning documents due to not having prepared Annual Budget Document as needed to implement those plans</p>	<p>We always attempt to perform basing on the Corporate Plan and the Action Plan</p>	<p>Action will be taken to implement Annual Budget Documents in parallel to Corporate Plan and Annual Action Plan</p>

3.2.4 (a)	<p>Even though assets should have been purchased under competitive rates through newspaper advertisement in accordance with 3.2.2 (a) Procurement Guide to bring more benefits to the institute, action had been taken in contrary to that to buy 73 computers valued Rs.6,482,745/-</p>	<p>(a) It is unnecessary to follow all the time 3.2.2 (a) of the Procurement Guide and the Departmental Procurement Committee can follow the system of "Shopin" at purchasing up to Rs. two millions</p>	<p>These 73 computers were not bought at one time and they were bought at several occasions. Further it is more beneficial to buy these computers at several occasions on the basis of change of their rate and technology and in suitable manner to the institute and also it is more practicable to buy these computers in a manner the treasury grants money to the institute and approval has been granted for this in accordance with the 3.2.2 (a) of Procurement guide</p>
(b)	<p>Although 04 direct line telephones in computer Centre of the Institute had not been used for many years, an amount of Rs. 58,707 had been spent for that purpose.</p>	<p>(b) Actions have been taken to correct this</p>	<p>These telephone lines were used for internet and they have been disconnected with the receiving of direct internet line. Currently actions have been taken to remove these telephonic connections completely.</p>

3.2.5	A Human Resource Budgetary Document had not been prepared in accordance with the paragraph 09 of Public Enterprises Circular No.PED/12 and dated 02 nd June 2003	Actions will be taken in future to prepare this human resource budget	This budget is being prepared and action will be taken to complete it within next three months
3.2.6 i.	Although a sum of 13,670,000 estimated grants relevant to 05 expense subjects had been arranged, the total amount had been remained without spending any amount of it	Our stern attention will be paid on this when budgets are prepared for coming years	Attention has been paid
ii.	Although a sum of Rs. 8,225,000 over expenditure from 4% to 264% estimated grants relevant to 06 expense subjects had been spent, a proper approval had not been obtained for that.	This type of variations cannot be avoided within the existing inflation, and the variation of 264% is due to hiring and revenue tax expenses, this kind of variation was taken place on the basis of revision of leasing by the government in the mid year, an approval is not required as taxes are changed by an Act.	This is very difficult to control due to prevailing inflation situation in the country

4.	<p>Short comings of systems and control observed at the audit were pointed to the director from time to time through my reports. Special attention should be paid on the following control field.</p> <ul style="list-style-type: none"> (a) Accounting (b) Controlling of fixed assets (c) Conduct Workshops and short term courses (d) Payment of Advances (e) Maintaining of Registers (f) Internal control (g) Progress of Researches 	Action will be taken to pay our attention on the pointed systems	Efforts will be taken to minimize short comings at every time
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