# SUBJECT REVIEW REPORT

## DEPARTMENT OF FOOD SCIENCE AND TECHNOLOGY



# FACULTY OF AGRICULTURE UNIVERSITY OF RUHUNA

 $12^{\text{th}}$  to  $14^{\text{th}}$  January 2010

#### **Review Team:**

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Promote and safeguard public confidence in Sri Lankan Higher Education System is the responsibility and accountability for maintaining the quality and relevance and standards. In the context of Sri Lanka, higher education is a public good and therefore universities must conscientiously work in order to satisfy the expectations of the general public producing a high quality out puts. The subject review is one of the components of the external quality assurance programmes that are being carried out in Sri Lankan universities. The evaluation is focused on the studentsø learning experience, studentsø achievement and the quality of student learning experience in terms of its management and quality assurance at programme level.

Key features of the subject review process include the critical analysis of the self evaluation report prepared by the academic department concerned, peer observation of teaching, observation of documents, observation of the facilities available and gathering information on activities towards quality assurance through conducting discussions with as many stakeholders as possible. This review report examines the quality of academic programmes offered by the Department of Food Science and Technology (DFST) in the Faculty of Agriculture of the University of Ruhuna. The review was carried out using the process recommended by the CVCD and the UGC, laid down in the Quality Assurance Handbook for Sri Lankan Universities, published in July 2002.

The review team consisted of Prof. K.K.D.S.Ranaweera, Professor of Food Science and Technology, Faculty of Applied Science, University of Sri Jayewardenepura (Team Chair); Dr. Sisira de Silva, Head of the Department and Senior Lecturer in Food Science and Technology, Faculty Applied Sciences, Wayamba University of Sri Lanka and Mr. Marian Arsekularathne, Quality and Research Development Executive, The Ceylon Cold Stores, Ranala. The review visit took place on 12ó14 January 2010

The specific aspects examined were as follows:

- 1. Curriculum design, content and review
- 2. Teaching, learning and assessment methods
- 3. Quality of students, including student progress and achievement
- 4. Extent of student feedback
- 5. Postgraduate studies
- 6. Peer observation process
- 7. Skills development
- 8. Academic guidance and counselling

The primary source of documentary information for this subject review came from the self evaluation report submitted by the DFST. The review team was also provided with a variety of documents which included the Faculty of Agriculture handbook for 2008/2009, the detailed curricula for B.Sc. Agriculture (BSc Agric) students majoring in Food Science and Technology, teaching materials, samples of student work (student reports, thesis of final year research and practical reports), end of course assessments (question papers, marking schemes, answer scripts), feedback from undergraduate and postgraduate students, peer observation and academic guidance and counselling.

met the Director/QAA who briefed about the review ncellor together with the Deputy Vice Chancellor, the ad/ Department of Food Science and Technology at the

main camps in Wellamadama. The Vice-Chancellor at this meeting briefed the reviewers on the present situation at the University and how the university is committed to improve the quality and relevance of the academic programmes through activities like subject reviews. The review team also had very useful discussions with the Head of the DFST and other academic staff members, undergraduate and postgraduate students, and supporting staff of the department, student counsellors and academic counsellors, Faculty Co-ordinator of English and the then chairman of the Academic Committee. Members of the team also visited lecture theatres, laboratories, the Agriculture Library, farm, and computer centre. The review team was able to observe one lecture and one practical class.

On the last day, the review team had the final meeting with the entire academic staff of the department to summarise observations and views made during the review process.

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

#### University of Ruhuna, Faculty of Agriculture

The Ruhuna University College was established in 1978 and was upgraded to University status in 1984. The University of Ruhuna (UR) is one of National Universities consisting of seven faculties of study; Faculties of Science, Humanities and Social Sciences, Fisheries and Marine Sciences Technology and Management and Finance (located at the Wellamadama Campus), Faculty of Medicine (located at Karapitiya), Faculty of Engineering (located at Hapugala) and the Faculty of Agriculture (located at Mapalana). Its current undergraduate student population is about 9500. The B.Sc. Agriculture degree programme at Ruhuna started in 1978. At present, the Faculty of Agriculture has seven Departments of Study; Agricultural Biology, Food Science and Technology, Soil Science, Agricultural Economics and Extension, Agricultural Engineering, Animal Science and Crop Science. The annual enrolment of students grew from 15 in 1978/79 to 150 in 1997.

#### The Department of Food Science and Technology (including staff and facilities)

The DFST was established in 2006 with a view to strengthening Food Science education, a function which was previously carried out by the Department of Agricultural Chemistry. At present, the academic / teaching staff consists of two Senior Lecturers (one on sabbatical leave), 2 probationary lecturers (both currently on study leave overseas). Two academic staff positions are vacant at present. Academic supporting staff consists of 4 Temporary Demonstrators. The non-Academic staff consists of one Staff Technician and labourer. The DFST also has one Research Assistant recruited on temporary basis. It is worth mentioning that the head/DFST alone is taking a big effort to smoothly run the department with help of the Temporary staff members.

The DFST has a lecture hall that can accommodate 40 students. The department also has two laboratories, one of which is equipped for experimental work in Food Chemistry and the other is for Food Technology. The DFST has a space which can accommodate about five students where basic microbiology practical can be carried out. At present, all the laboratories and the lecture hall are shared with the Department of Soil Science.

Library facilities are provided through the main Agriculture Faculty library, which has an extensive collection of books (including substantial number titles in Food Science and

ure Library subscribes some periodicals at present, but d Science and Technology.

#### The degree programme

#### B.Sc. degree programme

Students of the BSc Agric degree programme have been able to specialise in Food Science and Technology under the DFST since 2006. However, the Faculty intends to introduce a new degree programme with a different title to attract students with higher Z-score. About 150 students are currently admitted each year for the BSc Agric degree programme, and about 8-17 of these students specialise in Food Science and Technology (Table 01). The DFST offers compulsory courses of 22 credits (Table 02) which account for about 16% of the total requirement of the BSc degree programme and optional courses (9 credits) (Table 03).

Table 01. Number of students who selected FST as specialization

Batch	Total No. of	No. selected for
Datcii	students	FST
24 <sup>th</sup> (2004/2005)	116	16
25 <sup>th</sup> (2005/2006)	94	24
26 <sup>th</sup> (2006/2007)	134	12
27 <sup>th</sup> (2007/2008)	120	08
28 <sup>th</sup> (2008/2009)	116	10
29 <sup>th</sup> (2009/2010)	170	17

Table 02. Compulsory Credit Courses offered by the Department of Food Science and Technology

	Year	Semester	Course Name	Number of Credits	Number of hours	
Course Notation					Lectures	Practical
FS 1101	1	1	Biochemistry (Compulsory)	4	45	30
FS 2201	2	2	Food and Nutrition (Compulsory)	4	45	30
FS 4101	4	1	Specialization Modules	6	75	75
FS 4200	4	2	Research/Training Project	8		
Total			22			

Table 03. Optional courses offered by the Department of Food Science and Technology

			•		Number of hours	
Course Notation	Year	Semester	Course Name	Number of Credits	Lectures	Practical
ID 3201	3	2	Food Processing and Preservation	3	30	30
FS 4102	4	1	Food Safety	2	30	00
FS 4103	4	1	Sensory Evaluation of Food	2	30	00
FS 4104	4	1	Fermentation Technology	2	30	00
Total				9		

ate programme (MSc in FST and Postgraduate diplomas r students to follow MPhil degree programmes. These

postgraduate courses are administratively operated by the Graduate Studies Unit of the University on recommendations made by the Academic committee of the Faculty of Agriculture.

#### 3. AIMS AND LEARNING OUTCOMES

As described in the Self-Evaluation Report, the DFST offers a BSc degree programme in Agriculture specialising in Food Science and Technology. The aim of this programme is to provide basic Food Science and Technology knowledge and skills to agriculture graduates so that they could combine the concepts on production of agricultural raw materials suitable for quality processing.

At the end of the degree programme, students should

- Have a general knowledge and understanding of various disciplines in Food Science and Technology.
- Acquire the ability to face future challenges of agriculture.
- Use the knowledge and experience gained to design future research for the development of agriculture in general and Food science and Technology in particular.
- Develop personal and transferable skills.
- Become graduates for academic and executive level positions in the public and private sector institutes and non-governmental organizations.

EAM

1d Review

The curriculum of the degree programme is constructed on a semester-based course unit system which was introduced in 2000. Subsequently, in 2006, the Faculty has switched to the semester based Course-Unit system with Grade Point Average. However, the proceedings of the above revisions were not available for the team to observe. In 2011, the DFST intends to revise and update the curriculum taking the views of the food industry, employees and other stakeholders as well as feedback from past and present students into consideration.

In first 6 semesters, all BSc Agric students follow a core programme jointly offered by seven departments. On successful completion of these semesters, there is provision for students who desire to specialise in Food Science and Technology, to follow the curriculum offered by the DFST for the seventh and eighth semesters. Students are selected to the DFST by the department itself basing on the studentsøpreference.

The curriculum for BSc Agric students specialising FST includes several industrial visits to food industries of different specialisation. Their research projects are frequently planned and carried out in the industrial setting. This helps the students to get an exposure to the industrial environment while they carry out their intended research project. The reviewers are of the opinion that the above component facilitates progression to employment of graduates.

The reviewers noted that the students follow basic and advanced interdisciplinary and multidisciplinary course units throughout their student career. The review team noted that the FST courses are delivered through a combination of lectures, practicals, individual assignments, group assignments, PowerPoint presentations, and field / industrial visits. The review team was happy to observe that, at the beginning of each lecture or practical course, the BFST students in particular, are provided with outlines of course content, handouts on some courses subjects like Biochemistry (FS 1101) and model questions and answers pertaining to the course unit subject Biochemistry (FS 1101).

It should be mentioned that during the meetings held between the review team and the students, the latter expressed concern regarding the heavy workload in course unit subject Biochemistry (FS 1101) which is presently offered in the year one semester one. Therefore, the team recommends the said course be offered in the semester two of the first year. The team also recommends a non-credit course unit in Basic Chemistry be introduced in the year one semester one, which will certainly help students to easily understand FST subjects like Biochemistry (FS 1101). Another drawback the team observes is that the FST curriculum does not contain a course unit subject related to Food Engineering which could have been designed in collaboration with the department of Agricultural Engineering.

The students of the BSc Agric degree programme following FST modules are provided with requisite subject knowledge in Food Science and Technology in addition to the basic knowledge and skills acquired through various core modules. However, the review team noted that the following observations/comments made by the students deserve attention of the DFST and the University;

1. No FST courses are being conducted during the third year of study depriving the students from keeping interaction with DFST staff which may be one of the reasons as to why the number of students who select the FST specialisation seems to be not encouraging.

ith the number of FST practicals conducted but they are esources like equipment, consumables and chemicals. would have helped the DFST to reduce the number of

students per group in their practical.

3. It should be mentioned that during the meeting between the review team and the students, the latter expressed general satisfaction with the courses conducted by the DFST. However, they also expressed their concern regarding the lack of a practical component in some areas (e.g. Specialisation Module FS 4101). They also said that no mid-semester examinations are set for the Subjects conducted in the first and second years of study. The team was happy to note that the DFST has adopted an innovative teaching component called Career Development (CC 4104 ó 2 credit course). However, the team strongly feels that if the above component is offered in the third year of their study, they will get the maximum benefit out of the same.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'SATISFACTORY'.

#### 4.2. Teaching, Learning and Assessment Methods

The above aspects of the DFST were evaluated using (a) the Self-Evaluation Report (b) peer observation of lectures (c) meetings with academic and supporting staff and students. The review team also examined the Agriculture Faculty handbook, time tables, project reports, question papers and marking schemes.

As mentioned above, the FST courses are delivered through a combination of lectures, practicals, individual assignments, group assignments, PowerPoint presentations, and field / industrial visits. The review team was happy to observe that the BFST students in particular, are provided at the beginning of each lecture or practical course, with outline of course content, handouts on some course subjects like Biochemistry (FS 1101) and Food and Nutrition (FS 2201) and model questions and answers pertaining to the course unit subject Biochemistry (FS 1101). The review team observed studentsø evaluation and peer observation of internal staff members namely Dr. V.S.Jayamanne and Dr.V.Wijerathne. It has been found that all question papers are routinely moderated in the department (often by the Senior Academics). However, there was no evidence of involvement of any external examiners in the assessment of students. The review team felt that external examination in the assessment system need to be adopted at least in certain subjects which still require external supports. It should be mentioned that during the meetings held between the review team and the students, the latter expressed concern on lack of access to visiting lectures (VL) whenever the students need to clarify subject matters the VLs conduct. This can be rectified to certain extent, by adopting a way to get the service of visiting lectures at the beginning of the semester so that students get sufficient time to clarify unclear areas.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'GOOD'.

#### 4.3 Quality of Students including Student Progress and Achievements

Students who are admitted to the faculty of Agriculture have the following range of Z ó score (Table 04) . The Faculty of Agriculture and the DFST employ various strategies to enhance the quality of education and enable students to achieve the expected learning outcomes.

admit to the Faculty of Agriculture

ages and Expanded Feature	num Z ó score	Maximum Z - score
ages and Expanded reature	3	1.555
2007/2008	0.960	1.672
2006/2007	0.878	1.025

The team is pleased to note that the rate of completion of students specialising FST for last five years (from 2005-2009) is 100 % and number of dropouts for last five years is none (Table 05). High completion rates suggest that students achieve the stated aims and desired learning outcomes, and thus maintain satisfactory academic standards. In this event, the final year research reports and practical record books provided the review team with sufficient evidence that intended learning outcomes are being achieved. However, marked answer scripts were not available for observation as the scripts are kept in the main Campus at Wellamadama.

Performance and achievement levels of the students who have entered the BFST degree programme appear to be relatively higher (Table 05). The review team noted that for the last five batches of students, students have secured five First Classes, 48 Second classes and 17 general passes.

Table 05. Overall results of final year specialization students in Department of Food Science and Technology

Science and Technology					
Year	No. of	First Class	Second	Second	Normal Pass
	Students		Class Upper	Class Lower	
	Specialized				
	Food				
	Science and				
	Technology				
2009	10	1	4	3	2
2008	08	1	1	5	1
2007	12	1	1	10	0
2006	24	2	10	7	5
2005	16	0	4	3	9
Total	70	5	20	28	17

The review team is of the opinion that the quality of students and their progress and achievement are in keeping with the stated aims and objectives of the DFST.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'GOOD'.

#### 4.4. Extent and use of Student Feedback

From the documentation provided to the review team and the discussions held with students, it is evident that the DFST encourages feedback from students, using a pre-decided comprehensive questionnaire. Direct feedback includes the quality of the lectures, opportunities given for asking question during lectures, extent of motivation of students by the lecturer, student performance on given assignments, and practicals. Indirect feedback on student performance is also obtained through discussions with the temporary demonstrators, who assist in practical classes.

All students in the Agriculture Faculty are asked to formally evaluate their teachersø lectures using the above standard questionnaire as a routine practice. The teachers distribute the

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completed forms are handed over to the department by a uses are entered on a computer. The analysis is returned hanalyses were made available to the review team. The

team feels that it would have been more appropriate if this can be applied to visiting lecturers as well. From the next year, obtaining student feedback will be undertaken by the Industrial Placement Officer attached to the Deanos office.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'GOOD'.

#### 4.5. Postgraduate Studies

Administrative matters of Postgraduate studies in the DFST are carried out through the Academic committee in the Faculty. Under the said administration, the DFST offers the MSc degrees in Food Science and Technology. At present the MSc course has about 30 students. There was one MPhil completed. The MSc (FST) is offered on fee-levy basis and students are required to bear the course fees.

It should be mentioned that during the meetings held between the review team and the postgraduate students (three representatives), the latter expressed their satisfaction regarding the MSc course. However, they are of the opinion that it will be more appropriate if some practical aspects relevant to certain FST course units are introduced into the curriculum. They also strongly feel that giving hands on experience with regard to handling modern equipment used in research and development programmes will be of importance.

The review team is of the opinion that the DFST needs to acquire sufficient infrastructure facilities and equipment to conduct postgraduate research projects successfully.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'SATISFACTORY'.

#### 4.6 Peer Observation

The DFST has evolved a mechanism to monitor the quality of teaching provided to their students in order to enhance the quality of teaching.

The review team was pleased to find evidence of peer evaluation of teaching by colleagues in their own faculty. As per the materials provided to the review team, two permanent staff members have been subjected to observation while their teaching. The peers use a comprehensive questionnaire in the process of evaluation which enables the peer-evaluator to make very valuable and constructive comments. The review team was impressed by the cooperation given by academic staff in the implementation of an effective peer observation mechanism.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'SATISFACTORY'.

ergraduate academic programme conducted by the DFST is structured to provide opportunities for students to develop a variety of skills in addition to subject-specific knowledge. There was evidence that students have the opportunity to use modern audio-visual equipment for their presentations. Certain course unit subjects like Information and Communication Technology (CC 1201) and Technical Writing and Presentation Skills (CC 4102) have been designed to improve their presentation skills. The team also observed that the quality of practical reports and writing skill are to the satisfaction. However, the team observed that the faculty has not well defined English programme intended for improving studentsø communication skills. Further, the team recommends the faculty and DFST to device a comprehensive and relevant English course. The said course needs to be designed jointly by the ELTU and the Faculty, which needs to be conducted preferably by a permanent staff member recruited and assigned for the said purpose.

The DFST believes that working in laboratory practical classes and participating in field visits enable students to acquire required skills and ability to think critically. Therefore, the DFST organises field trips to agri-food industry and related institutions (e.g. Milco (Pvt), Keels, Kist, Harischandra, Catherich, Ceylon Agor. (Pvt) Ltd., Fontera, Lihini Sea Foods, Nor-Fork Foods Ltd., Varna etc). The review team was convinced that the DFST encourages such activities among students. However, the also feels that the students get very limited opportunities of getting hands on experience in the fields like Food Microbiology, Food Chemistry etc due to limited faculties available in the DFST.

The review team understands that all students are provided with a document that gives details of the academic content and assessment. These are all very positive aspects of skills development strategies adopted by the DFST. However, the team recommends the DFST to hold regular meetings like student-staff consultative meetings where the department can get feedback about the academic and other matters and to make the students aware of the information of the course units and related academic mattes.

The reviewers rate this aspect of the Dept of Food Science and Technology as 'GOOD'.

#### 4.8 Academic guidance and counselling

Students are provided with necessary information with regard to academic programmes offered by the DFST in the Faculty prospectus. The team is happy to observe that the Faculty organises an orientation programme prior to the commencement of the main course.

As far as studentsø selection on specialision is concerned, the students can get advices from the Academic Counsellors of the faculty. Each department has an Academic Counsellor and all seven counsellors are working as a committee. The team noted that students were generally satisfied with the assistance and support extended by Academic Counsellor and Students Counsellors related to academic matters and other issues in general.

The faculty has a deputy senior student counsellor and seven designated Student Counsellors with no formal training in counselling. Students with significant personal problems can meet the Student Counsellors. The faculty has a Career Guidance Advisor who was also one of the Academic Counsellors. The faculty has allocated a free time slot in the time table for students

t activities conducted by different relevant resource Guidance (CG) unit.

The team is pleased to note that the Faculty has a permanent Medical Officer and has a Medical Centre with basic facilities. The review team also was happy to note that once there was a mechanism by which needy students were provided with financial support obtained through an Australian citizen.

The review team has also observed that the faculty has not assigned a physical space for carrying out activities pertaining to counselling and the University needs to organise formal training programmes for both Academic and Student counsellors.

The team is happy to observe that the Faculty motivates the students by awarding certificates to the students who participate CG workshops.

The review team is also satisfied that there are mechanisms adopted to address students' problems and to accommodate requests through academic guidance and counselling, and would like to rate this aspect as 'GOOD'.

Aspect	Judgment
Curriculum Design, Content and Review	Satisfactory
Teaching, Learning and Assessment Methods	Good
Quality of Students including Student Progress and Achievements	Good
Extent and Use of Student Feedback	Good
Postgraduate Studies	Satisfactory
Peer Observation	Satisfactory
Skills Development	Good
Academic Guidance and Counseling	Good

#### 5. CONCLUSIONS

#### 1. Curriculum Design, Content and Review

#### Strengths / Good Practices

- 1. Regular curriculum revision by the Faculty with the mediation of Academic Committee
- 2. The curriculum of the degree programme is constructed on a semester-based course unit system.
- 3. The curriculum provides opportunities to develop subject related skills and presentation skills
- 4. The curriculum for BSc Agric students specialising FST includes several industrial visits to food industries of different specialisation

T optional courses for students specialising in FST rision are not available for easy reference.

- 3. No FST courses are conducted during the third year of study.
- 4. Lack of a practical component in some areas like Specialisation Module (FS 4101).
- 5. FST curriculum does not contain a course unit subject related to Food Engineering.

#### 2. Teaching, Learning and Assessment Methods

#### Strengths / Good practices

- 1. Use of variety of teaching and learning methods
- 2. Use of multimedia and other AV aids
- 3. Providing handouts for practicals.
- 4. Giving hands on experience and industrial exposure.
- 5. Strutinization of question papers.
- 6. Exposure to real situations through research projects
- 7. Satisfactory library facilities within existing financial constraints to encourage student centered learning.
- 8. Independent learning components to encourage student-centered learning
- 9. Well developed computer facilities.

#### **Weaknesses**

- 1. No mid-semester examinations set for the subjects conducted in the first and second years of study.
- 2. No viable and workable mechanism to motivate students to follow English classes.

#### 3. Quality of Students, including Student Progress and Achievement

#### Strengths / Good Practices

- 1. Availability of the orientation at the beginning of the study programme
- 2. A reasonable proportion of students with high performance opt to specialise in FST each year.
- 3. Most students who specialise in FST achieve good grades.
- 4. Rate of completion of the degree with FST specialisation is 100 %.

#### **Weaknesses**

- 1. Non- availability of an English programme to facilitate improving presentation skills.
- 2. Students are not encouraged to participate in national level events related to Food Science.

#### 4. Extent and Use of Student Feedback

#### Strengths / Good practices

1. Feedback is sought from students on a regular basis, and carried out routinely with regard to both individual teachers, as well as the study programme.

#### Weaknesses

- 1. No clear mechanism to show the students that their comments are being taken in improving learning and teaching and assessment process.
- 2. No forums like students-staff consultative meetings are being organised.
- 3. Visiting lecturers are not evaluated.

- 1. DFST offers a MSc (FST) course for the benefit of the needy graduates who otherwise are compelled to travel for long distance for postgraduate education.
- 2. Using an evaluation form developed by the PGIA, the department evaluates the performances of academics involved in teaching postgraduates.

#### **Weaknesses**

- 1. The department possesses insufficient number of senior academics in order to provide adequate supervision for postgraduate students in FST.
- 2. No practical components are found in the MSc (FST) curriculum.

#### 6. Peer Observation

#### Strengths / Good practices

1. Two senior staff members have started peer observation practices through a formal, well-structured process.

#### **Weaknesses**

1. The Department does not have a formal peer observation practise adopted for External staff.

#### 7. Skills Development

#### Strengths / Good practices

- 1. The development of various skills has been clearly identified as desired learning outcomes of the study programme.
- 2. Students are given a range of opportunities for development of subject specific skills (e.g. skills required in product development) as well as generic skills such as IT and communication skills.
- 3. The study programme encourages development of team spirit etc.

#### Weaknesses

- 1. Lack of a strategic procedure to attract students to improve their practical English.
- 2. Limited opportunities of getting hands on experience through practicals in subjects like Food Microbiology and Food Chemistry due to limited faculties available at the department.

#### 8. Academic Guidance and Counseling

#### Strengths / Good practices

- 1. Availability of the orientation programme at the beginning of the study programme
- 2. Regular monitoring of student GPA at Faculty level.
- 3. Three of the five Student Counsellors in the Faculty are from the Dept of Animal Science.
- 4. Academic and Student counsellors are readily available to students for guidance and counselling

#### Weaknesses

1. No formal training has been given to improve counsellorsø professional skills.

ew, the review team wishes to make the following recommendations that the DFST may consider in improving the quality and the relevance of the study programmes. The review team recommend,

- 1. Maintain records on all academic matter like Curriculum revisions.
- 2. Adopt a strategic mechanism to motivate studentsøattendance for the English course.
- 3. Identify and introduce components of basic chemistry (as a non-credit course) necessary for Food Science and Technology related subjects
- 4. Devise a method to get the service of visiting lectures at the beginning of the semester so that students get sufficient time to clarify unclear areas.
- 5. Improve and strengthen the function of the FST laboratory by recruiting a laboratory attendant and by giving a formal training to the Staff technician.
- 6. Increase the frequency of group / individual presentations...
- 7. Analyse the suggestions made by the students through the feedback process and to implement the decisions taken in the above regard.
- 8. Organize student-staff consultative committee.
- 9. Extend Peer observations and studentsø feedback to visiting lecturers whenever possible.
- 10. Organise Staff development Programmes for Student counsellors in order for them to improve their professional skills..
- 11. Introduce a course unit subject related to Food Engineering which can be designed in collaboration with the department of Agricultural Engineering.
- 12. Provide required resources to carry out FST related practicals (Food Microbiology and Food Chemistry, Food Preservation etc.)

#### Acknowledgements

The Review Team appreciates the hard work done by the DFST facilitating the review process. Team also appreciates the cooperation extended by the Head of the Department of FST and all others to perform our duty well.

### EW VISIT

12 <sup>TH</sup> JANUARY	(TUESDAY)
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<u> 12 JANUARI</u>	<u>Y (TUESDAY)</u>
7:30-8:15	Meeting of the Review Team with QAA Council rep and Head/Food
	Science and Technology
8:3069:00	Meeting with the Vice-Chancellor, University of Ruhuna
9:30610:00	Meeting at the Dean of Office, Faculty of Agriculture (Tea)
	Prof. (Mrs) R.T. Serasinhe, Dean/Faculty of Agriculture
	Dr. Vijith S. Jayamanne, Head, Department of Food Science and
	Technology
	Dr. Vinitha Wijeratne, Former Head, Department of Food Science and
	Technology
10:00ó11:00	Meeting at the Headøs room, Department of Food Science and Technology
	Self Evaluation Report (SER) presentation
	(A l Academic and Technical Staff Members of the Department)
11:00612:00	Discussion
12:00613:30	Lunch at the Head s room of the Department of Food Science and
	Technology
13:30614:30	Observation of Department facilities (Food Science Research
	Laboratory/Food Science Teaching Laboratory)
14:30615:30	Other facilities of the Faculty
	Library/Computer Unit/Farm
	(Tea at the Head  s room, Dept of Food Science and Technology)
15:30ó16:30	Meeting with undergraduate students at the undergraduate lecture hall at the
	Department
	1 <sup>st</sup> year 1 <sup>st</sup> semester students
	2 <sup>nd</sup> year 2 <sup>nd</sup> semester students
	Final year 1 <sup>st</sup> semester students
16:30ó17:00	Meeting of the Review Team

### 13<sup>TH</sup> JANUARY (WEDNESDAY)

IJ JANUAKI	(WEDNESDAI)
8:00	Review Team leaves the hotel
9:00ó10:00	Undergraduate lecture (Dr. Vijith S. Jayamanne)
10:00611:00	Meeting at the Head room, Department of Food Science and Technology
	Observation of the documents (Tea at the Dept)
11:00ó12:00	Meeting with the Student Counselors/Academic Counselors at the Head
	Room, Department of Food Science and Technology (Tea)
12:00613:00	Lunch at Head  s room
13:00614:00	Undergraduate practical class at the Food Science Teaching Laboratory
	(Dr. Vijith S. Jayamanne)
14:30615:30	Meeting of the review panel at the Head  Room, Department of Food
	Science and Technology (Tea)
15:30616:30	Meeting of the review panel.

leaves the hotel

final year students and observation of two student

	presentations
9:30ó10:30	Meeting at the Headøs room with non-academic staff members,
	Department of Food Science and Technology (Tea)
10:30611:00	Meeting of the Review Panel
11:00612:00	Meeting with Postgraduate Students at the Department of Food
	Science and Technology
12:00-12:30	Meeting with academic staff members of the Dept (Tea)
12:30613:30	Lunch at Head Room

#### Annex 2. LIST OF PERSONS MET

- 1. Vice Chancellor/UR
- 2. Deputy Vice Chancellor/UR
- 3. Dean, Faculty of Agriculture (FA)
- 4. Head / Department of Food Science and Technology
- 5. Dr. Vinitha Wijerathne Senior lecturer/DFST
- 6. Four demonstrators (Temporary)
- 7. One Research Assistant (Temporary)
- 8. Staff Technician, DFST
- 9. Labourer, DFST
- 10. Students from first year, second year and third year
- 11. Students specialising in FST
- 12. Co-ordinator/Computer centre/FA
- 13. English co-ordinator
- 14. Students counsellors/FA
- 15. Academic counsellors/FA
- 16. Farm manager/FA
- 17. Library staff/FA

#### Annex 3. LIST OF TEACHING SESSIONS OBSERVED

- 1. Teaching Class (1) Food Microbiology (FS 4101)
- 2. Practical Class (1) Undergraduate practical class F

#### Annex 4. LIST OF FACILITIES OBSERVED

- 1. Office and staff rooms of the DFST
- 2. Laboratories of DFST/Dept of Soil Science
- 3. Lecture room in the DFST
- 4. The library
- 5. The computer centre
- 6. Farm



- <u> DBSERVED</u>
- 3. Research proposals submitted for funds
- 4. Z-scores and GPA of students
- 5. Result sheets of some examinations
- 6. Appointment of examiners
- 7. Time table
- 8. Past question papers
- 9. Samples of student assignments, practical reports and research project reports
- 10. Peer observation of teachers (forms)
- 11. Teacher evaluation by students (summary sheets)
- 12. Minutes of Department meetings
- 13. Minutes of Faculty Board meetings
- 14. Minutes of the Senate meetings