



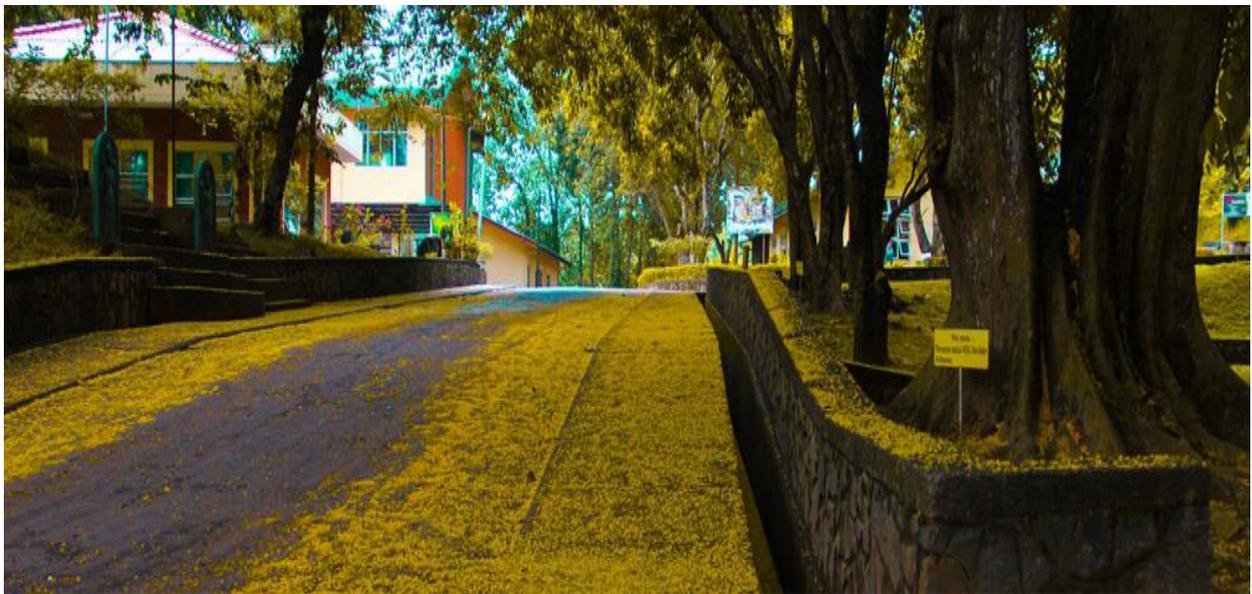
## **PROGRAM REVIEW REPORT**

**BSc (Honours) Agricultural Resource Management and Technology**

**Faculty of Agriculture**

**University of Ruhuna**

**January 20 – 23, 2020**



**Reviewers:**            **Prof. Deepthi C. Bandara**  
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**Quality Assurance Council**  
**University Grant Commission, Sri Lanka**

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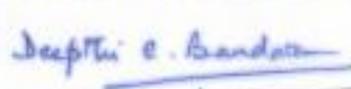
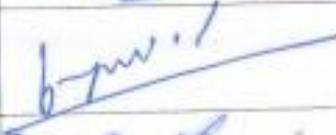
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University: University of Ruhuna

Faculty: Faculty of Agriculture

Program: Agricultural Resource Management and Technology

Review Panel:

Name	Signature
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Date: 24-06-20.

## Section 1: Brief Introduction to the Program

The Ruhuna University, located in southern Sri Lanka, is one of the 15 Sri Lankan state universities, which was upgraded as a fully fledged university in February 1984. The Faculty of Agriculture (FAUR) is one of the 10 faculties of the University, located 20 km away from Wellamadama, where the main University premises are established. The Faculty is perceived as a leading center for agricultural education, research and outreach activities in southern Sri Lanka.

The reviewed program – BSc Honours in Agricultural Resource Management and Technology (ARMT) – is a study program offered by the FAUR which commenced in 2013 April with an enrolment of 137 students. Seven batches of students have been enrolled in the program to date with two batches of students graduating as at December 2017. The student enrolment has been maintained between 122 and 150 (except in 2017 when it was 96) with maximum enrolment of 150 in 2019 which is the full capacity of the program and thus showing satisfactory student demand for the program.

The BSc Honours (ARMT) is positioned at SLQF level 6 and is conducted in the English medium. The program comprises 128 credits offered over 8 semesters. The students follow a core program till end of the 3<sup>rd</sup> year of study (6<sup>th</sup> semester) at which time they would select a specialization department/stream. Students select their choice of organization/institute for industrial training during the 7<sup>th</sup> semester. Advanced courses of the selected specialization are followed in the first semester of 4<sup>th</sup> year with a few common courses and they also engage in industrial training/internship. In the final semester (8<sup>th</sup>), students engage in research.

All seven departments of the Faculty of Agriculture, University of Ruhuna (FAUR) namely Agricultural Biology (AB), Agricultural Economics (AE), Agricultural Engineering (AE), Animal Science (AS), Crop Science (CS) Food Science and Technology (FS) and Soil Science (SS) contribute to the ARMT study program. The Computer Unit and the English Unit provide additional support for the program.

A total of 72 permanent academic staff, comprising of Senior Professors (04), Professors (14), Associate Professors (2), Senior Lecturers (Grade I and II) (31), Lecturer and Lecturer (Probationary) (21) in the study program are supported by 26 temporary cadres, Academic Support Staff and Computer Instructor together with a Program Cum System Analyst and 41 non- academic staff.

The learning resource system facilitating the study program comprises of four large lecture halls (seating capacity 250x2, 150x2), student laboratories in each department, research laboratories, tutorial rooms, mini lecture halls, and study program specific resources such as a farm with crop and livestock components, irrigation techniques demonstration model farm, a tissue culture lab, poly tunnels, shade houses, engineering workshop, farm machinery unit, meteorological unit, biogas unit and an audio visual unit.

The student support system of the FAUR which contributes to the ARMT program comprises of orientation and foundation programs, English courses, an academic counseling and mentoring system, career guidance programs, student welfare services and

health center facilities. Since FAUR is a fully residential campus, the students of this program are also benefitted by this. In addition, a wide range of recreational facilities, student and staff canteens, student common rooms contribute to student support systems. Student discipline is maintained by a Proctor and Deputy Proctor at University and Faculty level, respectively.

## **Section 2: Review Team's Observations on the Self Evaluation Report(SER)**

The SER had been written well. It was concise, yet descriptive enough to comprehend the program's activities regarding a program review. The style of writing was reader friendly, and content was arranged methodically. The effort in total was conducive for the desk evaluation by the reviewers.

The FAUR had adopted a five-stage collaborative approach in the preparation of the SER as reported in the SER and as was observed during the site visit by the reviewers.

The planning of the SER writing process was documented, which included an announcement by the Dean of the Faculty regarding the PR process and a request for the IQAC to prepare an action plan. It is good that students had been informed of the PR process at the planning stages itself. The IQAC's plan had included time schedules and suggestions for the appointment of committees to carryout the different tasks. Thus, appointment of an advisory committee (AC),eight committees (CAT) to work on the eight criteria, anSER writing team and technical support team (TST) was beneficial.

Training of all academic and non-academic staff and creating awareness about the PR and SER writing is noteworthy. Additionally, the members of the SER writing team, CAT and TST had attended the UGC Quality Assurance Council (QAC)'s training sessions. The program had conducted a SWOT analysis and also visited the Faculty of Management and Finance (who had already had their PR in the previous year) in order to familiarize themselves with the coding of documents and the filing system, all of which had positive contributions towards writing an effective SER.

According to the SER, the evidence for different criteria had been collected and this was also observed at the site. Different chapters had been written by different members of the SER team. However, the report was coherent in its chapters. It was evident that much reviewing and editing of chapters and the report had taken place, which is good. The draft had been circulated and observed by members of the Faculty Board and their comments incorporated. The collaborative efforts are appreciated. Approval had been obtained from the Faculty Board. Student representatives were briefed about the draft SER. The draft had also been reviewed by a Senate appointed internal review team after which the reviewers' comments had been incorporated and proof-read before preparing the final report, which had been submitted through the official channel to the QAC, UGC.

The hard copy of the SER received by each reviewer though the QAC was sectioned and produced in pages in an easy and use friendly manner for the reviewers to conduct the desk evaluation and later to refer to during the site visit.

### **Section 3: A Brief Description of the Review Process**

Each of the three members of the review team was given a hard copy of the SER by the QAC quite early in the review process. Each member evaluated the SER individually as a desk review and submitted marks for each standard in each criterion on a template provided by the QAC. The template provided the automatic final result of the desk evaluation for each member according to different weightage given to each criterion.

Once the QAC had received the 3 desk evaluations separately, they amalgamated all 3 desk reviews and made it available for the members of the review team, so that each member was able to see how close their evaluation was with respect to a standard with that of the other two members. This information was available and was discussed among the members at a meeting in Matara, the day prior to start of the site visit at the Faculty in January 2020.

In the meantime, the Chairperson of the review team communicated with the IQAU Director of Ruhuna University, Coordinator of IQAC at FAUR and the other two review team members and finalized the schedule for the four-day site visit. At the site, however, few modifications to the schedule were made to facilitate more efficient use of the visit time and for the convenience of the team who spent long hours in the evenings perusing evidence in documents.

The schedule included meetings with the Vice Chancellor of the Ruhuna University, Director of the IQAU, Dean of the Faculty, Heads of Departments, a representative group of students from the program, academic staff members, DR, AB, Farm Manager, Curator, teachers of the ELTU, temporary staff members contributing to the program, a group of external stakeholders which included employers, industry, private sector, representatives with link to or involved with the University and alumni, Chair and SER preparation team, Senior Student Counselors, Student Counselors and Mentors, technical officers and laboratory attendants, officers of the computer center, library, the industrial placement unit, sub wardens of hostels, Proctor, Deputy Proctor, relevant Chairpersons and Directors of the Higher Degrees Committee, UBL, Career Guidance Unit, GEE and Research Committee, and a group of academic support staff and non-academic staff.

The team also visited and observed facilities of the study program. These included lecture halls, examination hall, medical centre, administration division, finance branch, sub warden office, student counter, Career Guidance Unit, English Language Training Unit, Prayer Room, IQAC, Computer Unit, Library, Agro-Meteorological Station, Drip Irrigation Demonstration Unit, student hostels, Compost Unit, student canteen, auditorium, Biogas Unit, Science Park, Budu Madura, playground/sport room/Physical Gymnasium, student common room and counseling room. Visits were made to each department also to observe the facilities available.

The team observed two theory teaching classes and one practical teaching class. Many hours were spent observing the documentation which were provided as evidence for the reporting in the SER. The coding and filing system were up to a satisfactory level. Both senior staff and the young facilitators made all efforts to ease as much as possible

this painstaking task.

#### **Section 4: Overview of the Faculty's Approach to Quality and Standards**

If an overall view is taken on the Faculty's approach to quality and standards, it is one which is positive and encouraging.

At the first meeting of the site visit which the review team had with the Vice Chancellor (VC), it was apparent that the VC supports the concept of quality assurance in higher education of Sri Lanka and hence this would augur well for the Faculty and its study program including the program under review. The Vice Chancellor recalled that the last Institutional Review of the Ruhuna University was conducted five years ago and that the IQAU which was established in 2015 has now been reestablished as the Center for Quality Assurance (CQA) according to the new recommendation by the UGC. The vision of the VC who had assumed office in April 2019 was to "Produce a value-added graduate". In this regard, he envisioned to improve the quality of the graduate through curriculum development, soft skills, sports and cultural activities, and put in place the framework for including these aspects in graduate profiles. He was also of the view that students' free thinking should emerge, and that freedom of expression was ensured.

The CQA of the University is well established. It has its office in the main campus premises at Matara. The newly appointed Director has much experience in QA activities as he has served as a Faculty QA coordinator in the recent past and therefore is able to provide the required leadership on QA work to the University and faculties. The CQA has an AR, a management assistant (on sharing basis) and one works aid. It is housed in a new office which has the required physical resources in order, with internet and telephone connection. Thus, the CQA can provide a good service to the program under review on QA matters.

The FQAC of the Faculty has a coordinator who is nominated and seconded at the Faculty Board for appointment. The coordinator is assisted by departmental QA coordinators. The QA concept has been accepted well and a quality culture prevails. Members are cooperative towards QA work and have a positive attitude and are progressive. QA items of the Faculty are discussed at the Management Committee meetings of the CQA.

The CQA intends to work on the new concept on student engagement in QA work and hopefully this would be beneficial for all students in the program, as they would be aware of what could be expected in a study program and how QA has to be ensured to obtain a rewarding learning experience at a university.

The program and faculty have progressed well in QA matters especially in the last four years and will be able to internalize some of the good practices which are available at the Faculty. It would be essential to maintain a good record keeping procedure for all those practices as well as new practices which would evolve, in order to be able to have all stakeholders of the program and faculty work in tandem always. This would include the administrative hierarchy, the academic staff, non-academic and support staff, students,

and alumni whose contribution would be critical for progress of the Faculty and program in order to have the program demanded as one of the best the University could offer.

## **Section 5: Judgment on the 8 Criteria of the Programme Review**

### **Criterion 1: Programme Management**

The Vice Chancellor of the University has a vision that the University of Ruhuna would be selected by students for undergraduate studies more in the future, and that there would be more demand than supply. He hopes that if the message is spread that it is a University free of ragging that this would be realized. He is also hoping to minimize the time where students wait for commencement of the program. The Dean of the Faculty stated that this year all placements allocated for the Faculty were taken, which is a good indication that the University is realizing its hope.

The influence of English is well realized by the University and a handbook is available for all faculties, and special programs have been launched to upgrade students' competence in English. The resources available for learning IT is adequate in the University and opening times for IT labs have been extended (8am to 8 pm) and hence the vision for IT and English are encouraging. The VC is hopeful for producing more humane graduates in the future.

With this background, the future of this program sounds optimistic.

The Faculty organizational structure is adequate for effective management and execution of core functions of this program which are discussed, evaluated and monitored at scheduled regular and special Faculty Board meetings. The Faculty has established an Internal Quality assurance Cell (IQAC) and its activities are taken as an agenda item of the meetings of the Faculty Board, which would work positively for the program. There are a few committees at faculty level which assist in program management. These are the Academic Committee, Curriculum Development Committee and Faculty Research Committee. UGC grants for research are decided for recipients by the Faculty of Graduate Studies.

The Faculty has produced an informative handbook available to all incoming students of the program which is given to each at the ceremonial induction of students. The program has the necessary 6 credit research project at SLQF level 6. Applications are called for specialization in the 2<sup>nd</sup> semester of 3<sup>rd</sup> year. The title and project proposals are developed by students. Research groups have been established to attract students to different disciplines of research. Research supervisors are allocated by the Head of Department. Undergraduate research is given due consideration and the three best presentations from each department is nominated to be presented as one oral and two posters at the International conference of the Faculty.

The Faculty has established collaborative partnerships for academic and research activities through signing of MoUs which is beneficial for the program. Several MoUs are in place and currently 8 students are abroad pursuing their studies. However, a specific credit transfer policy is unavailable.

The semester system had been introduced to the Faculty in 2000, and the curriculum revision for this program was in 2013 when it was initiated. The same curriculum is being conducted still, even though attempts at a revision are underway. Documents pertaining to curriculum development were limited and some were irrelevant. Also, the curriculum revision has not

been completed even though seven years have lapsed since the last revision. A curriculum document in revision was available.

The counselling service for students in the program includes the senior student counsellors and deputy student counsellors appointed by the University. The Faculty also has 10 student counsellors, academic counsellors and mentors. A transaction record with mentors was not available. Maintaining of such would have been good. Any issue of concern is brought to the notice of the mentor, counsellors and then the Dean depending on the severity of the issue.

There is an e- culture prevailing in the Faculty which has email groups and WhatsApp groups which is conducive for information sharing. The MIS is active and student attendance is taken by technical officers which is a good practice. All mentors (teachers/lecturers) have access to the 'Cloud' and all mentors upload material each semester. Student registration, timetables and examination schedules are on an online mode. Staff members have been given the right to decide on a cut-off on attendance for theory classes, while 80% attendance is needed for practicals. All staff members maintain MIS accounts.

Continuous Professional Development programs are conducted by the SDC on request by the Faculty, on proposals of different aspects such as examination procedures, LMS, and curriculum mapping, while the Lecturers on probation undergo the compulsory induction program.

Interaction with student groups showed that in the academic program, priority was given to the time allocation for practicals. They conveyed that this program provided them the correct attitude and values such as teamwork and leadership qualities when applying for job opportunities. The students commended the Farm Practice course and said that the English program was helpful. The orientation program was helpful and guided the students regarding important program aspects such as registration for courses, GPA, class, health and mentoring possibilities. It is good that the Faculty has made provision for the students to engage in activities which promote ethnic and social harmony (Buddhist Society organizing the Thai Pongal activity) and makes provision for students to be engaged in sports by facilitating their transport for practice when necessary.

There is an Examination Division at the Faculty which comes under the Dean. The Program uses an Examination Manual which is used by the whole University. The award of medals is done according to criteria specified by the University and the Dean's List and Faculty Awards are done according to the UGC circular. There is a confidential room for examinations and a results notice board.

An aspect that was remarkable was the instructions provided by the Faculty on how to be an inventor, apply for patents, commercialization of inventions and encouragement provided for participating in inventor competitions.

The ELTU offers an intensive Basic English course, the level 1 course which is essential for degree certification, and levels 2 and 3 courses for which certificates are provided. The staff at the ELTU are inadequate.

The Faculty has an Industrial Placement Office. The students make an online application. They are also expected to maintain a log- book and submit a report. The industrial placements are done through a placement committee and the coordinator maintains a database.

The DR attends to examination work, certification work, welfare, canteen, hostels, time scheduling for printing of papers for which DR must be present. There are 1<sup>st</sup> and 2<sup>nd</sup> markers for question papers. Final marks are given with their signatures and that of the Head of Department (HoD). Grades are given according to the UGC circular. Once submitted marks are not changed for grades.

The Assistant Bursar (AB) attends to voucher preparation and collection, procurements and purchasing of goods, Mahapola, foreign funded projects, and self- generated funds.

The Dean consults department members for consensus in the appointment of the Head of Department. HoDs decide on allocation of lectures and vacation leave matters. At a meeting with Chairman/Rag Prevention Committee, Sub Wardens of the male and female hostels, Proctor of University, Deputy Proctor, Medical Officer and OIC Security Warden/female hostel, it was conveyed by OIC Security that there is no ragging at this faculty. Therefore, there has not been a single day of closure of the Faculty due to ragging. Concerted efforts are made to eliminate ragging. A unique rag prevention method is adopted, and one hall is allocated for the 1<sup>st</sup> years.

Temporary academic staff members are appointed each year depending on their performance in the program. They assist in practicals of courses. The outcome of the meeting with these members were disappointing. They were not responsive to the questions raised.

The meeting with Alumni and few stakeholders was rewarding. Their request was that action be taken so that student commitment to the program is high and programs for identification of career goals and perseverance is inculcated. They encouraged having continuous motivational programs. The Alumni Association of the Faculty is not very active at present.

The meeting with technical officers and lab attendants conveyed that it would be beneficial if CPDs are held annually for them, so that they are updated in knowledge and competencies.

The Faculty conducts PG degrees through a Board of Study (BS) in Agriculture and many graduates join this BS and perform well too. There are 6 programs at MS level 10 and none at level 9. There is some effort at Distance Education and two Diplomas in Tea and Biodiversity are conducted.

The University Business Linkage Cell has made some effort at making some new products in food such as a Habalapethi product.

An optional course on career guidance is offered to the ARMT degree program by the Career Guidance Unit. Students can register for soft skills development. They also have a Job Fair on the day of the Going Down party.

In the observation of documents, it was seen that internal and external audit queries were limited. However, any related documents were available only in a few years of the review period. SOP documents were also available for a limited period only. Special support and

assistance for students with special needs have been initiated, but need some arrangements for the future.

Overall, the maintenance of documentation with respect to Program Management could be improved. There was limited documentation in some aspects while in others, those available were irrelevant. A concerted effort at improving this aspect of Program Management would greatly improve internalization of best practices.

## **Criterion 2: Human and Physical Resources**

The ARMT Program has 150 placements. The administrative structure of the Faculty comprises of the Dean, a Deputy Registrar (DR), Assistant Bursar (AB), Farm Manager (FM), Curator, and a Scientific Assistant (on permanent basis), 4 academic support staff, one Networks Engineer and one Systems Analyst who support academic work, and non-academic staff.

The Program is conducted by adequate numbers of qualified academic staff. The meeting with them showed that they are well trained in the different disciplines of the program. They had a satisfactory knowledge regarding developing ILOs for courses and assessment strategies. Some of them used Google classroom in their teaching and most were involved in curriculum development activities in the committee. All newly recruited academics are provided with induction training and academics are supported for postgraduate studies by collaborative programs. An adequate facility is available for students and staff to engage in multi-cultural programs to promote harmony and cohesion.

The DR/Senior Assistant Registrar of the Faculty is in charge of the clerical staff, vehicles, drivers, welfare, student aid, record room, postal room, student counter, and examination matters. The Faculty also has a curator who attends to landscaping matters and maintains a conducive environment for student learning, but also makes a contribution to a floriculture course and some practicals.

The Academic Support Staff and Non-academic staff which included the sub wardens, curator, those involved in lab safety (such as fire extinguishers, use of gas and liquid nitrogen), and welfare societies of students/academic staff/ non-academic staff exist, and they serve to improve the working environment for all. A mechanism for regular capacity development of technical officers and other non-academic members, however, is lacking. The online system for ordering chemicals and equipment is good. A request was made to send the laboratory attendants on some of the field visits with the students, so that they also get an idea about these facilities and services. An intra university training was suggested.

The program is fully residential (except for the first year first semester students who are not given accommodation facilities) which is a significant feature for the students of the program. Hostel allocation is done by sub wardens. The hostels are kept clean and tidy.

Some services have been provided for disabled students such as large prints and touch screen facility for visually impaired students and building ramps in a few places. However, the

program does not encourage the admission of disabled students due to the high component of field practicals involved.

The research farm is in the University itself which is an advantage. Drone views of this location are possible. There is also an Agro-met station which is maintained by the Faculty. There is a Farm Sales Outlet where produce of the farm are sold. In the meeting with the VC, it was stated that 108 acres are available for agriculture programs which would be utilized as an investment for partnerships.

Medical facilities are provided to students with a retired doctor who serves a few hours every day. In serious situations, students are either sent to the University Health Centre at Matara or to the base hospital. There are arrangements for sick students to sit the examinations during examination times.

The Career Guidance Unit of the Faculty is manned by one Senior Lecturer who provides the necessary services to students.

The Computer Centre has two units of 40 computers each. There is a Systems Engineer and a Systems Analyst. The students are given login accounts. There is a Computer Unit coordinator and students work in groups of 50. The Faculty Computer Unit communicates with students through Google forms. Although a Computer Unit is available, the benefits are not optimized. Unavailability of adequate wi-fi facilities affects administration, teaching and learning and there are limited wi-fi areas for student laptops.

The IQAC has adequate facilities and works are undertaken as needed. IQAC conducts student and peer observations through Google forms.

All students and staff have access to a well-resourced library facility which is maintained well, with a collection of about 20,000 books. Students have their own barcode which is used in lending. The library opening hours are reasonable (8.00 am - 7.00 pm, open on Sundays too.) Students are given training on searching techniques, research ethics and plagiarism.

### **Criterion 3: Programme Design and Development**

The Program design and development process of the FAUR reflects a participatory approach of academics with some contribution from external expertise. The program is logically structured in the first six semesters and specialization is in the next 2 semesters. The Program has a defined industrial training program in addition to a research component, which assures the level of the degree programme with SLQF requirements.

It is commendable that the ARMT degree program is successful in delivering the defined courses, while preserving the traditional education of the defined area and the disciplines. Over the past several years, the degree program has commenced the process towards achieving current expectations of higher educational quality and standards. However, the curriculum revision process is yet to be completed for the last cycle, in meeting the requirements.

The Faculty expects to improve Outcome Based Education (OBE). The degree program includes a variety of supplementary, cross disciplinary and self-learning courses. Inbuilt collaborative and group work are visible in the curriculum teaching.

Although, the program design seems in compliance with the SLQF to a certain extent, as per the available information, the teaching, learning and assessment process and subject description need further improvement. The SBS used in developing the curriculum should also be stated clearly. As one of the key elements of the best practices in program design, needs analysis must be practiced regularly in order to obtain an idea of the industrial demand. In this respect, industry and other stakeholders including employers and professionals can be further consulted during the curriculum revision process. The support extended by the alumni and industry can be positively invested in this need. Routine monitoring of the study program would be necessary.

It is noted that the Faculty has no clear policy on differently abled students, although some facilities are provided for certain cases once incidents are noted. Also, the present program design and development procedures do not provide any fall-back option to the students. These gaps should be addressed in the ongoing curriculum revision of the degree program in order to provide a wide opportunity.

#### **Criterion 4: Course/Module Design and Development**

The Faculty has established a Curriculum Development Committee (CDC) which consists of responsible lecturers and an Academic Committee (AC) with the Heads of all Departments of FAUR. The course content and activities of the program are designed by qualified academics, based on relevant concepts, theories and applications. University approved guidelines, formats and other standard templates of QAC are used at different stages of program development and design. As stated, the functional nature of the CDC and its operational mechanism are progressing. Appropriate and adequate resources (human, physical and financial) are made available by the Faculty for course design. Integration of principles, interdisciplinary activities and related disciplines in the curriculum is noteworthy. The course design is aligned with the credit values and learning hours as specified by the SLQF.

Course design integrates learning strategies for the development of self-directed and collaborative learning, creative and critical thinking and teamwork. However, internal monitoring strategies and processes to evaluate, review and improve course design, development and operationalization need further strengthening for better achievements. Curriculum revision with the participation of university academics, eminent scientists, subject experts, professionals from agricultural research institutions and industries and graduates of the degree program under review is needed for a better outcome.

It was noticed that the IQAC did not adequately adopt internal monitoring strategies and effective processes to evaluate, review and improve the program. Constructive alignment of each course with the program outcome is inadequate.

## Criterion 5: Teaching and Learning

The review team noted that the program provides course specifications and timetables before the commencement of the course. The program's teaching/learning strategies include opportunities for students to work in study groups to promote collaborative learning. Teachers engage students in research and encourage/support students to publish research outcomes. Having an Academic Accountability Model ensures a fair engagement of all academic staff in teaching activities, though some lecturers and departments provide greater contribution than the others. To maximize the student involvement in learning, the Faculty has internalized strategies of team-based learning and self-learning through in-class and outdoor exposure. Undergraduates are encouraged and provided opportunities to undertake research and publish their outcomes. The Faculty has ensured that physical facilities to a satisfactory level are provided, to enhance the quality of the teaching and learning process of this program. Resource materials placed at the library are available to all teachers and students. It was noted that the use of the LMS in teaching, learning and assessment processes is considerable.

Nevertheless, there was inadequate evidence of integration of appropriate research by teachers into their teaching activities. Due to limitation of wi-fi availability, self-learning and collaborative learning through assignments based on literature review is limited. Documentation is limited on evidence that teachers adopt innovative pedagogy for effective teaching/learning. Regular internal monitoring by the IQAC is necessary to foster and promote widespread adoption of best practices. The review team observed that the academic staff members receive a limited amount of research grants from the University allocation and thus it has limited certain research outcomes.

Although the Faculty recognizes the value of creative and innovative approaches in teaching and research, few progressive steps have been taken to institutionalize a teacher appraisal system to reward the staff members who excels in teaching. It is necessary to keep performance data of teachers and to develop an attractive teacher appraisal system. This will encourage staff engagement in training programs as well as in curriculum development. It must be a regular transformational process of the degree program. There was no evidence or firm plan to capture and retain foreign students in the degree program though some students receive opportunities to engage in studies under foreign environments.

The observation of two theory classes and one practical class showed that staff are committed to doing a good job at teaching. Classrooms were maintained well; they are tiered and provided with chairs with arms, fans and slide projection facilities. From the back of the lecture hall, the writings on the board were not clearly visible. It was a limited interaction class but progressed well. Writings and voice volume could be increased.

In the other class, handouts were given. Slide projections were good, voice was loud enough, seating was good, and the lecture room was airconditioned. Specific instructions to write down was given. Questions were asked but answering was low. Teacher was active. Teacher should avoid speaking to the screen and it might help to use a microphone.

Practical teaching at the milking shed was good. Some improvements were possible to increase key knowledge in such practicals.

### **Criterion 6: Learning Environment, Student Support and Progression**

The Faculty provides student support systems which are introduced during the orientation program for new students. The academic members of the Faculty maintain a very good interaction with the students. To maintain a student friendly administrative, academic and technical support system, the Faculty adopts an open-door policy for students to meet the staff. Guiding the students to comply with the code of conduct, optimal use of available student support services are communicated with the students through various sources. The Faculty provides an inclusive educational environment to undergraduates in the program by providing many facility centers to support the development of skilled graduates for the Agriculture discipline. The Faculty also provides on-going training programs for users of common learning resources such as the ICT-led tools. The Faculty has academic counsellors who hold discussions with students focusing on the wellbeing of the psychological background and educational problems. Continuous training programs are organized for students to use the common learning resources. The Faculty maintains up-to-date records on student progress throughout the program of study and enhances learning opportunities for students, by collaborating with industry partners to offer work-based internship placement opportunities to all undergraduates during their study. Social interaction between the Faculty and students are conducted through the student associations.

The Faculty, however, can create a formal alumni association and maintain a good network with them, which will help in the progression of the study program. The Faculty provides limited programs for student induction on OBE, SCT and technology-based learning and the Faculty can improve this situation. The monitoring of student support systems and use of information to improve such is limited. The Faculty also can improve the facility of dealing with student complaints, grievances and provision of timely responses. It will be worthwhile for the Faculty to expand the existing unit of English which will benefit students of this program also.

### **Criterion 7: Student Assessment and Awards**

The Faculty activates its' assessment strategies of student learning under the curriculum development and program design. Teaching learning methods of the Faculty appear to be appropriate and effective. The staff of the Faculty is aware of contemporary teaching practices. The Faculty adopts Senate-approved procedures for approving and monitoring the assessment strategies for examinations. A complete transcript indicating all the courses followed, grades obtained, and the aggregate GPA and the class obtained is given to all students after graduation. The Faculty Handbook provides guidelines to all students regarding examination misconduct. There is incorporation of views of internal and external academic staff members for moderation and second marking of question papers. There is clarity in the assessment strategy used for the Internship/Industrial Training component.

Students obtain a Handbook at the time of enrollment. The graduate profile and course ILOs were well developed and are up to the required standards. The Faculty has developed a credible mechanism to ensure a fair student assessment and award scheme. There is availability of excellence awards for students of different course units/programs sponsored by different stakeholders. Facilities of the Faculty are made available for students with disabilities where relevant. Disabled students are permitted to request extra time at the examinations.

However, the review team observed certain areas that need to be improved in order to further enhance the quality of the assessment procedures. The Faculty has not designed its' assessment strategy to align with the SLQF and SBS requirements. The Faculty can take necessary action to correct it. There is limited evidence which ensures that marks/reports of external examiners are considered by the Examination Board for finalization of marks. Results of continuous assessments should be made available to students in time. All the documents and examination matters are maintained at the small Examination Unit of the Faculty. The Faculty can improve the Unit so that practices such as web-based examinations could be held.

### **Criterion 8: Innovative and Healthy Practices**

There are MOUs between renowned professional institutions and global firms to strengthen the rapport between academia and industry. The Faculty recognizes complementarity between academic training, research and development (R&D), innovations and industry as core duties of academics. The Program includes a mandatory undergraduate research project and encourages students to disseminate research findings. The Faculty shows appreciation by giving annual awards for research output and innovation. The Faculty has diversified its sources of income to complement the grants received from the Government by engaging in income-generating activities. The Faculty organizes an annual international research conference and student colloquium to encourage research and publications, which foster a research culture among academia and students.

The Faculty has not yet adequately encouraged the staff and students to use Open Educational Resources (OER) to supplement the teaching and learning process and the evidence is inadequate. The Faculty can take necessary action to amend this lapse. There is no mechanism in the Faculty for the recognition of any achievement of students who do not complete the program. Therefore, the Faculty can establish a mechanism for such students.



## Section 6: Grading of Overall Performance

No	Criterion	Weighted minimum score*	Actual criterion-wise score
1	Programme Management	75	117.00
2	Human and Physical Resources	50	78.00
3	Programme Design and Development	75	96.00
4	Course / Module Design and Development	75	100.00
5	Teaching and Learning	75	113.00
6	Learning Environment, Student Support and Progression	50	86.00
7	Student Assessment and Awards	75	115.00
8	Innovative and Healthy Practices	25	35.00
	Total score (out of 1000)		739.00
	Total score (out of 100)		73.88

**Final Grade: B**

## Section 7: Commendations and Recommendations

### Commendations

- The Faculty organizational structure is adequate for effective management and execution of core functions of this program which are discussed, evaluated and monitored at scheduled regular and special Faculty Board meetings.
- The Faculty has produced an informative Handbook available to all incoming students of the program which is given to each at the ceremonial induction of students.
- The Faculty has established an Internal Quality Assurance Cell (IQAC) and its activities are taken as an agenda item of the meetings of the Faculty Board, which would work positively for the program.
- The Faculty has established collaborative partnerships for academic and research activities through signing of MoUs, which is beneficial for the program.
- All students and staff have access to a well-resourced library facility.
- Adequate facility is available for students and staff to engage in multi-cultural programs to promote harmony and cohesion.
- The Program provides course specifications and timetables before the commencement of the course.
- The Program's teaching/learning strategies include opportunities for students to work in study groups to promote collaborative learning.
- Teachers engage students in research and encourage/support students to publish research outcomes.
- Student support systems are introduced during the orientation program for newcomers.
- The Faculty maintains up-to-date records on student progress throughout the program of study.
- Mechanisms are in place to ensure that all staff adheres to University guidelines of examinations and regulations are communicated to the students at time of enrollment.
- The Program contains a mandatory undergraduate research project and encourage students to disseminate research findings.
- The Faculty has diversified its sources of income to complement the grants received from the Government by engaging in income-generating activities.
- The student hostels are maintained in good order.
- The Program encourages student inventions and participation at invention competitions.

## Recommendations

- When the Faculty believes that a certain long-standing practice gives good outcomes, it would be beneficial to identify it as a good practice and then develop it to be a policy to be adopted. Faculty Board approval would be needed for the new policy. If University approval could be obtained -so much the better.
- Internal and external audit queries for the total period of review should be made available.
- SOP documents also should be made available for the total period of review.
- Relevant documents pertaining to curriculum development should be made available and the curriculum revision should be completed soon.
- Special support and assistance for students with special needs need some arrangements for the future.
- Benefits of the Computer Unit should be optimized.
- Adequate wi-fi facilities to be made available to better facilitate administration, teaching and learning.
- A mechanism for regular capacity development of technical officers to be initiated.
- The program design process should adequately incorporate feedback from employers and professionals.
- Program design should comply adequately with the Sri Lanka Qualification Framework level 6, at which level the program would be placed. The SBS used for the program should be clearly stated.
- The Program should adequately use the outcomes of program monitoring to foster on-going and future design.
- The IQAC should adequately adopt internal monitoring strategies and effective processes to evaluate, review and improve the program.
- Constructive alignment of each course with the program outcome should be clearly outlined.
- Better integration of appropriate research by teachers into their teaching activities is needed.
- Limitation of wi-fi availability to be minimized for self-learning and collaborative learning through assignments based on literature review.
- More documentation on evidence that teachers adopt innovative pedagogy for effective teaching/learning to be made available.
- More student induction programs on OBE, SCT and technology-based learning.
- Better monitoring of student support systems and use of information to improve such.
- Timely response in dealing with student complaints and grievances is needed.
- Better alignment of the assessment strategy with the SBS for program level on SLQF must be done.
- More evidence which ensures that marks/reports of external examiners are considered by the Examination Board for finalization of marks, to be made available.

- Greater encouragement of staff and students to use OER to supplement teaching and learning.
- Introduce a mechanism for the recognition of any achievement of students who do not complete the program.

## Section 8: Summary

The program review of the BSc (Honours) in Agricultural Resource Management and Technology of the Faculty of Agriculture, University of Ruhuna was successfully completed with the site visit held during January 20 – 23, 2020. The FAUR located in Mapalana provides an excellent environment conducive for academic pursuits, scholarly work, socio-cultural activities, innovative thinking and agricultural research. As per the present program review of the above degree program, it is evident that, there are both strengths and weaknesses with regard to the quality of the study of the program, as evaluated under the eight review criteria specified in the PR Manual of the QAC.

The FAUR had adopted a five-stage collaborative approach in the preparation of the SER. Training of all academic and non-academic staff and creating awareness about the PR and SER writing is noteworthy. However, the SER had few shortcomings. These are failure to provide appropriate evidence to support some claims, incompatibility of evidence provided with the claims, citing the same irrelevant documents as evidence for several claims, failure to quote some underutilized areas and shortcomings by the SWOT analysis, very few contextual and typographical errors, etc. However, the FAUR was well prepared for the site-visit of the program review. The Vice Chancellor, Dean of the Faculty, Director- QAC, Coordinator- IQAC, Heads of the Departments and academic staff members extended their fullest cooperation during the site visit.

The program review was conducted in accordance with the guidelines prescribed in the PR Manual with an agreed time schedule by both parties and judgment on study program was reached by making evidence-based assessment of the degree of internalization of prescribed best practices and extent of achievements in respective standards defined under the eight review criteria. The review team observed that the Degree Program is implementing several good practices as described in the Review Manual of the University Grants Commission, Sri Lanka to maintain its quality. Some of them are unique to the FAUR.

The on-site review visit consisted of meetings with both the University and Faculty administration, academic staff members, a representative group of students, Farm Manager, Curator, teachers of the ELTU, temporary staff members, a group of external stakeholders and alumni, Chair and the SER preparation team, Senior Student Counselors, Student Counselors and Mentors, technical officers and lab attendants, officers of the computer center, library, the industrial placement unit, sub wardens of hostels, and a group of academic support staff and non-academic staff.

It was evident to the review team that human and physical resources and facilities available are sufficient to conduct the degree program efficiently and effectively. The Program is conducted by adequate numbers of qualified academic staff. Also, the Faculty organizational structure is adequate for effective management and execution of core functions of this program which are discussed, evaluated and monitored at scheduled Faculty Board meetings. There are a few other committees at faculty level which assist in the program management. The Program is fully residential (except in the first year first semester). The research farm is in the University itself. The library facility is commendable. Use of the LMS in teaching, learning and assessment processes is considerable. Program design and development process of the FAUR reflects a participatory approach of academics with some contribution from external expertise. The Program has the necessary 6 credit research project to be placed at

SLQF level 6. Several MoUs signed with collaborative partnerships have benefitted the FAUR. The Faculty promotes an e-culture within the premises and the Continuous Professional development programmes add value to the staff members. In addition to the academic activities, the Faculty has made provision for the students to engage in activities which promote ethnic and social harmony. In general, all academic staff at FAUR is expected to be research-active, with the expected proportion of research effort varying between different levels. Instructions are provided to the undergraduates by the Faculty on how to be an inventor, apply for patents, commercialization of inventions and encouragement is provided for participating in inventor competitions.

The Program provides course specifications and timetables before the commencement of the course. Having an 'Academic Accountability Model' ensures a fair engagement of all academic staff in teaching activities. The observation of theory and practical classes showed that staff is committed to doing a good job at teaching. To maintain the student friendly administrative, academic and technical support system, the Faculty adopts an open-door policy for students to meet the staff. Social interaction between the Faculty and students are conducted through the students' associations. Teaching learning methods of the Faculty appear to be appropriate and effective. The Faculty adopts Senate-approved procedures for approving and monitoring the assessment strategies for examinations and the examination operations are conducted at a satisfactory level. The Faculty Handbook provides guidelines to all students regarding examination misconduct. There is availability of excellence awards for students of different course units/programs, sponsored by different stakeholders. The Faculty has diversified its sources of income to complement the grants received from the Government by engaging in income-generating activities. The Faculty organizes an annual international research conference and student colloquium to encourage research and publications, which foster a research culture among academia and students.

Overall, the curriculum revision process is yet to be completed in meeting the requirements. The teaching, learning and assessment process and subject description of the Program need further improvement. Internal monitoring strategies and processes to evaluate, review and improve course design, development and operationalization need further strengthening for better achievements. Wi-fi facility must be improved and the benefits of the Computer Centre needs to be optimized. Utilization of the support of stakeholders and alumni is not up to an appreciable level. Activities of the IQAC and UBL should be further strengthened. Overall maintenance of documentation with respect to program management could be improved. A mechanism for regular capacity development of technical officers and other non-academic members, however, is lacking. The Program does not encourage the admission of differently abled students due to the high component of field practicals involved.

The present program design and development procedures do not provide any fall-back option to the students. Academic staff members receive a limited amount of research grants from the University allocation and thus it has limited certain research outcomes. Although the Faculty recognizes the value of creative and innovative approaches in teaching and research, few progressive steps have been taken to institutionalize a teacher appraisal system to reward staff members who excels in teaching. There was no evidence or firm plan to capture and

retain foreign students in the degree program though some students receive opportunities to engage in studies in foreign environments. The Faculty provides limited programs for student induction on OBE, SCT and technology-based learning and the Faculty can improve this situation. The monitoring of student support systems and use of information to improve such is limited. The Faculty has not designed its' assessment strategy to align with the SLQF and SBS requirements. It also has not yet adequately encouraged the staff and students to use OER to supplement the teaching and learning process and the evidence on such is inadequate. Though the Faculty is blessed with a good academic staff, outreach activities including "industry engagement" and providing "hands-on-experience" are areas requiring further strengthening.

Finally, the review team wishes to acknowledge the cooperation and support extended by the Vice Chancellor, Dean of the Faculty, Heads of Departments, Heads of the Centers and Units, Director of CQA, Coordinator of IQAC and all academic and non-academic staff members and students of the degree program during the entire process of the program review.

## Annexes

### Annex 1: Program Review Schedule

#### Day 1 (January 20, 2020 – Monday)

Time	Activity	Venue	Participants
8.30 AM – 9.00 AM	Meeting with the Vice Chancellor	University of Ruhuna, Wellamadame	Vice Chancellor/ Dean, Director – CQA/ Coordinator – FQAC, Chair – SER Preparation
9.00 AM – 09.30 AM	Meeting with the Director - CQA ( <i>Working Tea</i> )	CQA, University of Ruhuna, Wellamadame	Director – CQA
10.30 AM – 11.00 AM	Meeting with the Dean	Dean's Office, Faculty of Agriculture	Dean and Review Team
11.00 AM – 12. noon	Presentation about the Faculty and the degree programs	Conference Hall - Dean's Office, Faculty of Agriculture	Dean/Director- CQA/Coordinator FQAC/All HODs of the Faculty/ Chair and SER Team
12:00 noon -12.30 PM	Meeting with Student Counselors and Mentors	Conference Hall - Dean's Office	Senior Student Counselors, Student Counselors and Mentors
12.30 PM - 1:30 PM	<i>Lunch</i>		
1.30 PM – 2.30 PM	Meeting with Students	Auditorium of the Dept. of Crop Science	Review Team/Students
2:30 PM – 5.30 PM	Observing Documentation ( <i>Working Tea</i> )	Conference Hall - Dean's Office	Review Team/Facilitators

**Day 2 (January 21, 2020 – Tuesday)**

<b>Time</b>	<b>Activity</b>	<b>Venue</b>	<b>Participants</b>
8.30 AM – 9:30 AM	Meeting with Academic Staff	Conference Hall - Dean's Office	Academic staff excluding HoDs
9.30 AM – 1.00 PM	Observing Physical Facilities <ul style="list-style-type: none"> <li>• Lecture Halls</li> <li>• Examination Hall</li> <li>• Prayer Room</li> <li>• Medical Centre</li> <li>• Career Guidance Unit</li> <li>• English Language Training Unit</li> <li>• Counseling Room</li> <li>• Administration Division</li> <li>• Finance Branch</li> <li>• Sub Warden Office</li> <li>• Student counter (Tea?)</li> </ul>	Around Dean's Office	Review Team/ Facilitators
	<ul style="list-style-type: none"> <li>• IQAC</li> <li>• Computer Unit</li> <li>• Library</li> </ul>	Around Computer Unit	
	<ul style="list-style-type: none"> <li>• Agro-Meteorological Station</li> <li>• Drip Irrigation Demonstration Unit</li> <li>• Student Hostel</li> <li>• Compost Unit/Farm practice Field</li> <li>• Automated protected houses</li> <li>• Student Canteen</li> </ul>	Around Hostels	
	<ul style="list-style-type: none"> <li>• Auditorium</li> <li>• Biogas Unit</li> <li>• Student Common Room</li> <li>• Budu Madura</li> <li>• Play Ground/Sport Room/Physical Gymnasium</li> <li>• Science Park</li> </ul>	Around Security Office	
1.00 PM – 2.00 PM	<b>Lunch</b>		
2.00 PM – 3.30 PM	Department Visits	Biology/Crop/Econ/Soil/ Food/ Eng/Anim	Review Team/ Facilitators
3.30 PM – 5.30 PM	Observing Documents	Conference Hall - Dean's Office	Review Team/ Facilitators

**Day 3 (January 22, 2020 – Wednesday)**

<b>Time</b>	<b>Activity</b>	<b>Venue</b>	<b>Participants</b>
8.30 AM – 09.00 AM	Meeting with Administrative Staff	Conference Hall - Dean's Office	DR/AB/FM/Curator
9.00 AM -9:30 AM	Meeting with HODs contributing to academic programme	Conference Hall - Dean's Office	HODs, Head/DELT/Coordinator Computer Unit
9.30 AM – 10.15 AM	Meeting with Proctor, Deputy proctor and other Welfare People (Wardens, Medical Officer/s, Physical Education, Food Committees etc.)	Conference Hall - Dean's Office	Review Team/ Proctor/ Deputy Proctor/ Facilitators
10.15 AM – 10.30 AM	<b>Tea</b>		
10.30 AM – 11.15 AM	Meeting with Temporary Academic Staff	Conference Hall - Dean's Office	Temporary Academic Staff
11.15 AM – 12.15 PM	Meeting with external stakeholders, alumni members and other stakeholders	Conference Hall - Dean's Office	Group of external stakeholders (employers, industry, private sector, representatives with link to or involvement with the University) and Alumni
12.15 PM – 12.45 PM	Meeting with Technical Officers and lab Attendants	Conference Hall - Dean's Office	All Technical officers and lab Attendants
12.45 PM – 1.45 PM	<b>Lunch</b>		
1.45 AM - 2:00 PM	Meeting with Board of study in Agriculture, UBL, Career Guidance Unit, GEE and Research Committee/DCEU	Conference Hall - Dean's Office	Relevant Directors/Coordinators/Chair
2:00 PM – 5.30 PM	Observing Documents ( <b>Working Tea</b> )	Conference Hall - Dean's Office	Review Team/Facilitators

**Day 4 (January 23, 2020 – Thursday)**

<b>Time</b>	<b>Activity</b>	<b>Venue</b>	<b>Participants</b>
8.30 AM – 9.30 AM	Observing Teaching/Practical Sessions	Available Teaching/Practical Sessions	Review Team/Respective Staff Members and Students
9.30 AM – 10.00 AM	Meeting with the office bearers of Committees	Conference Hall - Dean's Office	Chairperson/ Secretary of the committees
10.00 AM – 10.30AM	Meeting with a cross section of Academic Support Staff and Non-academic Staff	Conference Hall - Dean's Office	Representative group of academic support staff and non-academic staff (10)
10.30 AM – 12.30PM	Observing Documentation, Private meeting/ Report Writing	Conference Hall - Dean's Office	Review Team
12:30 PM - 1:30 PM	<b>Lunch</b>		
1:30 PM - 2:00 PM	Private meeting of reviewers and report writing	Conference Hall - Dean's Office	Review Team
2:00 PM - 3:00 PM	Closing meeting for debriefing ( <b>Working Tea</b> )	Conference Hall - Dean's Office	Dean/Director – CQA/ HODs/ Coordinator – FQAC/Chair & the SER – Team

***Annex 2: Attendance at meetings***

*Will be provided as hard copies*

***Annex 3: Reviewers' Signature page***

*Will be provided as hard copy*