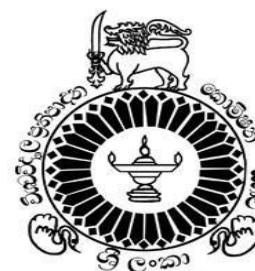




Programme Review Report



**Bachelor of Science Honours in Fisheries and Marine Sciences
Faculty of Fisheries and Marine Sciences and Technology
University of Ruhuna, Sri Lanka**

Site visit Dates: 16th and 17th June 2022



**Review Panel: Prof. GVAR Fernando (Chair)
Prof. GLLP Silva
Prof. WAD Nayananjalie**

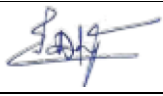
**The Quality Assurance Council
University Grants Commission, Sri Lanka**

University : University of Ruhuna

Faculty : Faculty of Fisheries and Marine Sciences & Technology

Programme : Bachelor of Science Honours in Fisheries and Marine Sciences Degree Programme

Review panel:

Name	Signature
Prof. GVAR Fernando (Chair)	
Prof. GLLP Silva (Member)	
Prof. WAD Nayananjali (Member)	

Date: 2022.09.12

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Section 1: Introduction to the Programme

Overview

The University of Ruhuna was established by an Extraordinary Gazette No. 16/16 of 29th December 1978 by the power vested in sub-section 1 of section 27 of the University Act. No 16 of 1978. It operates under the provisions of the Universities Act No. 16 of 1978 and the Universities (Amendment) Act No. 7 of 1985. Accordingly, the University has a Chancellor, a Vice Chancellor, Officers, and Authorities to draw plans, make decisions, and monitor the implementation of such decisions in the overall management (Fig.1.1). The University is now comprised of ten (10) Faculties and the Faculty of Fisheries and Marine Sciences & Technology is the 6th Faculty established by the University.

The University of Ruhuna was able to introduce a Faculty of Fisheries and Marine Sciences & Technology to the system in Sri Lanka, primarily due to the hard work of the dedicated staff of the Department of Fisheries Biology, with the fullest cooperation from the Vice Chancellor, Professor Ranjith Senarathne at that time. The location of the University, facing the Indian Ocean and in close proximity to two fishery harbours, viz. Dondra & Mirissa also supported this mission. Professor Sena S. De Silva, who was the founder Professor of Zoology at the University of Ruhuna, was instrumental in establishing the Faculty as he introduced Fisheries Science into the Zoology curriculum at the University of Ruhuna. His dedication to Fisheries Science research and education enabled him to first establish a sub -Department of Fisheries Biology under the Department of Zoology in 1986 and then a Department of Fisheries Biology in the Faculty of Science in 1988. Professor Kapila Dahanayake is the first person to propose at a meeting of the Natural Resources Committee of NSF that a Faculty or an Institute for Marine Sciences should be established at the University of Ruhuna. This was in response to a recommendation made by a former Minister for Science and Technology, Late Hon. Batty Weerakoon, to establish such an institution in Sri Lanka. This proposal was forwarded to the Senate and to the Council of the University of Ruhuna, which responded positively, as Professor R.H. Wijenayake, Professor Ananda Gunathilake, Dr. N.P. Wijeyananda, Professor Danny Athapaththu, Professor M.P. De Silva, Dr. D.S. Jayakody, Dr. P. Gunaratne, and Professor P.R.T. Cumaranatunga have been appointed to the sub-committee of the Senate. The generous financial assistance of nearly Rupees 120 million given through Coastal Ecology and Marine Sciences Programmes of the SAREC and SIDA of Sweden, for capacity building in the Department of Fisheries Biology and marine research activities, was a foundation for the establishment of the Faculty.

The Faculty

The Faculty of Fisheries and Marine Sciences & Technology (FMST) was established by an extraordinary Gazette No. 1412/36 on 30th September 2005, and the ceremonial inauguration was held on 8th November 2006, followed by the intake of the first batch of students on 9th November 2006. The Faculty of Fisheries and Marine Sciences & Technology comprises three Departments.

- (i) Fisheries & Aquaculture (FAQ),
- (ii) Limnology (LIM), and
- (iii) Oceanography & Marine Geology (OCG) (Fig.1.2)

The FMST acquired its own land by 2010 and initiated the building project for an administrative block in 2012. Until the project was completed in 2015, the degree programme was conducted in a limited space within the Faculty of Science. The name of the Department of Limnology has been changed as the Department of Limnology and Water Technology by an Extraordinary Gazette No. 1948/58 on 8th January 2016. Building facilities of the FMST were further improved with the addition of the department complex, which was opened in 2017. Before producing the first batch of FMS graduates, the Faculty held a stakeholder workshop in 2010 with the participation of subject experts from other universities and research and development institutes of the country, and also with the students of the first batch who were in their final year, with a view to further improving the FMS curriculum and to explore other possible developments.

Programmes

The Faculty has offered a Bachelor of Science Honours in Fisheries and Marine Sciences (FMS), a four-year degree which complies with Level 6 of Sri Lanka Qualification Framework (SLQF), since November 2006. Undergraduates pursuing a Bachelor of Science in Fisheries and Marine Sciences degree programme will get the opportunity to specialize in Fisheries or Aquaculture. The student intake for the programme is from a separate z-score window.

The Bachelor of Science Honours in Marine and Freshwater Sciences was introduced as the

second degree programme in 2017. Since the new degree Programme is still in its 3rd year of operation, the scope of this review is to assess only the FMS degree programme, which produced graduates from 2011 onwards.

ORGANIZATIONAL STRUCTURE OF THE UNIVERSITY

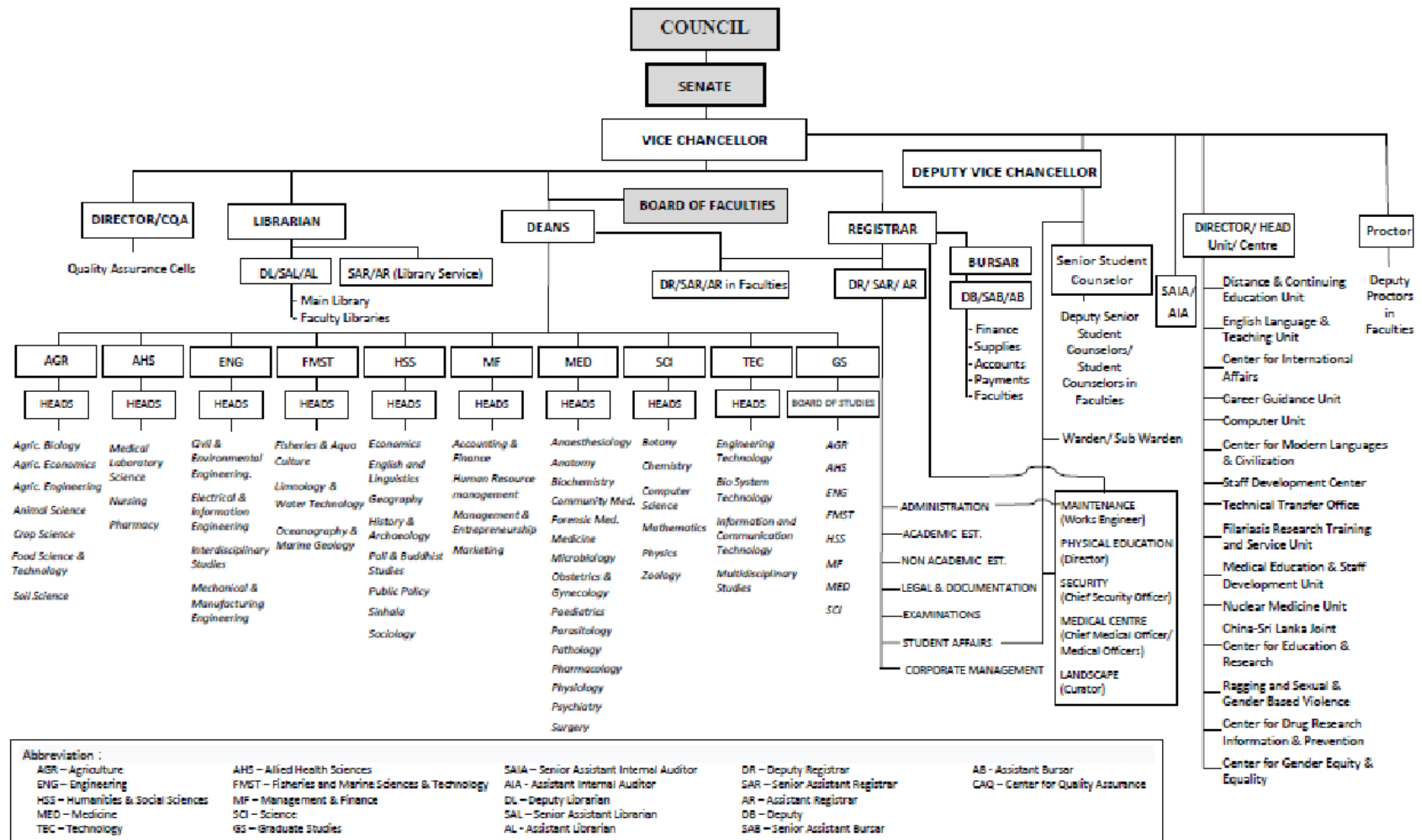


Fig.1.1 Organizational Structure of the University

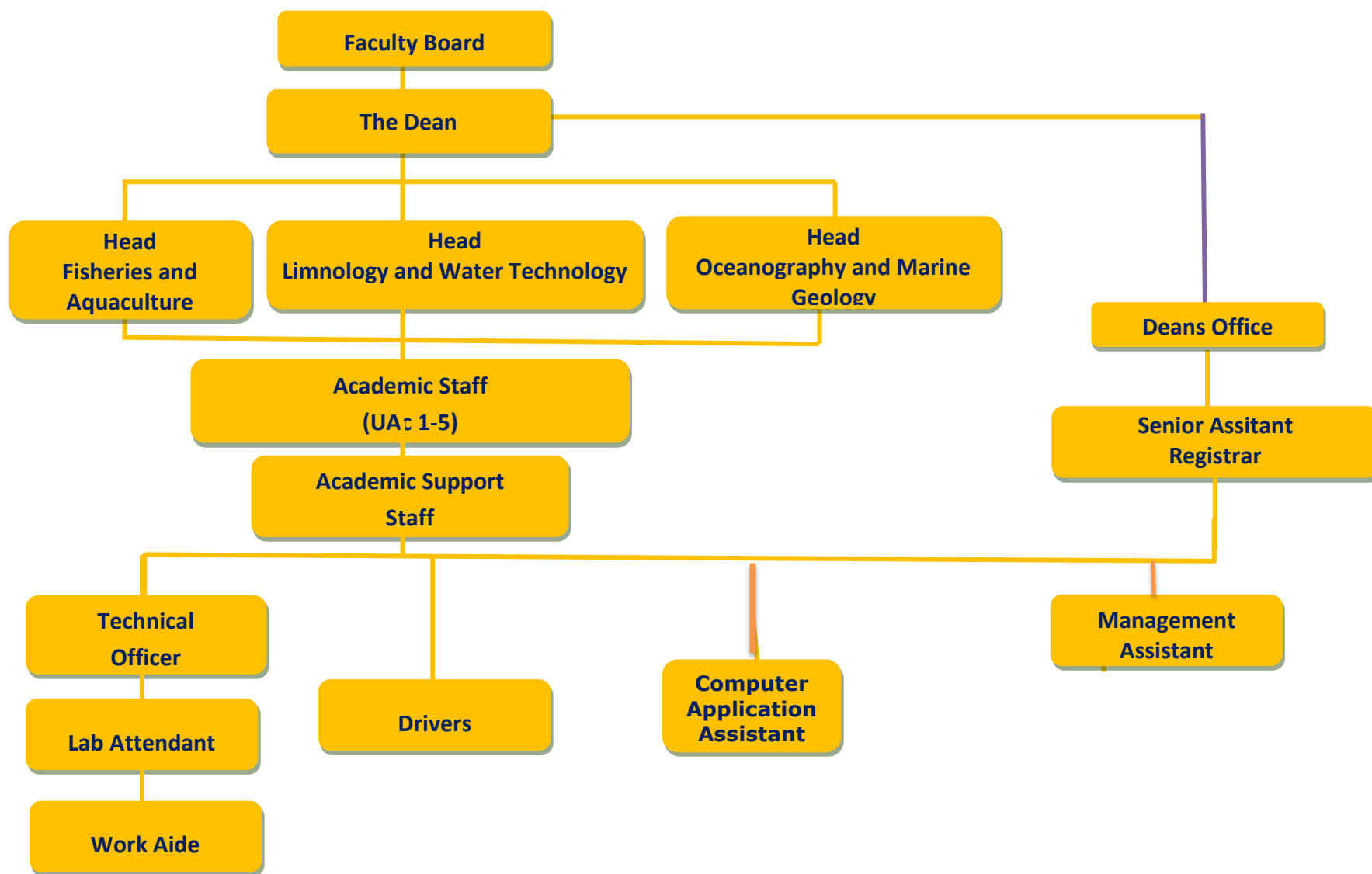


Fig.1.2 Organogram of the Faculty of FMS

In the first and second years, all students in the FMS degree programme are enrolled in a common curriculum through its core courses. From the third year onwards, students can select their specialized areas in Fisheries or Aquaculture, making it the 2 + 2 Programme (Table 1.1). A total of 229 students were enrolled in all levels for the FMS degree programme in 2020.

Table 1.1: Subject selection of FMS students

Levels in SLQF	Student Enrolled					Total Students
3	64					64
4	80					80
	Subject of Specialization	Fisheries	Aquaculture	Limnology	Oceanography and Marine Geology	
5		6	24	17*	16*	63
6		2	10	3*	7*	22
Total/Specializing		8	34	20*	23*	229

* Student Registered for Bachelor of Science Honours in Marine and Freshwater Sciences

The Staff

The Faculty of Marine Science and Technology comprises an academic cadre of 32, of which 5 cadre positions are vacant. They maintain a healthy student-teacher ratio of 7.15 according to the data provided by the SER (student: Teacher ratio is 1:10 for the programme of FMS according to the UGC circular 4/2019). However, the Faculty has 37 academic cadres, and student numbers of both programmes in 2020 were 357, making the student-teacher ratio of 9.65 (Table 1.2). The Faculty has employed 30 temporary academic positions, which does not equate with the UGC circular 4/2019 of Permanent: Temporary ratio of 2:1. There are no considerable notes on the non-academic cadre.

Table 1.2 Academic and non-academic staff of the Faculty of Marine Science and Technology in 2022

Job Category	Dean's Office	FAQ	LIM	OCG	
<u>Academic Staff</u>					
Emeritus Professor		1			
Chair Professor		(1)	1	(1)	
Senior Professor					
Professor		1	1		
Associate Professor					
Senior Lecturer Gr. I		1		1	
Senior Lecturer Gr. II	1	2	3	3	
Lecturer		2		2	
Lecturer (Prob.)		5	2 (2)	2 (1)	
Total permanent academic	1	11 (1)	7 (2)	8 (2)	
Temporary Lecturer		2	4		
Temporary. Demonstrator	1	8	8	7	
<u>Academic Support Staff</u>					
Aquaculturist		1 (1)			
Research Assistant			1	1	
System. Analyst	1				
Computer Instructor	(1)				
<u>Non-academic staff</u>					
Senior Assistant Registrar	1				
Technical Officer	1	1 (2)	1 (2)	1 (2)	
Computer Application Assistant	3	1	(1)	1	
Laboratory Assistant	(1)	3	3	3	
Office Assistant	3	1	1	1	
Driver	2 (1)				
Total staff	13 (3)	28 (4)	25 (5)	22 (4)	88 (16)

Learning Environment

Library Facilities

The main library of the Wellamadama premises offers a large collection of books and periodicals (online and printed) with an online catalogue, access to electronic databases, the free use of laptops within the library, a learning common for discussions and activities, an e-resource centre, and an inter-library loaning and article request service to students of the Faculty. Approximately 10 students of the Faculty use the reference section while approximately 30 use the lending facilities daily.

Being situated within the main campus, FMST students have access to the facilities provided by the main library, which is open from 8.00 am to 6.00 pm throughout the week except on Sundays and Public Holidays. Students are allowed to borrow books and take them outside the Library (Table 1.3). The Library staff conduct a course unit on Information Literacy and Library Skills (FDN3122), which is compulsory for Level III students.

Table 1.3: Library Policy on Borrowing Books

Allowed no. of items			
Study Level	Lending books	Reference books	Electronic media
Level 1	3	1	1
Level 2	4	2	1
Level 3	5	2	1
Level 4	6	2	1
Postgraduate	3	1	0

English Language Teaching

The Department of English Language Teaching (DELT) functions under the Faculty of Humanities and Social Sciences, while serving all faculties of the University to develop English language skills of undergraduates. The DELT provides undergraduates with a working knowledge of English through its proficiency courses in English. English proficiency courses are compulsory for all undergraduates in the Faculty. DELT offers English courses for FMST students during the first three study levels, as Foundation courses (FDN) (Table 1.4).

Table 1.4: Courses offered by DELT for FMS students

Study Level	Course		Credit value/ duration
	code	Course name	
Orientation period		Orientation English Programme	Everyday 8.00 am – 12.00 pm
Level 1	FDN1111	Preliminary English - I	1
	FDN1211	Preliminary English - II	1
Level 2	FDN2111	Intermediate English -I	1
	FDN2211	Intermediate English -II	1
Level 3	FDN3111	Advanced English - I	1
	FDN3211	Advanced English –II	1

Laboratory Facilities

With two new building complexes, the FMST possesses sufficient laboratory space to conduct undergraduate degree programmes. However, some of these spaces have not been furnished yet due to a lack of funding (Annexure III).

Computer Facilities

The FMST possesses a common computer pool with 50 desktop computers. In addition, all three departments have reserved places for mini-computer labs with a seating capacity of 20 students in each. The Department of Oceanography and Marine Geology has already established its mini computer lab, while the other two departments have initiated the procurement process for purchasing computers and furniture.

Student Support System and Management

The academics of all three Departments serve as student counsellors in the Faculty. Faculty members maintain student consultation hours and ensure support for both academic and personal issues. All Departments use the LMS extensively to provide teaching slides, assignments and guidelines, additional reading and resources, and to communicate with students in providing academic support.

The Faculty maintains a student-friendly environment conducive to teaching and learning. The Faculty practices a policy of zero tolerance of sexual and gender based violence (SGBV), which is particularly attractive to female students who make up over 80% of the student population in the Faculty. The Centre for Gender Equality of the University plays a key role in protecting the rights of female students and lecturers in the University. Additionally, the health centre, the gymnasium, and the canteens established in the campus premises and the off-campus hostel facilities available for students also contribute to the well-being of the students.

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

The review process was based on the Self Evaluation Report (SER), and this report presents the findings of a review of the quality of education submitted by the Bachelor of Science Honours in Fisheries and Marine Sciences Degree Programme offered by the Faculty of Marine Science and Technology (FMST), University of Ruhuna, Sri Lanka, since 2011. Although the Faculty has offered another BSc honours degree programme named Bachelor of Science Honours in Marine and Freshwater Sciences, it has not been included in the SER because the degree programme was in its 3rd year of operation at the time of SER submission in 2020.

At the pre-visit workshop held online, review members discussed their individual evaluations. The review team was of the view that the SER had been prepared according to the guidelines given in the Programme Review Manual, and there was ample evidence of a good participatory approach in appointing a writing team from among the academics, with clear TORs. The SER is in accordance with the guidelines of the Manual for Review of Undergraduate Study Programmes of Sri Lankan Universities and Higher Education Institutions, published by the University Grant Commission in December 2015.

The review process was completed in two steps.

(i) online desk evaluation of documentary evidence and

(ii) on-site visit

The review team members were provided with a soft copy of the SER through the UGC web portal, and the review team members were requested to complete an online desk evaluation prior to the on-site visit held on 16th of June 2022.

The SER contained four chapters covering 132 pages, including annexes. There were some documentary indications of periodic meetings and discussions held during the process of writing and compiling data into a final version of the SER. It was the general view of the review team that the evidence had been presented systematically alongside the standards, and many of the relevant documents were observed during the site visit.

Section 01 of the SER gives an introduction to the study programme, which gives an overview of the Faculty, the Honours programme offered by the Faculty, overviews of the departments under purview, the learning resource system, student support system & management and

SWOT analysis. The SWOT analysis given in pages 17 and 18 gives a comprehensive outlook of the Faculty. The Bachelor of Science Honours in Fisheries and Marine Sciences Degree Programme is the only one of its kind offered in the state university system, and the location, working environment, and qualified young, dynamic staff are identified as the strengths to offer the programme at the University of Ruhuna. The programme also includes well-defined intended learning outcomes related to the courses, imparting essential life skills through core courses, use of a learning management system (LMS), organization of cultural & sports activities, availability of Memorandum of Understanding and collaborations with foreign universities, and geo-cultural diversity for research. A wide range of choices in subject combinations, staff engaging in national-level research activities, and the preference of students with high aggregates in the science stream are its main strengths. It was noted that the lack of experienced senior academic and technical staff, dependence on visiting resource personnel, lack of foreign students, and higher per student cost for running the programme are the major weaknesses.

The elaborations in Section 1 were detailed enough for the review team to get an overview of the degree programme and the Faculty. Section 02 is dedicated to a brief overview of the preparation of the SER, which includes the names of the members of the writing team and the editors. Section 03 titled “Compliance with the criteria and standards” is the core of the SER, covering pages 25 to 127, and it includes an analysis of the 8 criteria prescribed by the QAC with a summary at the end of the analysis. As instructed in the manual, under this section, the information has been tabulated in five columns. The first column identifies the code of the standard, while the second column describes faculty adherence to the individual standard. Column 3 highlights the claims for the best practices, highlighting the level of achievement of the standard, while the final two columns are dedicated to the support claims and their respective codes.

Criterion 1: Programme Management has been highlighted under 27 Standards mentioned in the PR Manual. Successful attempts have been made to interpret the vision and mission statements of the University, Corporate Plan of the Faculty and its programme. The degree programmes are conducted under strong organizational and administrative mechanisms that incorporate innovative and standardized HEI practices, which ensure optimal participation by students and lecturers in how the programme is managed.

Criterion 2: Human and Physical Resources have been examined under 12 Standards. The programme is conducted by well-qualified and trained academics with ample teaching and research experience in a wide range of disciplines (Table 2.1). The physical resources available in the Faculty for conducting the programme are largely satisfactory, with some inadequacies,

particularly with regard to students with special needs. While some Departments have made effective links with potential employers for their graduates by way of internship programmes, others are currently in the process of exploring such possibilities. The newly introduced Enhancement Courses, soft skills development, and other training organized by the CGU are also instrumental in enhancing student employability.

Table 2.1: Academic Profile

Department	Professors UAc 5	Senior Lecturers UAc 3	Lecturers (confirmed) UAc 3	Lecturers (probationary) UAc 3	Support Staff UAc (1 & 2)
FAQ	01(01)	03	03	05	10
LIM	02	01	00	02 (02)	12
OCG	(01)	04	02	01 (02)	07

Criterion 3: Programme design and Development is elaborated in the next section under 24 Standards. In this section, attempts were made to demonstrate the faculty's adherence to the policies and practices relevant to the quality of programme design and development.

Criterion 4: Course/Module Design and Development has been summarized under 19 Standards. The SER has made efforts to highlight the commitment of the faculty to promote the out-come based education and student-centered learning.

Criterion 5: Teaching and Learning is explained by 19 Standards. Teaching on the programme is done using diverse approaches and techniques with particular attention paid to sustaining student interest and ensuring future employability. Technology-enhanced teaching through the LMS, online reading, slide presentations, and audio-visual tools are adopted, with research training and practical placements/ internships incorporated into the assessment scheme.

Criterion 6: Learning Environment, Student Support, and Progression have been discussed in this section with 24 Standards. A student-friendly environment that is caring and conducive is sustained by allowing students to be involved in decisions that concern their learning as well as their well-being. The Faculty orientation programme and similar Department-level programmes are successfully conducted throughout the academic year to provide information to students about university life. Several student-support mechanisms are put in place to provide academic support to students facing difficulties in IT and English. Counselling services are provided to help students deal with personal issues.

Criterion 7: Student Assessment and Awards contains 17 Standards. Student assessment is done as per the examination by-laws of the Faculty and in line with SLQF. It has been noted that procedures followed by the Faculty are designed to maintain fairness and transparency of student assessment. Assessment mechanisms pay considerable attention to developing soft skills that have been identified as necessary for employment.

Criterion 8: Innovative and Healthy Practices, having 14 Standards, covers information on policies on adapting UGC circulars, etc. This section has not paid attention to have the right to scrutinize the answer scripts nor has it paid attention to credit transferring as per SLQF guidelines.

At the end of each criterion, the review team was of the view that the SER team has summarized its findings, which was informative to get quick feedback for the readers. The review team considers that the SER has been prepared according to the guidelines given in the Manual for PR, and the sufficiency and the reliability of the evidence provided were examined thoroughly and extensively by the PR team through online materials provided through their LMS and during the visit to the Faculty. The compilation of documentary evidence can be identified as strength of the SER.

The SER does not provide any evidence on whether the strategies and activities are in place along with responsible persons, for the implementation of the Corporate Plan according to the set time frame at the Faculty level.

Section 3: Description of the Review Process

The programme review process was introduced by the Committee of Vice-Chancellors and Directors and the University Grants Commission (UGC) of Sri Lanka to maintain and improve the quality of higher education. The review process is directed by the Quality Assurance Council (QAC), headed by the Director and has been designed to improve the standards and quality of higher education. To fulfil that requirement, it has been decided to evaluate the quality of education within a specific programme of study for undergraduate programmes in Sri Lankan universities. The experiences gained during the first cycle (2004-2013) of Institutional and Subject Reviews by the QAC of the UGC have helped guide the process in a more relevant manner within the present context of higher education in Sri Lanka. The evaluation procedure specifically focuses on the quality of the student learning experience and achievements. The second cycle of programme review commenced with the evaluation of all Science-based Faculties within the UGC and this review is part of the second review cycle.

Due to the prevailing COVID-19 outbreak in the country, the review process has been scheduled in a hybrid mode: online platform and physical. The review process commenced with training given to programme reviewers by the QAC via the online platform on 16th June 2020. Then, reviewers were trained to carry out the online evaluation at the workshop held on 20th January 2022. The review panel appointed by the UGC consisted of Professor G.W.A.R. Fernando (Chairman, The Open University of Sri Lanka), Professor G.L.L.P. Silva (Member, University of Peradeniya), and Professor W.A.D. Nayananjalie (Member, Rajarata University of Sri Lanka). The review team members were requested to upload the desk evaluations to the online platform of the QAC before 31st March 2022. The review team members conducted the desk evaluation individually, following the guidelines given in the “Manual for Review of Undergraduate Study Programmes of Sri Lankan Universities and Higher Education Institutions” published by the UGC in December 2015, based on the evidence given in the Self Evaluation Report (SER) of the Faculty of Fisheries and Marine Sciences & Technology, University of Ruhuna, on the online platform from 1st March 2022 onwards.

The “Review Proper ” was started when the link to the document repository, which was uploaded by the Faculty of Fisheries and Marine Sciences & Technology, to the online platform on 18th April 2022, was made available to the reviewers. The team members went through the uploaded documents during the period of 20th April 2022 to 12th June 2020 and met online on 1st, 17th and 24th May 2022 in order to discuss related matters. The facts and findings of each reviewer have been further discussed at pre-site visit meetings held on 13th and 14th June 2022,

and the review team came to a consensus regarding the allocation of marks. After the online document review, the two-day site visit was scheduled on 16th and 17th June 2022.

The agenda of the visit was prepared and sent by the Chair/Review team with the agreement of the review team members and the schedule was finalized and submitted to the Director/QAC, UGC and Chair /FQAC, Faculty of Fisheries and Marine Sciences & Technology. During the review period, the team stayed at the Rest House, Matara. The review team visited the Faculty on 16th and 17th June 2022 to physically verify the contents given in the SER. The review team met in the assigned room and planned the activities according to the schedule of the site visit. Stakeholder meetings were conducted and the team visited the facilities available in the Faculty of Fisheries and Marine Sciences & Technology.

During the programme review, the team paid attention to the following six (06) aspects, as directed in the “Manual for Review of Undergraduate Study Programmes of Sri Lankan Universities and Higher Education Institutions”.

- Reviewing all documentary evidence furnished by the Faculty
- The presentation made by the Dean
- Information gathered at meetings held with the Faculty staff and other stakeholders as indicated in the programme schedule (Annexure I: *Site visit schedule*)
- Observing teaching/learning facilities (Annexure II)
- Information gathered during the observation of facilities available for students at the Faculty of Fisheries and Marine Sciences & Technology (Annexure III).
- Discussions with the SER writing team to get clarifications

The meetings held with the review team during the site visit are given in Table 3.1.

Table 3.1: Meetings held during the programme review process

No.	Meeting	Venue	No. of participating stakeholders
1	CQA/Director, Chair/FQAC	Faculty Board Room	3
2	Dean and Administration staff		5
3	HoDs and permanent academic staff/mentors		18
4	English language teaching and IT staff		7
5	Non-academic staff (TOs, MAs), Academic supportive staff, temporary staff		25
6	Directors/Chair-SDC, CGU, TTC, CGGE		7
7	Alumni members	Faculty Board Room & Zoom	40
8	Vice-Chancellor	Deputy Vice Chancellor's office	5
9	AR/Student affairs and student counselors	Faculty Board Room	6
10	Student union and students		21
11	Wrap-up meeting with Dean, HoDs and all academic staff		21

The review team discussed the relevant details regarding the degree programme at each of these meetings, and the information received was valuable for reviewing. The review team agreed that the meetings were highly satisfactory. It was noted that all stakeholder groups, including academic, administrative, & non-academics, students, alumni and other stakeholders were satisfied with the teaching/learning practices of the Faculty.

Meeting with the Director/CQA and Chair/FQAC

The review team visited the Faculty at 8.45 am on 16th June 2022 and first met Professor H.B. Asanthi, Chair /CQA, and Dr. U.A.D. Jayasinghe, former Chair/FQAC of the Faculty. Professor Sudheera Jayasinghe, the Acting Director/CQA of the University of Ruhuna described the activities conducted by the CQA. She also explained the plans and scheduled activities to enhance the quality of degree programmes offered by the University. The current Chair and former Chair/FQAC of the Faculty described the services rendered by the CQA and plans. It was pointed out that FQAC has organized necessary training and helped in preparing the SER. The FQAC is planning to expand its activities and reorganize the unit.

Meeting with Dean and Administrative Staff

The next meeting was held with the administrative staff of the Faculty: Dean, Senior Assistant Registrar, and Assistant Bursar. The review team was welcomed by Professor K.H.M.A. Deepananda, the Dean of the Faculty and Professor. H.B. Asanthi, the former Dean, also participated in this meeting. It was mentioned that the initial communications of the PR process were notified to the Faculty of Fisheries and Marine Sciences & Technology by the UGC with the letter dated 2019-03-19. Accordingly, UGC was informed about the willingness to conduct PR by letter dated 2019-07-12. The Dean made a detailed presentation on the current status and performance of the Faculty and explained that they offer two degree programmes. However, only one degree programme (Bachelor of Science Honours in Fisheries and Marine Sciences) was considered for the SER as mentioned in Section 1 of this report. The FMS degree programme offered by the Faculty is an honours degree. He explained the current structure of the degree programme offered and the facilities available at the Faculty. This presentation enlightened the review team on programme study and study streams conducted, infrastructure available and major constraints they face during the delivery of the academic programme. Ms. K.G.C.A. Bandarathilake, Senior Assistant Registrar, and Mr. D.C.R De Zoysa, Assistant Bursar explained their roles and duties to carry out the functions of the Faculty smoothly. The Assistant Bursar highlighted the fact that laboratory services provided by the Faculty are earning extra money, which is helpful in looking after certain department requirements, such as repair of equipment.

Meeting with Heads of the Departments and the Academic Staff

The meeting was held at 10.00 am in the Faculty Board Room with the participation of the Heads of the Departments and all academic staff members (Annexure IV). The meeting was concluded successfully, and it allowed the review team members to clarify the doubts raised during desk and proper evaluations of the degree programme done in online mode.

Meeting with English Language Teaching and IT Staff

Dr. S.G.S. Samaraweera, Head/DELT, Dr. H.L.K. Sanjaya, Coordinator/English, Ms. R.D.N. Wijesinghe, Coordinator/Computer, Mr. A.W.A.T. Dilhan, Instructor/Computer Technology, Ms. W.A.L. Madushika, Programmer Cum System Analyst, and other staff members attached to DELT and IT Unit participated in this meeting. They explained the assistance they gave to the degree programme. The review team was clear about the services provided by these two units in order to facilitate the teaching and learning process. The review team noticed that the two coordinators bridged the DELT and IT with the academic programme, and the review team was highly impressed with the work done by the two coordinators.

Meeting with the Non-academic, Academic Support Staff and Temporary Staff

A meeting was held with non-academic, academic support staff and temporary staff. The review team discussed the problems faced by them, which are related to new cadres, promotions, training, and the requirement for equipment. The team discussed the shortcomings relevant to their duties. Non-academic staff would be happy to have timely training to update their knowledge. It was highlighted that there was insufficient manpower, especially technical officers, and recruitment needs to be done soon. Demonstrators brought to the notice of the review team that they have to repeat the same practical session due to having less space in laboratories, especially when conducting practical classes for Level I and II students.

Meeting with Directors/SDC, CGU, Chair/TTC, Representative/CGEE

Professor W.N. De Silva, Director/SDC, Professor T.S.L.W. Gunawardana, Director/CGU, Dr. U. Premarathne, Chair/TTC and faculty representatives to these units, and Dr. R.M.G.N. Thilakarathna, Representative/CGEE, participated in this meeting. They all explained their role in improving the quality of the degree programme. Director/SDC highlighted the training programmes offered for different categories of staff members, and the review team noted that both academic and non-academic staff members benefit. Director/CGU explained the workshops conducted by their unit for students in order to build up their capacity and personality. Chair/TTC highlighted the services of TTC and possible guidance and services that they can offer in the commercialization process and applying for patents. A faculty representative to the CGEE explained the training that she had in this task and her role in ensuring gender equity.

Meeting with Alumni

This meeting was held in hybrid mode as some alumni joined online from distant places, including overseas destinations. Alumni were found to be strong and highly supportive, and it was observed that the Faculty is not utilizing the support fully, though they are currently involved with different activities in supporting the degree programme. The review team observed that there are many alumni engaged in postgraduate studies in foreign countries, and there is a significant number of academics serving in the Faculty of Fisheries and Marine Sciences & Technology and other Sri Lankan Universities. They proposed to increase the practical exposure, especially by increasing the time duration of industrial training in the degree programme.

Meeting with the Vice Chancellor

The team visited the Vice Chancellor's office, where they met both the Vice Chancellor and the Deputy Vice Chancellors on 17th June 2022. The meeting place was the Deputy Vice Chancellors' office. Professor Sujeewa Amarasena, Vice Chancellor, explained the current situation and the assistance rendered by the administration division of the University of Ruhuna to the Faculty of Fisheries and Marine Sciences & Technology. He also explained the difficulties in the recruitment of non-academic staff. The Vice-Chancellor also emphasized that they are addressing recruiting qualified academics to the University. He was happy with the student activities carried out at the University with non-violence. The review team members briefed their major observations to the Vice-Chancellor and recommendations are included in the document.

Meeting with AR/Student Affairs and Student Counsellors

The review team met Ms. P.N.N. Wickramasinghe, AR/Student affairs and Dr. S.S. Herath, Deputy senior student counsellor, including the other student counsellors. All of them explained how they assist the students in carrying out their academic activities in a smooth manner. They also explained in detail the selection procedure for hostel facilities in response to a query made by a member of the review team.

Meeting with the Students

The Faculty has invited a student group representing different batches who are currently studying in the Faculty. At the beginning of the meeting, the Chairman of the review team explained the reasons for this Programme Review visit and invited the views of the student community on the matters with regard to the teaching and learning process. They conveyed that teaching procedures, physical resources, and internship and hostel facilities should be further improved. The students were satisfied with the current academic activities and the available facilities. However, they mentioned the insufficient internet facility (Wi-Fi) within the University. The students are happy with the existing MIS and LMS systems in the Faculty and the maintenance of the portfolio. Students are facing some difficulties these days with the canteen facilities due to the current crisis in the country. All students are not having hostel facilities, though the majority in the first and final batches receive hostel facilities. The students also mentioned that Industrial Training has been introduced for the programme and they prefer that the time period could be increased from what is practiced now (2 months).

Apart from these meetings, the review team witnessed the physical facilities and also went through some documentary evidence for clarification.

Department and Laboratory Visits

The review team visited various facilities during the site visit, which are given in Annexure III. The review team noted that the facilities are highly satisfactory and functioning well. There is a conducive learning environment in the lecture halls. Further, the well-facilitated auditorium is also used when there is a need.

Some of the laboratories are equipped with new equipment, and some of the laboratories are still to be furnished and provided with equipment. In order to complete these laboratory facilities, further funds are required. However, the review team observed underutilization of these facilities, and recommendations are summarized in the document.

The review team also observed student computer facilities. There was a 50-capacity computer laboratory with a few smaller computer laboratories, which provided a sufficient number of computers for students. There were many spacious rooms, and there is a possibility of introducing a mini library for each department, especially focusing on research students.

The review team was unable to observe lecture sessions or practical classes with the existing timetable. However, the team met with research students while they were working on their research projects.

Library Visit

The review team visited the central library of the University, which provides services to the FMS programme. The senior assistant librarian, staff members attached to the library, and the coordinator of the Faculty of Fisheries and Marine Sciences & Technology explained their services and how they facilitated the student learning process.

Checking Documentary Evidence

At the end of the first day, the review team commenced to observe evidence for the SER report submitted by the Faculty since some queries had arisen during the proper evaluation in online mode. The review team scrutinized the documents made available to verify the queries. However, some of the evidence was not available or was not relevant to the standards of the criteria. When scrutinizing the documents, the review team called the writing team when there was a need to verify the evidence provided. All the additional information requested by the review team in order to verify certain processes and practices was provided promptly by the Senior Assistant Registrar and the SER writing team when available.

The Wrap-up Meeting

The final wrap-up meeting to conclude the review was held in the Board Room of the Faculty of Fisheries and Marine Sciences & Technology on 17th June 2022, with the presence of the Dean, Chair/FQAC, HoDs, and all the academic staff members of the Faculty. During the meeting, the reviewers conveyed their views, observations and findings to the members of the Faculty.

The review team was very satisfied with the arrangements made by the Dean, Chair/FQAC, and the SER writing team to conduct the site visit, and all of them were pleasant and highly cooperative in the process. The review team appreciated the Dean, Heads and the academic staff for the suitable arrangements, extended cooperation, generosity and hospitality extended to the review team during the site visit. A very productive and positive discussion on improving the quality of the programme was carried out, and after the site visit, the key findings and the final report were submitted to the QAC of the UGC.

Section 4: Faculty's Approach to Quality and Standards

The Faculty has established its Internal Quality Assurance Cell (IQAC) in January 2016 with its composition in accordance with the by-law of Internal Quality Assurance by the Council of the University of Ruhuna. Thus, the establishment of IQAC is in accordance with the Internal Quality Assurance Manual (2013) of the UGC and the QAC circular of 2015. The review team observed that the IQAC works in liaison with the Center for Quality Assurance (CQA) of the University, which conducts regular meetings (once a month) where all the coordinator of the IQAC is a member, thus functioning systematically. It was noticed that a council member has also been included in the composition of the CQA. The CQA is now taking action to develop the policy document and SOPs pertinent to the curriculum design and development process.

The Faculty has established the IQAC with defined functions, including curriculum development and monitoring. The IQAC is represented by each department of study, a senior academic staff member, a student counsellor, and the Senior Assistant Registrar of the Faculty. The review team noticed that the IQAC cooperates well with the CQA and conducts regular meetings to discuss matters pertinent to the faculty quality assurance before reporting them to the Faculty Board, where the matters are discussed under an agenda item. The IQAC office is located in a central place and the review team observes that the documentation is being organized at present.

The Faculty claims that it possesses well-trained human resources and sufficient physical resources to offer the study programmes at a high quality and standard. The FMS degree Programme is conducted by 27 well-qualified academic staff members, including three professors and eleven senior lecturers, with the support of 59 other academic support staff, administrative and non-academic staff members working on a temporary or permanent basis. It was observed that the FMS degree programme, which has a unique subject combination, is offered with the essential learning activities to achieve the required knowledge and skills pertinent to the relevant subject areas. The Faculty claims that it has identified the required blend of diverse learning strategies, including the field/ ocean excursions and laboratory -based investigations. The Faculty shows that the effort of dedicated staff is depicted by the evolution and achievement of the degree programme since the year 2011, in which year the first batch of FMS students graduated.

The Faculty claims that SDC conducts mandatory training programmes for newly recruited academic staff and also provides opportunities for a variety of training programmes to its academics on quality assurance related aspects, particularly on programme design and conduct,

with the help of the Staff Development Center on various occasions. Therefore, the FMS honours degree programme is offered through a well-defined organizational and administrative mechanism by incorporating effective teaching and learning practices with the optimal participation of both students and staff. The services rendered by staff members for the effective offering of the degree programme are rewarded in addition to their routine scheme of promotions and annual increments, and mechanisms as encouragements.

It appears that the Faculty has worked towards developing links with national and international agencies in student training and in creating employment opportunities. The industrial training programme, which is placed at the end of the degree programme, is said to aim to increase employment opportunities. The Faculty is now taking steps to identify credit value for the industrial training programme to make it a better offering with the required rigor. The effort of the Faculty in following Outcome-Based Education (OBE) and adopting Student-Centered Learning has been highlighted through making significant efforts and commitments to promote Outcome-Based Education and Student-Centered Learning to enhance the quality of delivery and the outcome of the degree programme. The facilities provided at the University library are common for all the faculties, though the Faculty has initiated a collection of materials to cater to the specific needs of the relevant subject areas. In addition, students are provided with adequate IT facilities and wi-fi zones promoting the learning facilities necessary for the academic programme.

The Faculty claims that it is making every effort to create a student-friendly environment from the beginning of student life by introducing the essential details of the study programme at the orientation programme.

Section 5: Judgment on the Eight Criteria of Programme Review

The Self-Evaluation Report of the FMS degree programme has a detailed account of the programme standards on which the FMS qualifications are currently offered. The programme-specific evidence supporting the standards has been made available through the Document Management System before the site visit. The reviewers have carefully perused the claims made in the SER and the relevant information provided in claiming the degree of internalization of best practices and the level of achievements of standards stated in the SER. The marks were allocated 0, 1, 2 or 3, depending on the relevance of the documentary evidence produced and the width and the breadth of evidence.

Criterion 1: Programme Management

The programme management of the FMS degree programme is greatly supported by the organizational structure, which has essential elements necessary to carry out the core functions pertinent to the programme of study. In addition to the administrative strength within the Faculty, the programme management is supported by centers and units at the University level.

The Faculty adopts good practices such as adhering to the University Act, by- Laws, and the Strategic Management Plan in making decisions on academic matters, in conducting assessments, and making decisions on human resources available within the Faculty, and in making improvements to the study programme. The Faculty makes decisions in the conduct of the degree programme according to the academic calendar, which is made available for both students and staff on time, and academic timetables are prepared accordingly.

The Faculty maintains a very user-friendly LMS, which is used effectively by both staff and students. The handbook of the degree programme is issued every year, and it provides the relevant information regarding the institute, degree programme and student life in the university.

The Faculty adopts the SLQF, but the Subject Benchmark Statement is not in place for the subject area of the degree programme. Some academic staff members of the Faculty are contributing to the preparation of the SBS at the national level. In the future, the FMS has to prove its compliance with SBS once developed. The Faculty practices policy and procedures for programme approval and implementation. The accountability of resources has been ensured by adopting proper auditing and maintaining records.

Good Practices

The Faculty maintains a conducive environment and administrative structure for effective learning engagement during the study programme.

Areas for Improvement

Documentation and compilation of information on different activities pertinent to programme management must be done regularly and properly, for example, of HoDs meetings and Department meetings.

The Faculty committees have to be well defined, and ToRs must be developed

The crucial academic documents, like the prospectus, must be developed for the programme.

Policy documents pertinent to programme management have to be developed and adopted.

Proper documentation of the curriculum development process, including the collection of evidence, stakeholder feedback, external review, monitoring process, etc. is needed.

The documentation system of the FQAC must be established and its functioning must be regulated with adequate human and physical resources.

Criterion 2: Human and Physical Resources

The three departments of study ensure that the subject areas necessary to offer the required knowledge and skills for the FMS degree programme are delivered in sufficient depth and rigor. In this connection, the review team noticed that each department has the strength of qualified and energetic academic staff with a positive mindset, which is much needed to conduct the programme without interruption. However, there is a need to identify some non-academic positions in all three departments in order to conduct the practical programme efficiently. As observed, the Faculty has taken commendable steps in developing physical resources, especially the laboratories, where technical expertise needs to be assigned to take advantage of such improvements. It was observed that many academic staff members have shown their research orientation by publishing their research findings in national and international journals.

An induction programme for newly recruited academics is being conducted continuously by the Staff Development Center of the University, which offers the Certificate Course for Professional

Development in Higher Education (CCPDHE). It was observed that the courses are revised regularly based on the feedback of the stakeholders/ need assessments. In addition, there is a continuous awareness programme in place to disseminate knowledge in teaching and learning strategies, especially on remote teaching techniques. The Faculty and the University have established centers (e.g., Technology Transfer Office supported by the AHEAD project) aimed at the staff/ student exchange, resource development, transferring technologies, etc. However, more opportunities for a continuous update in knowledge and skills in different subject specific matters need to be created.

The coordinator of the English Language Training Unit of the Faculty works closely with the DELT staff of the University in designing/ updating the syllabi at the beginning of the semester. The DELT staff carry out the teaching, and the review team observed that the DELT staff offer a satisfactory programme for the FMS degree programme.

Infrastructure facilities are up to the standard, including the IT facilities, which is supported by a dedicated staff. The Faculty receives the services of the central library facility of the university, which provides commendable service. The central library looks after the faculty's requirements through a management committee, which is represented by the Faculty.

Moreover, the career guidance counsellors who are working in collaboration with the CGEE of the University follow the university policy of 'being a center for producing creators and not job seekers'. The Career Guidance Unit of the Faculty functions properly and maintains an informative webpage giving all the information for its stakeholders.

The Faculty has taken a keen interest in building a conducive environment not only for knowledge and skill development but also for personal development of the student by creating opportunities for social and multi-cultural events and to promote social harmony and cohesion among the students.

Good Practices

The Faculty has made considerable efforts to develop and maintain physical resources to support the quality offering of the degree programme.

Areas for Improvement

Some subject- specific academic positions and non-academic positions should be filled

Continuous training for staff to acquire up-to-date knowledge in the relevant subject areas should be planned.

Staff development programmes for non-academic staff members need to be further strengthened.

Criterion 3: Programme Design and Development

The Faculty claimed that programme design and development have been done under the purview of a FB appointed committee, which considered stakeholder analysis, industry requirements, and national requirements. The revision of the degree programme commenced even before the completion of the four-year cycle by an academic board, which was later converted to a CDC. It is evident that the Faculty has fulfilled the criteria in relation to the programme design and development to a certain extent. A complete range of evidence could not be found, probably due to the non-availability of the process of documenting evidence. Thus, only comments from one external reviewer are available on the design and development process of the study programme.

The programme design complies with the SLQF guidelines in the absence of SBS. The Faculty expresses confidence in compliance with SBS, as its members are serving on the experts' committee in formulating SBS. The Faculty has a well-defined vision and mission that aligns with the University's vision and mission. It would have been nicer if a simple mapping had been done to show the alignment at different levels. The Corporate and Strategic Plans are straightforward and carry forward thinking and are feasible in implementation.

The graduate profile and the programme learning outcome (PLOs) are clear and concise. The mapping exercise done to depict the individual courses with PLOs is commendable. However, the evidence of this detailed mapping has not been claimed in the correct place in the SER, probably due to misjudgment in the interpretation of the claim. For instance, standard 3.5 is not the correct placement for this evidence.

Though there are adequate elements available within the curriculum, there is a serious lapse in demonstrating the evidence relating to constructive alignment, which is the fundamental

aspect of OBE-SCL. This has led to placing a strong emphasis on demonstrating that the programme design was based on these aspects.

The FMS programme is unique in its kind and consists of an impressive practical training component and industrial placement as integral components. Therefore, the SER could have capitalized on the unique structure it possesses in showing the learning progression of students and the intellectual challenge embedded in the programme with clear, measurable process indicators and outcome- based performance indicators.

Good Practices

The FMS programme has a well-defined and straightforward graduate profile, and it has been designed following the KSAM model.

Areas for Improvement

The Faculty/ institutional policy on curriculum development needs to be formulated, and the SOPs must be adopted.

Stakeholder engagement in the programme design and development process has to be properly documented and incorporated.

Opportunities for the staff members to get trained on Curriculum Development need to be adequately created.

Student feedback/satisfaction surveys /module feedback must be done on a regular basis.

The curriculum monitoring process should be initiated.

Clear identification of courses at the foundation, core and advanced levels is needed.

Criterion 4: Course/Module Design and Development

The Faculty claims that internal and external subject experts have contributed to course design and development in a participatory manner. The courses in the present curriculum have been designed and developed in two stages, where the original set of courses has been subjected to evaluation after three years of offer, and stakeholder feedback was considered in course

development after a certain period. The reason behind the time taken for course development is not clear.

According to the process of approval adopted by the Faculty, the curriculum development committee, which is mandated for curriculum development, approves the courses before Faculty Board approval. Then, the Senate approval has been obtained, completing the internal process of approval. However, the review team observed that evidence of minutes of the course development committee, course evaluation reports, and evidence of use of SLQF and dropout rates are missing. A comprehensive map has been developed both quantitatively and qualitatively by aligning the course learning outcome with the programme learning outcomes. This exercise is commendable. However, there is a lack of evidence on constructive alignment and course sequencing in the whole process of course design and development. In the absence of an undergraduate prospectus, access to course specifications is restricted. However, the Student Handbook provides a list of courses in brief.

Good Practices

Course mapping has been carried out in detail, depicting the alignment of course Intended Learning Outcomes (ILOs) with programme ILOs (PLO).

Areas for Improvement

Student Centered Learning and self-directed learning concepts have not been attempted much in identifying Learning and Teaching strategies.

Course sequencing has to be carried out effectively by identifying the level of achievement of learning.

Constructive alignment of each course is needed

Internal monitoring strategies to evaluate and improve courses are needed.

Evidence of staff training on instructional design and development of courses is limited.

Criterion 5: Teaching and Learning

The Faculty has a methodical approach to organizing the teaching activities and facilitating students' learning. The academic calendar is made available on the Faculty web and frequently

updated, in addition to the timetables, which are prepared and made available to both staff and students on time. Apart from those managerial practices, the Faculty has taken steps in introducing innovative teaching strategies by conducting regular programmes through the Staff Development Center, which is appreciated.

The review team noticed that the Faculty has developed a method of calculating the workload of academic staff to ensure transparency in the distribution of responsibilities among the staff. Given the small class size and small groups in practical sessions, the level of teacher-student interaction is high. The review team noticed that the Faculty maintains a good student: teacher ratio according to the norm prescribed for the higher education system.

Monitoring of student progression is a little weak, as there was no evidence of a proper process in this connection. The course and teacher evaluations have been done from time to time, though there is no evidence of approval of the procedure adopted by the Faculty. It was also noticed that evidence on the incorporation of feedback on course evaluation for the improvement of delivery is missing. The evidence on blended learning and strategies for deep learning exercises is missing. However, students agreed that the learning experience they have in the Faculty is satisfying, though there are places to be improved given certain limitations. Some of the drawbacks in teaching and learning aspects could have been avoided by having a proper peer evaluation process, which is lacking at present. There is no mechanism for identifying excellence in teaching. Given the resources available in the Faculty, this aspect should be more formalized and efficiently implemented with a small additional effort. The review team noticed that the University practices rewarding systems for research and teacher excellence, in addition to rewarding learning through certain performance evaluation processes.

Since the FMS degree programme has a considerable practical orientation, the Faculty pointed out the difficulties in accommodating the differently abled candidates for the programme, though there is no discrimination made in their selection criteria. The Faculty claimed that they did not face any situation thus far in relation to this aspect. However, the Faculty has all arrangements made to accommodate the temporary disabilities of students in their learning environment. Nevertheless, the Faculty follows learning and teaching strategies that are not gender biased.

Good Practices

The Faculty maintains a very good student -staff ratio and updates the teaching learning strategies through regular training sessions conducted by the Staff Development Center.

Areas for Improvement

Proper mechanisms and approved processes need to be established to conduct peer evaluation and teacher and course evaluation, and the incorporation of feedback from those evaluations.

Focus on blended learning adequately, and appropriate teaching and learning strategies have to be improved.

Steps need to be taken to ensure the incorporation of feedback on teaching and learning strategies for the improvement of the effectiveness of delivery.

Criterion 6: Learning Environment, Student Support and Progression

The Faculty has a favourable and caring environment and greater interaction among students and the staff. The Faculty has taken steps to maintain a student-friendly administrative, academic, and technical support system available for programme delivery. The Faculty arranges different awareness programmes to educate new entrants regarding university life and their role as students, especially by-laws, rules, and regulations pertinent to the course curricula and relevant assessments. The Faculty, with the help of Student Counsellors, organizes an orientation programme during which time students are exposed to those details, making them ready to embark on undergraduate studies.

As described under section 5.2, the learning environment is conducive and supportive for students to carry out learning engagement effectively. The library facilities, laboratory facilities, computer facilities, and other facilities necessary for soft skill development are appreciable. The services offered to students by the central library include self-access to PCs, Wi-Fi internet access, inter-library loan facility, and support to use software like plagiarism checking for academic works. The ICT-led tools to facilitate students to access and use information effectively for academic success are commendable. The faculty LMS is user-friendly and up-to-date, and helpful for students as well as staff in working within the learning environment.

The Faculty has taken steps in creating a learning environment more conducive for students by facilitating and encouraging co-curricular activities such as sports and aesthetic programmes. In addition, students have been connected to the alumni of the Faculty, especially in creating opportunities after graduation, i.e., either for employment or postgraduate studies.

The Faculty has no policy on the fallback option. But the Faculty supports the students to be successful in learning progression during the study programme by facilitating healthy student-

staff interaction and offering diverse learning opportunities. However, the Faculty is lagging with regular monitoring of progression during the undergraduate programme, though it maintains good contact with alumni employment tracer information. The reviewers observed that the Faculty encourages students to report any matter requiring urgent attention through the counselors. The evidence ensures that the student support opportunities are accessible and communicated.

The review team is of the view that the Faculty has sufficient infrastructure for their learning environment and student support and progression. In addition, the learning experience has been further enhanced through field visits (ocean excursions) and internships, which are now being planned to be offered as a credited course at the end of the programme.

The service laboratory managed by the Faculty for water testing, etc., is a commendable initiative, which provides an additional opportunity for the Faculty for students to get exposure to the working environment and strengthen the private-public partnership.

Good Practices

The Faculty maintains a good interaction between students and staff and ensures learning progression by providing facilities necessary for not only subject-oriented learning but also for developing soft skills.

Areas for Improvement

- The introduction of a fallback option and/or exit point will be useful.
- Developing a mechanism for monitoring the learning progression and the offering of the curriculum is needed.
- Conducting satisfaction surveys and employability surveys and obtaining student feedback on a regular basis is advisable.
- Introducing career guidance training and awareness workshops on a regular basis would be useful.
- Formalize the connection with alumni to improve the quality and attractiveness of the employability rates of the degree programme.

Criterion 7: Student Assessment and Awards

The Faculty has been implementing the Course Unit System (CUs) since its inception along with formative and summative assessment strategies. The evaluation strategies have been

elaborated in the handbook, which has been updated and made available on the Faculty website. The Faculty has produced an examination manual describing the examination strategies, which was approved in 2015.

The Handbook also includes a detailed description of the awards and qualifications of the degree programme, complying with the SLQF guidelines. In the absence of the Subject Benchmarks Statement, the experts of the Faculty claim that the qualification levels are being looked after adequately. However, there was no evidence on amendments made to the evaluation criteria to prove that assessments were kept up-to-date. The setting of question papers through scrutiny and moderation has been observed.

The details of weightage relating to different components of assessments and course specifications are described adequately in the handbook. However, it is advisable to produce the prospectus, which is a more academically oriented document with all these details of academic credentials pertinent to the degree programme. The LMS is being effectively used by the teaching staff and by students in conducting student learning and assessment processes, except for the final examination.

Though there was no evidence of Faculty policy on appointing examiners, such as consideration of being external (outside the institute, etc.) and how the marks are handled, how the deviation of marking is addressed, etc., the appointments of external examiners have been done regularly. This is helpful to maintain transparency, fairness and consistency in the student assessment process.

The Faculty has taken necessary steps to being transparent in the process of releasing results. Appropriate and timely feedback on formative assessments is given to promote effective learning and support the academic development of students. Though the final examination marks are handled centrally, the Faculty maintains all necessary databases and uses the LMS in displaying the results individually. Examination results are documented accurately, and the final examination results are announced through detailed transcripts that will be released to graduates as and when necessary.

Good Practices

The Faculty successfully implements the course unit system and credit- based assessment and grading system. The examination process is carefully monitored and the results are released on time.

Areas for Improvement

Having a good recording system of amendments made to assessments is useful to improve the clarity of assessments used.

Improvements are needed for the assessment strategies used for evaluating the soft skills of students, as there is a considerable amount of practical work covered in the degree programme.

Establishing a standard process to accommodate second marking and the second examiner's observation is useful.

Criterion 8: Innovative and Healthy Practices

Although the LMS has been established, multi-mode teaching and SCL are at a minimal level, and delivery of teaching materials, and assignments etc. should be enhanced. Use of OER in the teaching and learning process was not evident. However, there are some indications of innovation and interaction with communities and other stakeholders through field visits but objectives and rationale must be indicated. Although there are two course units specified for the research project as part of the degree programme, there is no mechanism to disseminate the generated knowledge to the community or researchers outside of the institute. It is also important to have a formal oral examination based on a presentation of the dissertation. Some departments have engaged in income generating activities at various levels; however, no commercialization practices have taken place. No evidence of credit transferring or fallback options in the degree programmes and no mechanism exists for re-scrutiny of results. Except for sports, no other significant ways of interaction or competitions, such as IQ, drama and soft skills enhancing programmes, exist.

Good Practices

The programme is supported by the following healthy practices

- ICT –based platform
- Academic reward scheme
- Research conferences
- Income generation
- Social and aesthetic pursuits

Areas for Improvement

The following aspects should be taken into account for further improvement

- Utilization of Open Educational Resources (OER)
- Planning of industry and community engagement
- Collaboration with outside stakeholders
- Credit transfer options
- Process of curricula development, approval and monitoring mechanisms
- Introduction of the Fallback option to the Faculty
- Formalization of Alumni activities

Section 6: Grading of Overall Performance of the Programme

Based on the guidelines given in Chapter 3, Table 3.4 of the PR manual in particular, the FMS degree programme was assessed under eight criteria on the aspects of programme development management, and the facilities available, along with other essential factors that contribute to the successful offering of the programme. The assessment of the overall performance of the FMS study programme is shown in Table 6.1 and Figure 6.1.

Table 6.1: Assessment Criteria and Score

ID	Criteria	Score	Maximum Score	Weighted minimum score	Weightage	Actual score
1	Programme Management	62	81	75	150	115
2	Human and Physical Resources	25	36	50	100	69
3	Programme Design and Development	42	72	75	150	88
4	Course/Module Design and Development	38	57	75	150	100
5	Teaching and Learning	41	57	75	150	108
6	Learning Environment, Student Support and Progression	45	72	50	100	63
7	Student Assessment and Awards	42	51	75	150	124
8	Innovative and Healthy Practices	36	42	25	50	43
Total on a thousands						710
Percentage (%)						71
Overall grade Performance descriptor						B Good

The BSc Hons in Fisheries and Marine Sciences degree programme review has achieved a good score that reflects the acceptable quality standard that the programme of study has maintained since its inception. The members of the review team propose areas where further improvements are needed in order to achieve excellence in the degree programme.

When scores earned were compared with the minimum scores, the criterion one and seven received highly satisfactory marks, showing the best performance levels in those standards. Criterion two, three and eight indicate that those aspects need more attention in offering the FMS degree programme. The review team has suggested the improvement required in those areas of the programme. The proposed good practices and areas to be improved are discussed in detail under Section 5. Some improvements suggested need a little intervention to reach the required level of achievement. For example, taking actions in filling vacancies and providing appropriate up -to-date training to equip the programme delivery mechanism with the required depth and rigor. Nevertheless, having a faculty policy on curriculum development, expanding the stakeholder engagement in the programme design and development process, and maintaining related documents properly would help improve the aspects considered in Criterion 3 “Programme design and management”. Regular feedback surveys and curriculum monitoring also have to be initiated. Further, utilizing Open Educational Resources (OER) and strengthening the collaboration with outside stakeholders are recommended under Criterion 8 “Innovative and healthy practices”.

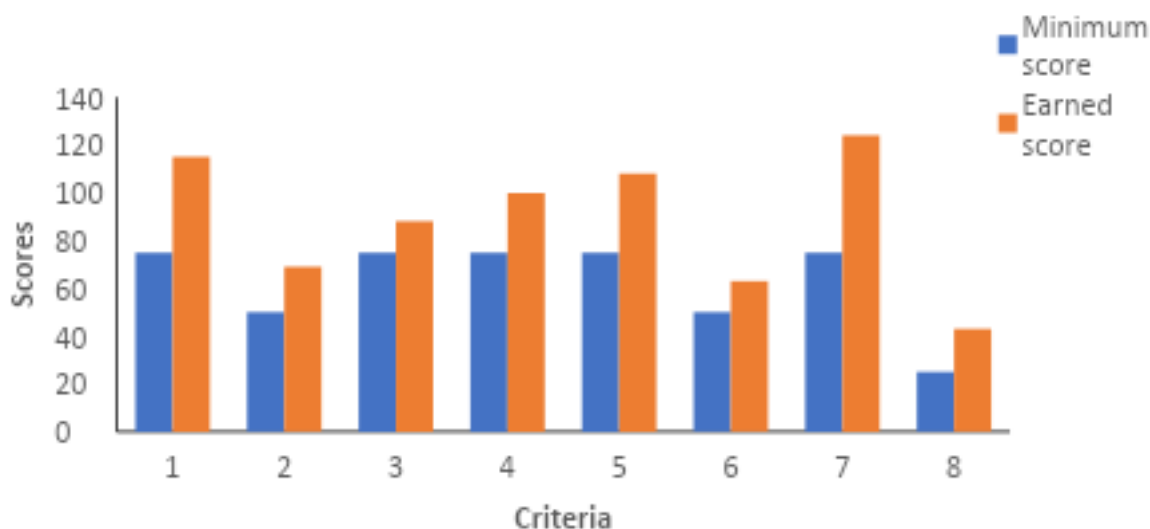


Figure 6.1: Scores earned by the BSc Hons in Fisheries and Marine Sciences Degree Programme in eight criteria against the minimum score

Section 7: Commendations and Recommendations

Commendations

- The Faculty has submitted a good Self Evaluation Report (SER), and the panel members were impressed with the SER.
- The review team noticed a strong commitment from the Dean, former Dean, Heads of the Department and Director and former Director/FQAC of the faculty in maintaining the quality of the programme.
- The Faculty and the internal quality assurance team have made a significant effort in the preparation of the documentary evidence for the review team to go through.
- Everybody in the Faculty was familiar with the documents, and they provided a key for the documentation, which was very useful for the reviewers.
- It was observed that the faculty is following most of the best practices stated in the PR Manual to improve the quality of the education.
- The teaching and learning facilities are in good condition, and attempts were made to further improve the laboratory facilities.
- Incorporation of Core English Language and Core Information Technology to all the students is commendable, and inclusion of them in the credit system is appreciated. Attempts to make these core courses presented to students in a practical manner are admirable. e.g., English Courses at different levels.
- Students become familiar with the system easily upon entrance to the university as they are informed through the faculty handbook and during the orientation programme.
- The review team was impressed with the learner- friendly environment and good maintenance of the vicinity and good student-teacher relationships.
- The Faculty maintains its stance on a ragging-free learning environment, which is praiseworthy.
- The organization of the dockets provided to the reviewers was very user friendly and, as a result, the review team observed the evidence easily.
- The review team is highly impressed with the award system for excellent performance at the General Convocation to encourage students to achieve excellence in their undergraduate career.

Recommendations

- The students were admitted to the Faculty of Marine and Fisheries Sciences & Technology, with separate Z-scores from the UGC. The review team observed that the decision to establish a Faculty of MST at Ruhuna University is a wise and timely decision. This is the only faculty in Sri Lanka of this nature with high aspirations to obtain a high academic level at the end of the Honours Degree. Thus, the Faculty should take necessary actions at all levels, endeavouring to achieve the highest academic level of the graduates who have passed out.
- The review team observed that the Student Handbook provides a sufficient amount of information to the students, but some of the vital information is missing. The review team suggests including the selection criteria for the speciality of aquaculture and degree evaluation criteria in the handbook (current criteria are vague and do not provide a detailed account of them).
- The Faculty responsibilities for the University Strategic Management Plan (SMP) have been demarcated. However, the review team identifies poor follow-up action. It is recommended to review the Faculty Action Plan quarterly at the Faculty Board.
- The review team observed that all the academic programmes are governed by the by-laws. It is recommended to redefine by-laws as 'Regulations' as described in Section 136 of the University Act No 16 of 1978 as amended.
- The review team observed that some of the Foundation courses are taught at level 3 of the degree programme. The review team recommends that foundation courses introduced in the degree programme must be pre-requisites to the core courses in levels 1 & 2 of the degree programmes.
- The review team encourages establishing an awareness programme at the end of the second year to provide correct guidance to students to select the desired speciality in fisheries or aquaculture.
- The review team noted that a few academic cadre positions were vacant at the time of the review process. The Faculty admitted in its SWOT analysis that the expertise/speciality in some areas is not available in the current cadre and visiting academics are hired. The review team recommends filling the vacant academic cadre (07) with senior academics in the future, in order to save public funds paid to the visiting academics, which is not sustainable in the long run.
- The review team recommends expanding the existing Curriculum Development Committee (a Senate sub-committee) with Senior Professors/Professors of the other disciplines and the Chairperson/CQA in order to create a constructive dialogue among them before being submitted to the Senate. It is not clear about the appointment of a member of the Council for the Senate subcommittee.

- The review team noted that the hierarchy of some officers in the university organogram is not in line with the University Act no 16 of 1978. (See Figs .1.1 and Figs. 1.2, e.g., the Faculty Senior Assistant Registrar has been ranked above the Heads of the Departments.
- The review team identified that the course synopsis prepared by the Faculty lacks detailed descriptions of courses. Course synopsis of each course at every level has to comply with the SLQF to address the respective Intended Learning Outcomes (ILO's), Programme Learning Outcomes (PLO's), and the breakdown of notional hours per credit.
- The review team appreciates the initiatives made by some of the faculty members to use the LMS through MOODLE and encourages all the faculty to use the LMS in the programme delivery. Online lectures during the COVID-19 outbreak are commendable. Blended and Hybrid modes of learning are encouraged whenever possible.
- The review team would like the departments to initiate more industry exposures in their final year, for those who intend to pursue a professional career in the industry. Practical exposures and industrial training in both degree programmes have to be increased according to the views provided by the Faculty alumni. The review team strongly suggests that the Faculty revisit the intended learning outcomes (ILOs) of the industrial training.
- The review team recommends making every effort to complete the degree programme within the stipulated time period. The review team assumed that the delay in the passing out of the last two years may be due to the Easter attack and the Covid-19 outbreak.
- The Faculty needs to assess its capacity, stakeholder survey, and laboratory facilities, and also conduct a needs assessment before introducing new academic programmes.
- The review team recommends improving the documentation at the FQAC to ensure smooth functioning of the academic programmes.
- It would have been much better if an effective learner support environment had been provided by the Faculty in addition to the classroom teaching.
- The review team notices the lack of a grievance mechanism to address issues of the students and staff in the faculty.
- The review team recommends establishing regular sub-committees to support the faculty management and to have regular meetings with reporting procedures for faculty activities.
- The review team recommends introducing a Level 5 exit mechanism for those who wish to leave the programme at Level 5.
- The review team recommends introducing a mechanism to facilitate the Credit-Transferring System.

Section 8: Summary

This report presents the findings of the review panel on the quality of the study programme, BSc (Honours) in Fisheries and Marine Science at the Faculty of Marine Science and Technology of the University of Ruhuna. The programme review was conducted in two stages: the first one through online documentary checking and the second stage with an on-site visit. Online documentary checking was done using the UGC-QAC website and the special reference 'url' provided by the Faculty of Marine Science and Technology. The onsite visit was conducted on 16th and 17th June 2022, 2017, adhering to the guidelines provided in the Manual for Review of Undergraduate Study Programmes of Sri Lankan Universities and Higher Education Institutions. The FMST of the University of Ruhuna is located in Wellamadama, Marata, in a magnificent environment conducive to teaching, research, scholarly work, socio-cultural activities, and innovative thinking. Its uniqueness lies in its location and a large number of young but committed academic staff.

The review team noted that the University uses an inclusive and participatory approach in fulfilling its obligations and in the decision- making process. The financial procedures of the University comply with the requirements of the national financial regulations and guidelines, and resource allocation is identified in the Annual Action Plan. However, the review team proposes that the institutional arrangements for quality management and administration need to be done through regular meetings of standing committees, planning and development committee, management committee, and the development of a manual of procedures, guidelines, by-laws and regulations and job descriptions for non-academic and administrative staff. A comprehensive MIS needs to be established, which would further enhance overall quality management and administration more effectively and efficiently. The University has established a CQA at the University and an FQAC at the faculty level in the recent past. The Faculty is yet to develop its Terms of Reference and an activity plan to support QA activities of the University on all aspects. The indications are that there is a commitment to take forward the activities of QA.

The University offers two degree programmes, one of which was considered in the current review. Although policies, processes, and procedures have been institutionalized for approval of curricula, there is a need to develop similar mechanisms to ensure periodic review, involve relevant stakeholders in the process of review and revision, use data from employment surveys, tracer studies, and identified graduate profiles, and benchmark them against national (SBS), professional, and international standards. It is also necessary to align the intended learning outcomes, the content, teaching and learning methods with assessments for effective learning.

Student- centered learning is required to be developed at the faculty level. For student-centered learning to be effective, it is necessary that: staff vacancies are filled with the expertise required by the Faculty; appropriate training on student -centered learning methods and means are carried out continuously by the Staff Development Center; and teaching learning aids and resources needed are provided.

Although young academic staff have been recruited recently, the FMST has a fairly reasonable research output. Achieving the research output is mainly due to collaborative research done with stakeholder institutes, to meet the national development of fisheries and aquaculture fields needed by the country. This would further strengthen the prevailing research culture and image of the FMST. In addition, policies on ethics, research misconduct, plagiarism, and conflict of interest need to be developed and institutionalized.

The overall performance score of 71% and a grade “B” was awarded by the review team.

Annexure: Site Visit Schedule

University of Ruhuna, Faculty of Fisheries and Marine Sciences and Technology

Time	Meeting/visit
Day 1: 2022.06.16	
8.45 - 9.30 am	CQA/Director, Chair/IQAC
9.30 - 10.30 am	Dean and Administration staff
10.30 - 11.45 am	HoDs and permanent academic staff/mentors
11.45 am - 12.15 pm	TEA BREAK
12.15 - 12.45 pm	English Language teaching and IT staff
12.45 - 1.15 pm	Non-academic staff (TOs, MAs, Academic supportive staff, temporary staff)
1.15 - 2.45 pm	Visit – Lecture room, laboratory and other facilities
2.45 - 3.15 pm	LUNCH BREAK
3.15 - 4.00 pm	Directors and coordinator/SDC, CGU, TTC, CGGE
4.00 - 4.30 pm	Alumni
4.30 - 5.00 pm	TEA BREAK
5.00 - 6.00 m	Checking documentary evidence
Day 2: 2022.06.17	
8.15 - 8.45 am	Vice chancellor
8.45 - 9.30 pm	Library visit
9.30 - 10.00 am	AR/Students affairs and student counselors
10.00 - 10.30 am	Students
10.30 - 11.00 am	TEA BREAK
11.00 - 11.30 am	Review team discussion
11.30 am - 1.30 pm	Wrap-up Meeting with Dean. HoDs and all academic staff
1.30 - 2.00 pm	LUNCH BREAK