SUBJECT REVIEW REPORT

DEPARTMENT OF AGRONOMY

FACULTY OF AGRICULTURE
EASTERN UNIVERSITY OF SRI LANKA

25th to 27th June 2007

Review Team :
Prof. C. S. Weeraratne, Surgarcane Research Institute
Prof. Rohan Rajapakse, University of Ruhuna
Dr. (Ms.) Indrika Rajapakshe, University of Moratuwa

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1. SUBJECT REVIEW PROCESS

Subject review is a procedure to evaluate the quality of education within a specific subject or discipline. This process primarily focuses on the appraisal of learning experience and achievement of students in both undergraduate and taught postgraduate programmes. However, the maintenance of quality and standards is a significant responsibility of the institution which has the authority to manage and modify existing practices when necesary.

This subject review of the study programme in the Department of Agronomy (DA) of Eastern University of Sri Lanka was conducted in accordance with the guidelines given in the Quality Assurance Handbook for Sri Lankan universities, published by the CVCD and University Grants Commission in July 2002.

The DA of the Eastern University submitted a Self Evaluation Report (SER). This SER consists of ten sections, namely aims, learning outcomes and programme details; students, staff and facilities; curriculum design, content and review; teaching, learning and assessment methods; quality of students including student progress and achievement; the extent and use of student feedback, qualitative and quantitative; postgraduate studies; peer observation; skills development; and academic guidance and counseling.

The Review Team visited the DA from 25th – 27th June, 2007 and the agenda of the three day visit is annexed (Annex 1). In the subject review process, the review was done according to the aims and learning outcomes given in the SER and the following eight aspects of the DA were reviewed.

1. Curriculum design, content and review
2. Teaching learning and assessment methods
3. Quality of students including student progress and achievements
4. Extent and use of student feedback, qualitative and quantitative
5. Postgraduate studies
6. Peer observation
7. Skills development
8. Academic guidance and counseling

The evaluation of eight aspects was based on:

- Meetings held with the Dean, Head of the DA, academic staff, non-academic staff, undergraduate students representing first, third and final years and a single student in the post graduate programme.
- Observation of the departmental and related institutional facilities such as laboratories, lecture rooms, drawing room, computer unit, farm, library, English Language Teaching Unit etc.
- Observing teaching and practical sessions by different categories of academic staff.
- Reviewing documents such as the prospectus, question papers, staff evaluation reports, handouts, lecture notes, final year project reports, academic staff publications etc. made available to the Review Team at the DA.

Each of the eight aspects was judged as good/satisfactory/unsatisfactory, noting the strengths, good practices and weaknesses in each.

2. BRIEF HISTORY OF THE UNIVERSITY, FACULTY AND THE DEPARTMENT

The Eastern University was initiated as a University College in 1981 with two faculties Agriculture and Science. Later in the year 1986 this College was conferred independent status and named as Eastern University of Sri Lanka (EUSL).

The eastern region of the country consists of three main districts namely Trincomalee, Batticaloa and Amparai. This region is gifted with natural resources and in pre-colonial period it was popularly denoted as "Granary of the island". At present, around 75% of the population of this province is involved in agricultural related activities. The university is located in Chenkalady, in the village of Vantharumoolai, which is approximately 18km North of Batticaloa town.

The Faculty of Agriculture is one of the four faculties of the EUSL. The establishment of the faculty was a response to the long felt need to sustain agricultural development of the region and also to enhance the socio-economic standards of the regional population in agriculture base livelihoods. Hence, the agricultural education programmes offered and research performed at the faculty are specially focused on definite agricultural needs and issues specific to the Agro-climatic zone of the Eastern region. Presently EUSL offers internal and external courses leading to a four year B.Sc degree in Agriculture and also an external diploma course in Agriculture (This review is focused on the internal four year B. Sc degree in Agriculture).

The Faculty of Agriculture consists of three departments namely; Agronomy, Animal Science and Agricultural Economics. In the first six semesters students follow a core programme, which consists of subject modules offered by all three departments and common course modules. At the end of the third year students earn a total of 134 credits, of which 126 credits are offered by the subject modules of three departments, of which DA offers 91 credits and this is 72% of the total credits.

The DA is composed of four divisions, Crop Science (CSC), Agricultural Biology (AGB), Agricultural Chemistry (ACH) and Agricultural Engineering (AEN). In addition to the subject specific knowledge obtained from theory and practical sessions in the first five semesters, the sixth semester primarily focuses on a practical programme to obtain Rural Agricultural Work Experience (RAWE). This course varies among the divisions. The final year facilitate an opportunity to specialize in one of the four divisions of the DA by following an advanced course. In the seventh semester the advanced course of each division offers 06 credits and remaining 11 credits are gained through common courses. The practical and theoretical knowledge obtained in seven semesters are utilized at the last semester in a research project and thesis which carries 06 credits. Thus at the end of all four years, students obtain a total of 157 credits.

The faculty has a well established crop and livestock farm of 3 hectares used for teaching purposes and also for the distribution of seed and planting materials to the farmers in the area. The outreach activities are supported by the centre for Sustainable Agriculture and Resource Management (CENSRAM). The faculty publishes the journal "AGRIEAST" annually.

3. AIMS AND LEARNING OUTCOMES

The aims and objectives stated in the SER of the DA are given below. Although the SER indicates 13 aims, the Review Team noted that there are only 9 aims and the others do not fall into this category. The considered 9 aims are as follows.

3.1. Aims

To provide the undergraduate students with

- High quality learning, experience and in-depth knowledge on recent advanced techniques, relevant to crop production and productivity.
- A range of challenging learning opportunities within the modular teaching structure of the university, enabling students to develop their academic interests and potential.
- An exposure to the community, their livelihood systems and their problems of differences in farming practices and traditional knowledge of farming system.
- An adequate knowledge on the system based approach that will enable students to adopt a holistic approach to all agricultural problems relevant to crop production and management, and develop solutions that are viable, feasible, effective and acceptable to farmers.
- Encouragement to develop a knowledge base cognitive abilities and transferable skills that will permit them to contribute effectively to sustain agriculture production and in turn rising national benefits.
- An opportunity to a choice of subject specializations all within the four divisions: Crop Science, Agricultural Engineering, Agricultural Biology and Agricultural Chemistry.
- An opportunity to expose them research skills in their chosen field of specialization and promoting their critical thinking to develop innovations which will immensely contribute to foster agricultural production.
- A stimulating opportunity for students from other departments and faculties in the university to study agricultural sector and its activities relevant at a level to their needs.
- Ability to work confidently with in the country or abroad and independently apply their skills to new situations.

3.2. Learning Outcomes

- Obtain a virtual understanding of the concepts in a holistic approach to learning and analysis of agricultural systems.
- Understand how this knowledge and understanding can be applied effectively and efficiently in working alongside farming community for improvement in the productivity, profitability and sustainability of exiting farming systems.
- Realize the importance on the minimal use of high external inputs; safety of the environment against degradation, and sustainable farming systems to rely on natural inputs, resource conservation and minimum adverse effects on the associated living environment, in other words to have realized the essential features of Low External Input Sustainable Agriculture. (LEISA).
- Develop a range of personal and transferable skills (e.g. critical ability, independence of thought, data handling and interpretation, computer literacy, information management, oral and written communication, team work) and had experience of applying them to varied situations.

- Acquire theoretical, technical, conceptual and intellectual skills necessary for the acquisition and analysis of data through laboratory work, and had direct experience of research, based on laboratory or field work.
- Improve their capacity for critical, self-directed learning through extensive reading, access to electronic information media and self-evaluation.
- Acquire knowledge and management skill to be professional in Agriculture based disciplines and to seek employment both in public and private sectors.

4. FINDINGS OF THE REVIEW TEAM

4.1. Curriculum Design, Content and Review

The degree programme of the faculty is of four year duration and consists of eight semesters. Each academic year has two semesters. The students follow a common core programme during the first 6 semesters and the advanced programme in the two semesters of the final year.

Core Programmes

Core progarmme is conducted during the first six semesters. Students gain a total of 126 credits from the core subject modules; of which 91 credits are offered by the core programs of the four divisions of the DA.The distribution of total credits among the four divisions is as follows, Agricultural Biology (AGB) 22 credits, Agricultural Chemistry (ACH) 19, Crop Science (CS) 30 credits and Agricultural Engineering (AEN) 20 credits. These total credit values include the farm training and practical course in the sixth semester.

As shown in the Table 1, during the first six semesters the DA offers a total of 39 subject modules in all four divisions to provide the required basic knowledge in Agricultural Engineering, Crop Science, Agricultural Chemistry and Agricultural Biology. In the sixth semester each division offers a specific farm training and practical course. The advanced programme is in the seventh and eighth semester.

Most of the modules consist of theory, lectures and laboratory practicals. In addition to core subject modules, students follow three common modules English (ENG 1101- 2 Credit course), Basic Mathematics (AEN 1103- 1 Credit Course) and Introduction to Information Technology (IT 101- 4 Credit Course) in the first year.

Table 1: The total no. of subject modules and total credits offered in core and advanced programmes of each division

Field of Study	Core Progamme		Advanced Programme	
	No. of subject modules	Total credits	No. of subject modules	Total credits
Agricultural Biology (AGB)	9	22	15	30
Agricultural Chemistry (ACH)	7	19	11	22
Crop Science (CSC)	12	30	11	22
Agricultural Engineering (AEN)	11	20	11	22
Total	**39**	**91**	**48**	**96**

Note: *The number of subject modules in the core programme of each division includes the sixth semester Rural Agriculture Work Experience(RAWE) programme The credits of RAWE programme differs among divisions and is as follows; AGB – 2, ACH – 1, CSC – 3 and AEN – 2.*

Practicals

Laboratory practical classes, relevant to theory, are conducted in the laboratories. Most of the modules the credit hours for practicals is twice the no. of hours for theory, thus in a ratio of 1:2. There are laboratories in microbiology, entomology, crop science, tissue culture, soil science, food chemistry and engineering. These laboratories are in a satisfactory state and needs to be improved.

The Farm Practice course is conducted during the second semester of the 3rd year, in the Faculty Farm which is about 3 ha in extent. A group of students cultivate one field crop in a given plot of land. In addition, students are assigned visits to villages under the Rural Agriculture Work Experience programme (RAWE). In these visits, students get an opportunity to observe cultivation of crops and interact with farmers to understand technical, and socio-economic problems associated with crop production. During the sixth semester, students also get an opportunity to visit private/state farms to study commercial production of crops.

During the discussions with the students, it was revealed that insufficient field trips have limited their knowledge on other crops of the country. The lack of exposure seems one of the major shortcomings of the DA.

Advanced Programme

The advanced program which aims for specialization is conducted in the seventh and eighth semesters, and are based on the advanced program offered in each of the four divisions. In the seventh semester specific advanced modules are offered for specialization and common modules to enhance the theoretical and practical knowledge. Common compulsory modules are experimental techniques, biotechnology, career development, scientific writing and seminar. In the seventh semester 6 credits are obtained by advanced courses of the specific division. These modules offer a total of 09 credits. Furthermore advanced courses of each division offer 06 credits. These courses are to be selected from the subject modules offered in the advanced programme of the specific division. As shown in Table 1 the number of modules in the four divisions consists of total number of modules as follows: Agric Biology – 15, Agric. chemistry– 11, Crop Science – 11, and agric. Engineering – 11. As each subject module is of 2 credits only 3 subject modules are necessary to gain the required credits.

The last semester of the 4th year is allocated for a research project and a thesis of 06 credits, giving an opportunity for undergraduates to apply their acquired knowledge in practical situations.

Computer knowledge: Students get an adequate knowledge and experience in the use of computers. The computer laboratory has around 200 computers with access to internet.

English: The undergraduate course is conducted in English medium. English is taught as a subject only in the first year. This is inadequate; there is a need to include English as subject module for the whole of the core programme, to obtain a comprehensive knowledge.

The Review Team is of the view that the number of courses is too much. There is a considerable repetition of core and advanced programme subject modules among divisions. Few examples of such repetition in Crop Science and Agricultural Biology are as follows;

Crop Physiology (CSC 2202) is similar to AGB 2101 (Plant Physiology); the advanced program module AGB 4105 (Plant Water Relations) is a repetition of the core programme module AGB 2101(Plant Physiology); AGB 4108 (Integrated Pest Management) could be integrated to AGB 4103 (Advanced Pest Management).

The repetitions in the core and advanced programme of Agricultural Chemistry modules are: ACH 4108 (Soil Chemistry) and ACH 2101 (Soil Physical Properties); ACH 3101 (Applied Soil Chemistry) and ACH 3102 (Soil Fertility and Plant Nutrient) with ACH 4110 (Soil Plant Nutrition and Fertility Management); ACH 4109 (Soil Physics) and ACH 2101 (Soil Physical Properties).

In Agricultural Engineering few subject modules are repeated. For example: AEN 2101 (Environmental Engineering) and AEN 4111 (Industrial Pollution and Environment); AEN 2202 (Post Harvest) and AEN 4109 (System concepts applied to post harvest applications).

The Review Team was informed that a curriculum revision is planned in the near future and that these shortcomings will be looked into. The Review Team is in the opinion that the over loading of credits is confined to the subject modules of the first five semesters.

Suggestions

- Remove repetitive modules (these are only few examples)

  Core programmes: CSC 2101, CSC 2202, AGB 4108

  Advanced programme: AGB 4105, AEN 4109 and AEN 4111
- Reduce the total credits to an acceptable value of 120 credits
- Elaborate each subject module including objectives, learning outcome with a list of references and a summary of practicals
- Include English as a Non GPA compulsory module in the core programme

With respect to the Curriculum Design, Content and Review, the judgment of the Review Team is GOOD.

4.2. Teaching, Learning and Assessment Methods

There are around 130 students in the Faculty of Agriculture. A range of teaching/learning methods are presently being used by the department staff. The most common method of imparting knowledge is through lectures and practicals. Overhead Projectors and multi media presentations are used in lectures. As indicated by the students as well as staff members, the teaching takes place in an interactive environment. This was also noted by the Review Team during the observation of teaching sessions. In addition, students are expected to submit term papers which promote self-study. The Review Team observed that for each course, a series of lecture notes have been prepared for the use of the teacher and parallel sets of handouts are distributed among students.

Most of the class rooms are equipped with conventional chalk boards but only few contain facilities for the use of OHP and multi media presentations. Currently most of the laboratories are used as lecture rooms. The Review Team is of the view that the teaching and learning environment need to be improved. Furthermore, the laboratories are not equipped adequately. Hence, it is necessary to initiate an immediate action to upgrade facilities in lecture rooms and laboratories.

Presently a significant issue of the DA is lack of senior academic staff. The SER contains details of 17 academic staff members. However the Review Team noted that at present there

are only 08 academic staff members (refer Annex 2 for details of academic staff members and present status). Table 2 shows the academic strength of each division of the DA.

Table 2: Staff strength of each division of the Department of Agronomy

Field of Study	No. of Academic staff members specialized in each division of the Department		
	Professor	Senior Lecturer	Lecturer/(Probationary)
Agricultural Biology (AGB)	1	1	1 (Lecturer)
Agricultural Chemistry (ACH)		1	
Crop Science (CSC)	1	1	1
Agricultural Engineering (AEN)			1

A total of 22 subject modules of Agricultural Engineering are currently handled by a Lecturer (probationary). It was noted that the advanced programme of this division is not effectively carried out due to lack of staff. Also, similar situation is evident in the division of Agricultural Chemistry. Hence, the Review Team strongly recommends immediate recruitment of senior academic staff specialized in Agricultural Engineering and Chemistry. This will benefit the future plans of the department which is in the process of promoting each of these divisions to separate departments.

Medium of Instruction

All most all students follow classes in the G.C.E. A level in Sinhala/Tamil and in the University, the medium of instruction is English. The Intensive English Course is expected to provide the first year students an opportunity to improve their writing, reading and understanding ability of English. Classes to improve the standard of English are conducted during the first year. However, some students are finding it difficult to follow the courses in the DA especially those in the first year. English is a module only in the first year, and due to limited time, the acquired knowledge seems insufficient. Hence, the Review Team suggests that English to be included as a compulsory non-GPA module for the core programme.

Assignments

It was noted that students in the first two years do not get enough assignments. Getting students to write assignments regularly compel them to use library more often.

Assessment Methods

Assessment of all the courses has been done uniformly. The theory component of courses is assessed by a quiz (10%), mid-semester (25%) and end-semester examination (65%) The practical component of courses is assessed by an end semester examination, the duration of which depends on the credit units of the course. Research projects, rural work experience report and other out of Department work are assessed by a panel of examiners.

In view of the above, the Review Team is of opinion that Teaching, Learning and Assessment Methods is SATISFACTORY.

4.3. Quality of Students including Student Progress and Achievements

Students are selected on the basis of their achievements at the A level examination. Students who have passed in at least three of the following G.C.E A level subjects; Biology, Chemistry, Physics, Combined Mathematics (pure/applied), Geography and Agriculture, at a single attempt are selected based on their z score. The new entrants undergo an orientation program of one-week duration prior to the commencement of the Intensive English course. The Intensive English course is aimed at improving students' abilities on listening, reading and comprehension.

Students' Achievements

Most of the students passing out from faculty have undergone specialization in a subject offered by the DA. Table 3 shows the total number of students, % specialized in one of the divisions of the department and no. of students with a class or pass for five batches from the year 1995 to 2001. The % values given in the third column of the table indicates the % of students who got classes in a subject offered in the DA. As shown by these figures a substantial % of students have obtained classes. Furthermore it was also noted that all the students passed out from the DA are gainfully employed (refer Annex 3 for Employment record of graduates).

Hence, the Review Team is of the opinion that the Quality of Students, Student Progress and Achievements are GOOD.

Table 3: **Total No. of students and no. of students with classes in five batches from the year 1995 to 2001**

Batch	Total No. of students	Number specialized in a subject offered in the DA	No. who got classes		
			1st class	2nd class (upper and lower)	pass
2000/2001	28	24 (67%)	4	12	8
1999/2000	16	12(67%)	3	5	4
1998/1999 and 1997/1998	25	21 (67%)	2	12	7
1996/1997	14	11(72%)	-	8	3
1995/1996	12	12(75%)	1	8	3

4.4. Extent and Use of Student Feedback, Qualitative and Quantitative

The DA utilizes a structured questionnaire to obtain the student feedback on teaching of academic staff members (refer Annex 4 for Sample questionnaire). This is a recent practice and these questionnaires are distributed and collected at the end of each semester.

It was evident from the documents available at the DA that some members have prepared summary reports utilizing the results of the student evaluation. The observed questionnaires revealed that in the evaluations most of the teachers have received the rankings of excellent, very good and good for several parameters such as, confidence, teaching methods, use of teaching aids, teaching style and punctuality. The Review Team finds this practice commendable.

However there are few notable shortcomings. The questionnaire is primarily focused on teaching and lacks questions to evaluate the contents and specific skills given in each module. Also, there is no evidence the extent of use of the feedback to improve the quality of teaching of the staff members.

Hence, the Review Team suggests the following:

- Revise the questionnaire including parameters to evaluate the quality of each subject module
- Develop a mechanism for effective utilization of student feed back in future improvements
- Adopt a method to recognize good teaching practices and appreciation for good teachers

The Review Team is of the opinion that the Extent and Use of Student Feedback is SATISFACTORY.

4.5. Postgraduate Studies

Currently the only on-going postgraduate programme of the DA is the one year Masters course in Food Processing Technology. This taught course consists of coursework and a final dissertation. This is a new course with a single passed out batch and the applications have been called for the 2nd batch to be commenced in August 2007.

During the discussion time with the postgraduate students, Review Team interviewed the available single student of the immediate passed out batch, who is presently attached to the ELTU. It was evident from the discussions and available documents that this postgraduate course is not properly organized. Also, only three staff members are involved in the course. Majority of the members neither teach in postgraduate programmes nor do they supervise postgraduate students of other Universities and Institutions. Thus the Review Team is of the view that lack of sufficient number of senior academic staff members has affected postgraduate teaching and research culture within the DA.

Hence, the Review Team suggests the following:

- Develop the course structures of postgraduate programmes,
- Increase the number of senior academic staff for postgraduate teaching, and
- Motivate young temporary academic staff members to engage in research and postgraduate studies

The judgment of the Review Team on Postgraduate Studies is UNSATISFACTORY.

4.6. Peer Observation

There is no formal practice in relation to Peer observation within the DA. As a substantial number of academic staff members of the department consist of temporary and probationary lecturers, it is vital to implement a structured peer observation programme.

The Review Team had a separate discussion with the junior academic staff members. It was apparent that the present teaching practice is that the junior staff member utilizes the teaching materials prepared by the senior staff member. Furthermore the junior staff members of the DA lack proper guidance in preparation of lecture notes. Teaching conducted by probationary

lecturers has not been frequently observed by the senior staff, and there is no evidence of providing continuous guidance to the junior staff on any aspects of teaching.

Thus a clear shortcoming is lack of a formal mechanism for peer observation. Unavailability of senior lecturers in the DA has contributed to this unsatisfactory situation in the department. The Review Team proposes that an appropriate formal mechanism for peer observation to overcome shortcomings in teaching quality is implemented.

With respect to the Peer Observation the judgment of the Review Team is UNSATISFACTORY.

4.7. Skills Development

It was noted that student get adequate skills in laboratory and field practicals. The Farm Practice course conducted during the second semester of the 3rd year enable students to obtain skills in the cultivation of rice, vegetables and other field crops. However, there is room for improvement in both laboratory and field practicals especially in plantation and horticultural crops. The term papers and assignments give an opportunity for the students to improve their writing and presentation skills. Students also get adequate opportunities to improve their skills in the use of computers, internet etc. The RAWE programme enables students to obtain experience with the farming community. Students also get training in the activities in commercial farms.

The Review Team is of the view that Skills Development by the DA is SATISFACTORY.

4.8. Academic Guidance and Counseling

Faculty of Agriculture appoints six student counselors annually. Their main activity is counseling students on academic and personal matters. At present, three permanent staff members of the DA have been appointed as student counselors.

The student counselors organize the faculty orientation pogramme, which is only of three days duration. In this programme students gain information on university facilities and academic staff members. At department level, there are four academic advisors and personal tutors to assist students in all academic issues such as problems on lectures and practicals. Introduction of regular academic assignments during the core programme are an evidence to track students progress and involvement in lectures and practicals. This mechanism facilitates in identifying poor students at initial stages.

During the research project period, the internal supervisor provides guidance and the personal tutor assigned for each student maintains close contacts with student's academic activities. Furthermore the career guidance and development course during the seventh semester provides an adequate exposure to employment related issues.

Hence, with respect to the Academic Guidance and Counseling the judgment of the Review Team is GOOD.

5. CONCLUSIONS

1. Curriculum Design, Content and Review

Strengths

- Curriculum is comprehensive and the contents are focused on disseminating knowledge in all areas relevant to the DA
- The core courses and the advanced courses are relevant and provide the basic knowledge in Agricultural Biology, Agricultural Chemistry, Crop Science and Agricultural Engineering.
- Curriculum comprises laboratory and field practical courses, use of computers and common compulsory modules such as experimental techniques, biotechnology, career development, and scientific writing.
- Final year is allocated for a research project

Weaknesses

- Too many subject modules
- Considerable repetition of core and advanced programme subject modules among divisions

2. Teaching, Learning and Assessment Methods

Strengths

- A range of teaching/learning methods are presently being used by the staff
- Overhead Projectors and multi media presentations are used in lectures
- For each course, a series of lecture notes have been prepared for the use of the teacher
- In teacher evaluation, most of the teachers have received the rankings of excellent, very good and good for several relevant parameters
- Assessment of all the courses has been done uniformly and satisfactorily

Weaknesses

- Only few lecture rooms contain facilities for the use of OHP and multi media presentations.
- The laboratories are not equipped adequately.
- Inadequate senior academic staff.
- A total of 22 subject modules of Agricultural Engineering are currently handled by a Lecturer (probationary).
- Time allocated for teaching of English is inadequate

3. Quality of Students including Student Progress and Achievements

Strengths

- Students are selected on the basis of their achievements at the A level examination.
- A substantial % of students have obtained classes.
- All the students passed out from the DA are gainfully employed

4. Extent and Use of Student Feedback

Strengths

- The department utilizes a structured questionnaire to obtain the student feedback on teaching of academic staff members
- Some staff members have prepared summary reports utilizing the results of the student evaluation.

Weaknesses

- The questionnaire to evaluate teachers is primarily focused on teaching and lacks questions to evaluate the contents and specific skills given in each module.
- Feedbacks are not effectively used to improve the quality of teaching of the staff members.

5. Postgraduate Studies

Weaknesses

- Only one postgraduate course has been conducted and is not properly organized.
- Majority of the academic staff members neither teach in postgraduate programmes nor do they supervise postgraduate students of other Universities and Institutions.

6. Peer Observation

Weaknesses

- There is no formal practice in relation to Peer observation within the department.
- The junior staff members do not get much guidance in preparation of lecture notes and teaching.

8. Skills Development

Strengths

- Students get adequate skills in laboratory and field practicals.
- The Farm Practice Course conducted during the second semester of the 3rd year enable students to obtain skills in the cultivation of annuals
- The term papers and assignments give an opportunity for the students to improve their writing and presentation skills.
- Students also get adequate opportunities to improve their skills in the use of computers, internet etc.

- The RAWE programme enables students to obtain experience with the farming community.

Weaknesses

- Inadequate skills in plantation and horticultural crops.

8. Academic Guidance and Counseling

Strengths

- Three permanent staff members of the department acts as student counselors.
- There are four academic advisors and personal tutors to assist students in all academic issues.
- Regular academic assignments are given to monitor students' progress and involvement in lectures and practicals.
- The internal supervisor provides guidance in research.
- Personal tutors assigned for each student maintains close contacts with student's academic activities.
- The career guidance and development course during the seventh semester provides an adequate exposure to employment related issues.

Based on the observations made during the visit by the Review Team, the eight aspects were judged as follows:

Aspects Reviewed	Judgment
Curriculum design, content and review	**Good**
Teaching, learning and assessment methods	**Satisfactory**
Quality of students including student progress and achievements	**Good**
Extent and use of student feedback, qualitative and quantitative	**Satisfactory**
Postgraduate studies	**Unsatisfactory**
Peer observations	**Unsatisfactory**
Skills development	**Satisfactory**
Academic guidance and counseling	**Good**

The overall judgment is suspended

6. RECOMMENDATIONS

Based on the findings indicated above, the Review Team wishes to make the following recommendations.

1. The curricula need to be revised and courses need to be revised to remove duplications which are indicated in section 4.1

2. A proper mechanism is needed in reducing the number of credits. More exposure to crop production aspects, especially plantation crops is needed. Hence, it is recommended that appropriate field studies are included in the curriculum.
3. In the Farm practice course a group of 5 students handle only one crop. This course needs to be improved so that students get the opportunity to handle more crops.
4. Classes in English need to be provided during the second year as well. A pass in this subject need to be made compulsory. It is recommended to include English as a Non GPA compulsory module in other years
5. Revising the student feedback questionnaire to include parameters to evaluate the quality of each subject module is recommended.
6. Developing a mechanism for effective utilization of student feedback in future improvements is recommended.
7. The DA may consider adopting a method to recognize good teaching practices and appreciation for good teachers
8. It is strongly recommended that more staff with post-graduate qualifications are recruited.
9. The academic programme of the Agricultural Engineering division is not satisfactory. Hence, this division needs special attention.
10. Selection of students to follow the external degree provided by the Faculty, and other aspects of this degree need to be closely examined and appropriate action taken.
11. It is recommended to promote the habit of taking notes by students. If necessary, provide only a summary of the notes after the lecture.
12. The teaching and learning environment need to be improved. It is recommended to upgrade facilities in lecture rooms and laboratories.
13. Library facilities need to be updated. Including e-journals and automated search engines etc. is recommended.
14. The DA may consider implementing an effective peer observation mechanism. Both junior and senior staff need to be monitored
15. Orientation programme need to be more effective. An agenda of this programme need to be distributed among the students and its duration increased to a week.
16. Postgraduate studies and research involvement of the staff need to be promoted.

7. ANNEXES

Annex 1. AGENDA FOR THE REVIEW VISIT

DAY 1 – 25TH JUNE 2007

9.00-9.30	Meeting with the Vice Chancellor/Chairman, Internal QA unit/Dean, Faculty of Agriculture, Head/Department of Agronomy and members of the Faculty QA cell etc.
9.30-10.00	Discuss and organize the agenda of the visit – (Working tea)
10.00-11.30	Presentations on Faculty and Department by Dean and Head
11.30-12.30	Meeting with Undergraduate students – 1st,3rd and Final year
12.30-13.00	Lunch
13.00-14.00	Observing Department facilities-Laboratories, Lecture rooms, Staff rooms, Drawing room etc.
14.00-15.00	Observing other facilities-Library, ELTU, Computer Center etc.
15.00-16.00	Meeting with Department academic staff-Senior and Junior staff members
16.00-17.00	Summing-up meeting of reviewers- Day 1 of the visit
DAY 2 – 26th June 2007	
9.00-9.30	Observing Faculty Farm
9.30-10.00	Observing a teaching session, A Lecture-Temporary Academic staff member
10.00-11.00	Observing documents (Working tea)
11.00-12.00	Meeting with Final year students
12.00-12.30	Meeting with Temporary Lecturers
12.30-13.00	Lunch
13.00-13.30	Meeting with supportive staff- Technical, Non-academic and minor staff
13.30-14.00	
14.00-14.30	Observing a teaching session, A lecture-Senior Academic staff member
14.30-15.00	Observing a teaching session, A lecture- Temporary Academic staff member
15.00-15.30	Observing a teaching session, An Introductory lecture to a Practical-
15.30-16.00	Temporary Academic staff member
15.30-16.00	Meeting with Postgraduate students
	Meeting with Head of the Department
	Summing-up meeting of the reviewers
DAY 3 -27th June 2007	
10.00-11.00	Meeting with Faculty student counselors/Academic advisors and Personal Tutors
11.00-12.00	Reviewers Private Discussion
12.00-12.30	Meeting with Head and academic staff for Reporting
12.30-13.00	Lunch
13.00-13.30	Report writing

Annex 2. ACADEMIC STAFF OF THE DA

Name	Academic Qualifications	Designation	Specialization
Prof.V.Arulnandhy	B.Sc. Agric.(UPDN), M. Sc.(Texas, USA), Ph.D. (UPDN)	Professor	Agric. Biology
Prof.S.Raveendranath	B.Se. Agric. (UPDN), Ph.D. (Lond), DIC - Not available	Professor	
Prof. K.Thedchanamoorty	B.Sc. Agric. (UPDN), M.Sc. (TNAU, India)	Associate Professor & Head/Agric. Economics	Crop Science
Dr (Ms) T Mahendran	B.Sc. Agric. (UPDN), Ph.D. (Reading, UK)	Senior Lecturer I	Agric. Chemistry
Dr. K. Premakumar	B.Sc Agric. (UPDN), M. Sc. (AIT, Thailand) Ph.D (IARI, India)	Senior Lecturer II & Dean/Agriculture	Agric. Engineering
Mr P Jeyakumar	B.Sc. (Agric.) (EUSL), M.Phil (UPDN) ***On study leave**	Senior Lecturer II	Agric. Chemistry
Mrs.A.Kajamuhan	B.Sc. Agric. (EUSL), M.Phil (UPDN) ***On study leave**	Senior Lecturer II	Agric. Biology
Mrs. P. Premanandarajah	B.Sc. Agric. (EUSL) M.Phii (UPDN) ***On study leave**	Senior Lecturer II	Agric. Chemistry
Dr. (Ms) T.H. Seran	B.Sc. Agric. (EUSL), M.Sc (UC), Ph.D (UC)	Senior Lecturer II & Head/Agronomy	Crop Science
Mr.T.Thanaraj	B.Sc. Agric. (EUSL), M.Phil (UPDN) ***On study leave**	Senior Lecturer II	Crop Science
Dr.S.Mahendran	B.Sc. Agric. (India), M.Sc. (Reading, UK), M.Sc. (Jaffna), PhD (UPDN)	Senior Lecturer II	Agric. Biology
Mrs K D Harris	B.Sc.Agric. (Coimbatore), M.Phil. (UPDN) ***On study leave**	Senior Lecturer II	Crop Science
Mrs.N.Rodney Fernando	B.Sc. Agric. (EUSL), M.Phili (UPDN)	Lecturer	Agric. Biology
Mr S Sureshsundar	B.Sc. Agric. (EUSL)	Lecturer (Probationary)	Crop Science
Mr S Sutharsan	B.Sc. Agric.(EUSL) ***On study leave**	Lecturer (Probationary)	Crop Science
Mr.M.Sugirtharan	B.Sc. Agric. (EUSL) ***On study leave**	Lecturer (Probationary)	Agric. Engineering
Mr.R.Thivyatharsan	B.Sc. Agric. (EUSL)	Lecturer (Probationary)	Agric. Engineering

Annex 3. EMPLOYMENT RECORD OF GRADUATES

Batch	Total number of students	No. of students specialized				Class obtained	Post graduate qualification	Employment
		CSC	AGB	AEN	ACH			
1999/00	16	3				Pass (03)	-	Agricultural Instructor(02)
							-	Bank
			3			pt class (01)	-	Lecturer(Prob.) (EUSL)
						2nd class upper division (02)	-	Programme Assistant
							-	Private sector
				4		1st class(02)	-	Lecturer(Prob.) (EUSL)
							-	Unemployed
						2nd class lower division(02)	-	Programme Assistant
							-	Agricultural Instructor
					2	2nd class lower division(Ol)	-	Programme Assistant
						Pass(Ol)	-	Abroad
2000/01	28	3				Pass(03)	-	Agricultural Instructor
							-	NGO(02)
			8			1st class(Ol)	Reading M.5c	Temp. Asst. Lecturer(EUSL)
						2nd class upper division(03)	Reading M.5c	Temp. Asst. Lecturer(EUSL)
							-	NGO (02)
						2nd class lower division(Ol)	-	NGO
						Pass(03)	-	NGO (03)
				5		2nd class upper division(03)	Reading M.5c	Temp. Asst. Lecturer(EUSL)
							-	NGO(02)
						2nd class lower division(02)	-	NGO(02)
					8	1 st class(03)	-	Temp. Asst. Lecturer(EUSL)(03)
						2nd class upper division(03)	Reading M.Sc	Temp. Asst. Lecturer(EUSL)
							-	NGO(02)
						Pass(02)	-	NGO

Batch	Total number of students	No. of students specialized				Class obtained	Post graduate qualification	Employment
		CSC	AGB	AEN	ACH			
							-	Pharmacist
1998/99	25	3				2nd class lower division(O1)	Reading M.Sc	Programme Assistant
&						Pass(02)	-	NGO(02)
1997/98			10			1st class(02)	Reading M.5c(02)	Lecturer(Prob.)(EUSL)(02)
						2nd class upper division(04)	Reading M.5c	NGO
							-	Assistant Librarian(EUSL)
							-	Private sector
							-	NGO
						2nd class lower division(01)	-	Programme Assistant
						Pass(03)	-	Agricultural Instructor
							-	NGO(02)
				4		2nd class upper division(04)	Reading M.5c(02)	Environmental officer(02)
							-	Programme Assistant(02)
					4	2nd class upper division(02)	Reading M.5c	Seed testing officer
							-	Programme Assistant
						Pass(02)	-	Programme Assistant(02)
1996/97	14	2				2nd class upper division(02)	Completed M.5c	Programme Assistant
							Reading M.5c	NGO
			6			2nd class upper division(02)	Reading M.5c	NGO
							-	NGO
						2nd class lower division(02)	-	Abroad(02)
						Pass(02)	Reading M.5c	NGO
							-	NGO
				2		2nd class upper division(02)	Reading M.5c	Lecturer(Prob.)(EUSL)
							-	NGO
					1	Pass(01)	Reading M.Sc	NGO

1995/96	12	1				Pass(01)	-	Agricultural Instructor
			8			2nd class upper division(05)	Completed M.Phili	Lecturer(EUSL)
							Reading M.5c	Teacher
							-	Environmental Officer
							-	Unemployed
							Completed M.5c	Environmental Officer
						2nd class lower division(01)	-	Teacher
						Pass(02)	Reading M.5c	NGO
							Completed M.5c	Unemployed
					3	1st class(01)	Reading Ph.D	Lecturer(Prob.)(EUSL)
						2nd class upper division(01)	Reading M.Phili	Environmental Officer
						2nd class lower division(01)	-	Abroad

Annex 4. STDENT FEEDBACK QUESTIONNAIRE

Theory Lesson

Course Number and Title ..... Day and Time .....

Teacher.....

Instructions: Please answer all questions by circling one out of numbers 1-5 against each statement.

The number 1- 5 correspond to the statement:

5 - Strongly agree
4 - Agree
3 - Neither agree nor disagree
2 - Disagree
1 - Strongly disagree

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a. The lectures helped to improve knowledge 5 (4) 3 2 1

b. The teacher was confident in teaching the subject. 5 (4) 3 2 1

c. The methods of teaching adopted were good (lectures, discussions, presentations, tutorials, case studies, etc.) 5 (4) 3 2 1

d. The teaching aids were used effectively during the lecture (chalk board, overhead projector, handouts, slides, specimens, etc.) (5) 4 3 2 1

e. The lecture was conducted at an acceptable pace. 5 (4) 3 2 1

f. The teacher encouraged questions by students and discussed them. 5 (4) 3 2 1

g. The lectures were clear and interesting. 5 (4) 3 2 1

h. The teacher was punctual. 5 (4) 3 2 1

i. The classes were conducted as indicated in the time-table. 5 (4) 3 2 1

j. The course outline/syllabus given at the beginning was covered. 5 4 (3) 2 1

The overall grading of the course: Very good – 5 Good – (4)
Satisfactory – 3 Poor – 2
Very poor – 1

Any other comments: