



SELF STUDY REPORT

FOR

1st CYCLE OF ACCREDITATION

KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES

KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES PANANGAD P.O.

ERNAKULAM

682506

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Submitted To

NATIONAL ASSESSMENT AND ACCREDITATION COUNCIL

BANGALORE

June 2024

1. EXECUTIVE SUMMARY

1.1 INTRODUCTION

The Kerala University of Fisheries and Ocean Studies (KUFOS) is a State University established on 20th November 2010. It is the first Fisheries University in the country with the headquarters at Panangad, 12 km away from Kochi city. KUFOS provides high quality instructional programmes in fisheries, ocean sciences and allied subjects. The University has a sprawling campus of 62 acres in the headquarters at Panangad, and a brackish water-cum-marine aquaculture area spanning 50 acres at Fisheries research station, Pudukkottai. The University was established by an Act of the Kerala State Legislative Assembly by delinking the College of Fisheries from the Kerala Agricultural University and started functioning on 01.04.2011. The University was established for the development of manpower in fisheries and ocean studies and for ensuring proper and systematic instruction, teaching, training and research and extension exclusively in fisheries and ocean studies in the State of Kerala. This is the primary and principal institution in Kerala State for providing human resources with skills and technology required for sustainable development, facilitating as a Centre of Excellence for human resource development in fisheries and ocean studies. KUFOS imparts quality education comparable with world class standards and giving significance to research oriented studies with effective meaningful and rewarding extension activities. With a view to produce technocrats of high calibre, the university has appointed highly qualified faculty, developed full-fledged infrastructure facility and maintain good linkages with reputed national and international institutes. At the same time, the University is continuously engaged in finding solutions to issues faced by its stakeholders through timely interventions in the form of advisories/capacity building/ hand-holding. To cater to a wide variety of skilled manpower in fisheries, aquaculture and marine industries, KUFOS has diversified its academic and research programmes in emerging disciplines of fisheries and ocean sciences to meet the requirement of state and national priorities. KUFOS is presently offering two graduate and 25 specialized postgraduate courses in relevant areas thereby creating a pool of professionals and experts. Research in these disciplines has led to successful transfer of technologies to the end users at the grassroots level.

Vision

Our vision is to serve as a flagship university of higher learning through demonstrated and growing excellence in teaching, research, extension, scholarship and creative work in fisheries and ocean studies, comparable with global standards that will benefit the country and the world at large. As the nation marches towards the dream of 'Viksit Bharat' by 2047, the role of fisheries and ocean studies under the purview of the concept of 'Blue Economy' plays a significant role not only in ensuring food and nutritional security by augmenting production of animal protein, but also in the global economy by providing employment, income and foreign exchange earnings. To achieve this mission, the University has set specific goals which includes furthering the advancement in learning, and conducting research in fisheries, ocean studies and allied subjects; imparting high quality education in these areas; formulating new courses and curriculum in fisheries and ocean studies sector in accordance with the technical advancements in the respective fields; act as a nodal agency to establish relationship with institutions and universities functioning at national and international levels; transform in to a centre of excellence having leading role for HRD in fisheries and ocean studies, and finally to foster and encourage entrepreneurship in fisheries and ocean studies. It is against this backdrop that the Kerala University of Fisheries and Ocean Studies is relentlessly furthering its vision to serve as flagship University for producing professionally and technically competent manpower with high level of entrepreneurship and employment

quotient. The University is taking all efforts to impart quality education comparable with global standards and also in carrying out research in areas having much bearing in the development of fisheries and marine science sectors of the country.

Mission

- To produce professionally and technically competent manpower in fisheries and ocean studies to cater the needs of the fast-developing sector.
- Develop entrepreneurship among the fisheries graduates by imparting hands-on training and give opportunities to develop management skills through Fisheries Work Experience Programme.
- Undertake research and extension activities in the field of fisheries and ocean studies by undertaking research in frontier areas and by promoting interdisciplinary/ inter-departmental/inter-institutional co-operation.
- Provide employment opportunities, especially for fishers by imparting trainings on modern techniques of fishing, primary handling, preservation, production of value-added fishery products, ornamental fish culture, hatchery production of seeds of various cultivable fin and shell fishes and their farming.
- Provide consultancy services so as to put into practice the technologies developed among the entrepreneurs and generate income for the institution.
- Achieve the mission and goals laid down by the University.
- Develop infrastructure facilities and inter-institutional co-operative programmes in order to make the campus the nucleus of the fisheries and ocean studies in the world.

1.2 Strength, Weakness, Opportunity and Challenges(SWOC)

Institutional Strength

Unique Location

Being located in Kochi, the fisheries hub of the country, the positional advantage that KUFOS has is immense. The proximity to the sea (Arabian sea), estuary (Vembanad lake) and river (Periyar and Muvattupuzha Rivers), and wetlands fringing its boundaries helps KUFOS provides the diversity at its doorsteps for students and researchers to have a practical understanding of the subject.

Distinct Academic Programmes

The university offers academic programmes under ICAR, UGC and AICTE streams which is well planned and highly systematic in order to fulfil and cater to the need of the industry and research, and to create an impressive future generation equipped with skills, research attitude and foresight to develop the fisheries sector.

Equitable and Inclusive Environment

Girls form the majority (>71%) of the students. More than 60% of the students in the University are supported by fellowships. To uplift the marginalized communities, KUFOS has reserved 20% seats in all its academic programmes to 'Children of Fishermen'.

Quality of the Faculty

A professionally competent and dedicated teaching force spearheads the academic, research and extension activities of the University. All the faculty are well trained with many attaining the PhD degrees and receiving postdoctoral training from reputed international institutions.

Good Infrastructure and Extension activities

KUFOS has been developing in a rapid pace, and has been equipped with spacious buildings, state-of-art labs, instructional farms, modern library, internet connectivity, student amenities and recreation facilities. KUFOS has a robust extension division that effectively caters to the need of fish farmers and fisherfolks. It also provides a suitable niche for innovation and startups.

Institutional Linkages

Kochi is the headquarters for five national fisheries and oceanographic institutions and regional centres for another four leading research organizations. This provides easy access to the students for their internship and to faculties for collaborative research. A prolific alumnus, most of them adorning prime positions in these institutes further support linkages.

Entrepreneurship Development

The Business Incubation Centre (BIC) nurtures a vibrant business innovation ecosystem, and an effective university-industry linkage. It also promotes entrepreneurship among students, motivating a start-up ecosystem and transforming them from 'job-seekers' to 'job-givers'.

Institutional Weakness

Specialized University and Jurisdiction

KUFOS is a specialized university catering to the needs of fisheries and ocean sector, and the curriculum followed specifically addresses these subjects alone. Secondly, according to the KUFOS Act, the jurisdiction of this university is limited to Kerala. Hence, involving the activities of KUFOS beyond the states boundaries is another weakness. This leads to lesser societal perception of the university beyond Kerala. Since both fisheries and ocean science cannot be limited within state boundaries, university is now making efforts to attract more students from across (and beyond) the country through its MOOC programmes.

Low staff strength and lesser academic programmes

During trifurcation of the Kerala Agricultural University, KUFOS was provided 58 faculty positions to handle six (1 UG, 4 PG and 1 PhD) programmes, with a total strength of 200 students. However, since then the number of programmes has increased to 35 (2 UG, 25 PG and 8 PhD) and student strength to over 1400, without any relative increment the faculty position. KUFOS has made efforts to employ contract teaching and guest faculties to overcome this gap.

Financial limitation

KUFOS is a public funded University with majority of its budget coming from the State Government. Financial constraints have hampered progress and delayed infrastructural projects. This creates a large gap in the demand

and supply chain, especially in areas such as the construction of student hostels. The four hostels that are currently in place cannot accommodate all students, compelling them to look for private facilities. University is trying hard to increase its revenue, but it needs to invest more to provide basic amenities to the students and faculties.

International Students

Presently there are no foreign students studying in the university which has affected its international visibility. Unavailability of an International hostel had been the major bottleneck in attracting foreign students. Though KUFOS has reached agreement with a dozen foreign Universities, it is yet to admit foreign students or start collaborative programmes. Recently KUFOS has signed MoUs with Bournemouth University, UK to start dual degree programmes and with Norwegian Universities for student exchange programmes.

Institutional Opportunity

Fisheries and Marine sector are one of the world's fastest growing industries. The demand for food, energy and medicine from oceans will increase in the future. Under the concept of Blue Economy, that focuses on sustainable use of ocean resources to benefit economies, livelihoods and ocean ecosystem health, there are various sub-sectors that would arise as offshoots that would contribute greatly to countries development. Hence for 'Viksit Bharat' by 2047 the contribution of Fisheries and Marine sector is immense. Unfortunately, this sector is also one where there is a crunch for quality skilled workforce.

Interdisciplinary programmes

KUFOS can introduce an array of interdisciplinary/multidisciplinary programmes that combine ocean studies with other conventional subjects with a focus on skill upgradation, employability, and hence attract a broader student base to foster holistic education.

International Collaboration

Some of the leading world-class institutes in Fisheries and Ocean Studies are functioning in China, Japan, Korea, Vietnam, etc. that have international affiliation and collaboration with a number of universities worldwide. Leveraging this strategic advantage and increasing partnerships with international universities and research institutions can enhance knowledge exchange, research collaborations, and provide global exposure to students and faculty.

Online Education

In lines with the New Educational Policy of the Government of India, many of the skill development programmes envisaged by KUFOS can be offered in online mode. Developing online courses and Massive Open Online Courses (MOOCs) can attract a global audience, increase the university's reach, and generate additional revenue.

Research Expansion

Since the mandate of KUFOS falls directly under SDG 14, there is significant potential to expand research programs in various emerging areas of food and nutritional security, human and ocean health, environment

protection, climate resilience, resource exploration, and socio-economics. Developing specific research proposals, can help leverage government initiatives and funding opportunities aimed at promoting marine and fisheries research, securing additional resources and support.

Community Engagement

Through entrepreneurship development and capacity building, alternate avocation among the women and youth can be encouraged. There is immense potential for enhancing community outreach and engagement programs that can help in disseminating research findings to local communities, improving their practices and livelihoods.

Institutional Challenge

Administrative and Governance issues

Frequent changes in leadership disrupts continuity in policies and strategies, leading to inconsistent progress and priorities. Delays in decision-making and administrative processes affects the timely implementation of projects, recruitment of faculty, updating and execution of academic programs. This is further marred by several unnecessary litigations delaying the process.

Student to Teacher ratio low

Inability to obtain additional teaching and supporting-staff post from the government time to time has hampered university to expand it academic programmes. The Student to Teacher ratio has increased nearly by four times. Low administrative staff strength compels faculties to take up additional administrative duties hampering their teaching and research.

Course Limitations

As a specialized university, the focus on a narrow range of subjects has restricted interdisciplinary learning and hinder the diverse interests and career aspirations of students. Academic flexibility in certain courses is limited, since the curriculum framework followed is designed at the National level without due consideration of regional attributes.

Inadequate Funding

The major funding source is the State Government, which is exclusively used for supporting specific mandates. Heavy reliance on government grants leads to financial instability if there are delays or cuts in government budgets. Securing external grants and funding remains a significant challenge due to the limitation of faculties. Insufficient financial resources hamper the development of infrastructure, procurement of advanced research equipment, and provision of scholarships for students.

Attracting Quality Students

Under New Educational Policy, various private institutes in Kerala have initiated a diverse range of academic

programmes in fisheries and ocean studies. Most of these institutes have advanced infrastructure and good industry-academia linkages and offer highly specialized new generation programmes. Attracting and retaining high-quality faculties, researcher and students is challenging, especially with competitive fee structure offered by these institutions.

Changing Societal Perception

Transforming from the brand of “Fisheries University” to “Multidisciplinary Education and Research University” is challenging. While improving professional competency among the staff and students, and continuously adapting and updating of educational and research priorities, it is also important how KUFOS would intervene to find solutions to societal problems in issues beyond its present mandate.

1.3 CRITERIA WISE SUMMARY

Curricular Aspects

Established as India's pioneer Fisheries University, our institution meticulously designs academic programs under the Credit and Semester System (CSS) to align with local, national, regional, and global developmental goals. Organized under four faculties, we offer diverse programs including Post-Doctoral, Doctoral, 12 MSc, nine MFSc, five MTech, MBA, two UG, diplomas, and certificates programs spanning across a wide range of subjects of Fisheries, Ocean Studies, Engineering and Management. Our curriculum integrates professional ethics, gender, human values, environment, and sustainability. KUFOS's curriculum is systematically developed to address the real-world challenges, ensuring graduates meet Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs).

A distinctive aspect of our academic approach is the mandatory inclusion of projects and internships, fostering critical thinking, problem-solving, and social responsibility under faculty mentorship. Fisheries extension integrates academia with industry to serve fishermen and fisheries industrialists. Curriculum Revision Workshops engage stakeholders such as teachers, alumni, parents, professionals, R&D experts, and industry representatives so as to ensure relevance and rigor. Evaluation methods, including Continuous and End Semester Assessment, align with PSOs and COs. Support structures like Placement Cell, Incubation Centre, and Career Guidance Bureau enhance employability through skill-based training. Our curriculum emphasizes ethics, gender equity, human values, environmental consciousness, creativity, innovation, and sustainability, in line with government guidelines.

By embracing Scientific Social Responsibility and relevant research practices, we contribute to global food security and sustainable development while addressing local needs, positioning ourselves in the global knowledge economy. Ph.D. coursework includes 'Research and Publication Ethics', highlighting ethical research practices. We excel in United Nations SDG5, with significant female representation among postgraduates and research scholars, supported by courses on gender issues, empowerment, entrepreneurship, and welfare. Programs also address deprivation, marginalization, environmental protection, regional development, equity, access, and inclusivity.

Beyond academics, we engage in community engagements, ecosystem evaluation, stakeholder training, and youth entrepreneurship guidance, demonstrating environmental stewardship and community welfare. Feedback from students, alumni, employers, parents, and fish farmers is integral part of our continuous enhancement of quality education. As India's first fisheries university, KUFOS actively supports both the industry, and local

communities who are dependent and contributing to the industry.

Teaching-learning and Evaluation

High Enrolment percentages have been regularly achieved for 25 postgraduate programmes and 2 undergraduate programmes offered through four Faculties of the University. In addition to these 27 programs, the University also offers PhD, Post-Doctoral, PG Diploma, Diploma programmes, and Certificate courses to cater to diverse higher educational needs. Admission to PG programmes, is through Common Admission Test conducted by the University/ All India Entrance Examination conducted by ICAR, which rigorously adheres to mandatory reservation policies. Admission to the MBA programme is based on a valid score obtained in the CAT/CMAT/KMAT entrance examination. KUFOS has a high enrolment ratio of female students, SC/ST students, Children of Fishermen (CoF) and students from other states. Admission to professional programmes such as BFSc and B.Tech is contingent upon the rank obtained in the NEET and KEEM entrance examinations, respectively.

Faculty members of KUFOS are highly qualified, with ninety-one percentage possessing PhD qualification and postdoctoral training from international Universities, coupled with extensive experience in their respective fields.

The University diligently adheres to the principals of Outcome-Based Education, which adopts diverse approaches to cater to the varying learning needs of the students. Additionally, special lectures and talks by renowned personalities are delivered offline and online to enhance the learner's performance. Students are actively encouraged to register for MOOC courses available on platforms like SWAYAM and NPTEL. The University libraries, including the KUFOS Library and individual faculty libraries, offer an extensive collection of books, journals, and online resources, facilitating a conducive learning environment.

The University has a robust evaluation process that assesses the intellectual and skill output of students. Slow-learners and Fast learners are given special attention through proper mentoring process that focuses on bolstering the confidence of mentees and nurturing essential skills and knowledge. Students are acquainted with evaluation norms at the outset of their academic journey. The examination system is fully operational, with an automated mechanism for conducting entrance examinations, recording internal and external marks, generating hall tickets, and issuing final result notifications. This comprehensive system has yielded an impressive overall pass percentage of 91% among final-year students during the latest academic year.

Research, Innovations and Extension

KUFOS exemplifies research excellence, innovation, and community engagement, significantly advancing the fields of fisheries and ocean sciences. The Research Policy underscores its commitment to high research standards, ethical conduct, and knowledge transfer, promoting sustainable marine and aquaculture resource management.

KUFOS ensures quality and progress through a two-tier system involving the Research Council and Faculty Doctoral Committees. Researchers receive substantial financial support, through different fellowships and seed money for faculty. State-of-the-art facilities such as the aquatic animal health referral laboratory, central instrumentation laboratory, Mobile clinic and biosecure wet-lab provide cutting-edge tools for scientific exploration.

KUFOS serves as a hub for innovation and entrepreneurship and the Business Incubation Centre nurtures entrepreneurs with pre-incubation, incubation, and skill development training. Collaborations with organizations such as the Kerala Start-up Mission and National Institute of Agricultural Extension Management enhance entrepreneurial networks. KUFOS-BIC, selected to establish an Atal Incubation Centre by NITI Aayog, promotes innovation-driven enterprises. The University also hosts hackathons, pitch fests, and idea hunts, fostering a culture of creativity and practical innovation.

KUFOS's extension activities highlight its commitment to community welfare, particularly among marginalized groups. The NSS and NCC units foster social responsibility through initiatives like cleanliness drives, health camps, and gender sensitization. Departmental activities address societal challenges with beach clean-up drives and awareness campaigns on plastic pollution.

The Directorate of Extension empowers fishing communities through village adoption programs, flood impact studies on aquaculture, and training on advanced aquaculture techniques. The University's intervention in Chellanam Panchayat in Ernakulam District, addressing issues from coastal erosion to livelihood enhancement, showcases its holistic approach to community upliftment.

KUFOS's research excellence is reflected in high-impact publications, numerous awards, and technology transfers. Faculty members, like Dr. Rajeev Raghavan (recognized since the year 2021 as 'top 2% scientists of the world' in fisheries by Elsevier-Scopus), and Dr. Anu Gopinath, (member of Indian Arctic and Southern Ocean expeditions), highlight the university's academic prowess. Having received 25th position in NIRF for agriculture and allied sectors further acknowledges KUFOS's dedication to innovation. Its comprehensive research policy, advanced infrastructure, strong support systems, and collaborative efforts foster a thriving environment for research, innovation, and extension.

Infrastructure and Learning Resources

KUFOS possesses comprehensive physical and academic infrastructural amenities to meet the demands of its students.

Physical Infrastructure

The University benefits from a main campus spanning 62.845 acres and a satellite campus of 50 acres. KUFOS has 51 well-equipped classrooms, three spacious seminar halls, and 80 research laboratories.

Academic Infrastructure

University has four faculties, one state referral lab, one central instrumentation facility, a smart classroom and four centers with state-of-the-art facilities for teaching and research. The fisheries research station at Puthuvype, covering 20 hectares, supports research in brackish and marine aquaculture. Additionally, the University has instructional ponds, farms and hatcheries that enhance its academic excellence.

IT Infrastructure

The University maintains robust backup procedures for its IT activities and operates a one Tier data center. Its IT infrastructure encompasses more than internet sharing; it includes cloud space, e-payment services, data and voice communication, audio- video devices, CCTVs, recording studios and more. The University's IT strategy

emphasizes green computing, risk management, information and network security, and IT service management.

University is Wi-Fi enabled and is well connected through LAN and WAN. A dedicated internet connectivity of 1 Gbps is provided throughout the campus. KUFOS integrates ICT-enabled teaching tools in its teaching-learning process, utilizing platforms such as Microsoft Teams, Google Classroom, Zoom, Google Meet and Cisco Webex. These tools were extensively used for classes and National/ State level webinars during the pandemic.

Library

The Library and Information System at KUFOS comprises the Central Library and a Faculty library at the Faculty of Fisheries Management. The entire library system is automated using the open-source Library Management Software Koha 21.05.08.000. Core library operations such as acquisition, circulation, cataloguing and management are fully automated.

Other Facilities

In addition to the above-mentioned resources, KUFOS offers an assembly space, a senate hall, student hostels, a guest house, residential flats/quarters for teaching and non-teaching staff, medical support, museum/aquarium, ATM, a canteen, water conservation facilities, University bus for staff and students, a 500KVA transformer sub-station, generators, solar rooftop power plant, a parking area, amenity centre with sales counter, Business Incubation Centre, swimming pool, sports ground, and facilities for yoga and fitness.

Student Support and Progression

The Kerala University of Fisheries and Ocean Studies has a student-friendly atmosphere with several committees and cells to address the physical, mental and academic progression of students. A participative, democratic, and academic ambience is ensured through students' representation in many statutory/non-statutory bodies. University has an optimum student-friendly atmosphere on campus: fellowships to all PhD students and postdoctoral candidates, scholarships to majority of postgraduate students, higher rate of employment, transparent and efficient grievance redressal mechanism, relevant student's representation in academic bodies, vibrant alumni associations and wide avenues for co-curricular activities.

A vibrant Student's Union provide platforms for academic/artistic/sports endeavours, career guidance, skill upgradation and cultural expressions. University has an elected Students' Union with annual budget allocation for organizing the University Youth Festival and other arts and cultural events. Together with various clubs, an array of programs is organized each year.

KUFOS has implemented extensive career counselling and guidance programs across various disciplines. The Placement cell coordinate these activities such as placement readiness programs, finishing schools, and skill development programs to enhance students' career prospects. Many workshops and training sessions focused on soft skills, communication, and life skills, involving collaboration with alumni and external experts, are hosted each year ensuring comprehensive support for career development.

Providing awareness on ragging is an integral part of student activities coordinated by the Anti-Ragging cell. Every year prior to the induction programmes of newly joined students, senior students are informed on the ill effects of ragging. For the newly inducted student's psychologists, student counsellors and police officers

provide awareness. The students are informed about the anti-ragging redressal systems of UGC and University. Committees for SC/ST/OBC/ PwD and Minorities and Internal Complaints Committee for prevention, prohibition and redressal of sexual harassment against women employees and students are actively involved in solving any such complaints. All issues related to various grants of students are also solved through frequent interactions with concerned officials and committees. The University has a dynamic Alumni association engaging in diverse areas of activities like academic collaboration, mentoring, instituting endowments and scholarships, and providing financial support for developmental needs.

Governance, Leadership and Management

KUFOS Acts (2010 and 2021), Statute (2013), UGC and ICAR Regulations and Guidelines, and Kerala Service Rules (KSR) and Kerala State and Subordinate Services Rules (KSSR) provide foundational structure and legal basis for the governance of the University. His Excellency, the Governor of Kerala (GoK), serves as the Chancellor, and the Hon'ble Minister for Fisheries, GoK acts as the Pro-Chancellor. The Vice Chancellor is the chief executive officer of the University. The University Governing Council, holds supreme authority of the University. Other statutory bodies such as Senate, Academic Council, Research Council, Extension Council, Faculty Board of Studies, and statutory officers such as Registrar, Finance Officer, Controller of Examinations, Director of Research, Director of Extension and so on ensures sustained institutional growth, decentralization, participation in the institutional governance. E-Governance is implemented in all sectors of the administration including the general administration, student admissions, examinations and finance. The University follows a well-defined performance-appraisal system and well-defined criteria for promotion and professional development for both teachers and non-teaching staff. In addition, the staff enjoy a wide range of facilities available in the campus, and are protected with welfare measures implemented at the University, State and National levels. The University draws a major share of funds from the State Government, and is further supported by various national and state level agencies including UGC, ICAR, NABARD, KIIFB, DST, DBT and so on. The accountability of the financial flow is verified through an internal audit system, as well as external audit conducted by the Kerala State Audit Department and Account General. The internal quality assurance cell contributes to the quality assurance in all the activities including teaching, learning and research of the University. The University ranks 25th in the agriculture and allied sectors category of the NIRF ranking, and also participated in the ARIIA, KIRF and AISHE ranking frameworks. The University is in a very progressive stage where new departments and new courses are being introduced to meet the challenges of today's world, and is being amalgamated with the national educational framework through the implementation of Blended Learning Programs (BLP) and Academic Bank of Credits (ABC).

Institutional Values and Best Practices

KUFOS strives to position itself as an advanced center for higher education, learning, and research, where the principles of sustainability, responsibility, environmental consciousness, inclusivity and ethics are seamlessly integrated into every aspect of its operation. The University fervently advocates for gender equality, equity and sensitization, ensuring an inclusive environment by providing equal access and opportunities to overcome any gender-based barriers. The green campus initiatives at KUFOS are rooted on the ethos of sustainability, modelled largely on the Sustainable Development Goals (SDGs). These initiatives prioritize efficient waste management and judicious utilization of water and energy resources.

Moreover, the University extends its commitments to environment and sustainability initiatives beyond its campus, actively promoting beach clean-up, plastic removal and allied activities in and around the district. With

a goal of Net Zero emission, KUFOS through the Energy Audit, Green Audit and Environmental Audit has assessed its carbon footprint and also has mapped the carbon it sequesters annually through the mangrove vegetation and other plantations in the campus.

Since the enactment of the RPwD ACT in 2016, KUFOS has demonstrated unwavering dedication and to transforming itself into a disability-friendly for students, staff and visitors and has also undertaken multiple initiatives in this regard. Being a multicultural hub, the University hosts students from as many as 14 states and Union territories of the country. Engaging in research and academics and excelling in inter-university arts, cultural events, and sports competitions nationwide.

KUFOS holds constitutional obligations in high regard, ensuring that every member of the institution, is well-versed in the values, rights, duties, and responsibilities enshrined in the Constitution of India. This commitment is underscored through the observance of national days of significance, particularly those related to the Constitution and National Integrity.

KUFOS is part of the UArctic consortium. Faculty and students of the university are regular members of Arctic and Southern Ocean Expeditions. The adoption of fishing villages, extension activities and disease diagnosis through mobile clinic extended to farmers' underlines KUFOS's exemplary practices are centered on social commitment, particularly in uplifting the economy, ensuring food security, and enhancing the livelihoods of marginalized fishing communities across Kerala.

2. PROFILE

2.1 BASIC INFORMATION

Name and Address of the University	
Name	KERALA UNIVERSITY OF FISHERIES AND OCEAN STUDIES
Address	Kerala University of Fisheries and Ocean Studies Panangad P.O. Ernakulam
City	Kochi
State	Kerala
Pin	682506
Website	www.kufos.ac.in

Contacts for Communication					
Designation	Name	Telephone with STD Code	Mobile	Fax	Email
Vice Chancellor (in-charge)	Pradeepkumar T	0484-2713781	9447300743	0484-2703782	vc@kufos.ac.in
IQAC / CIQA coordinator	Ranjeet K	0484-2700598	9744171986	0484-2703782	naac@kufos.ac.in

Nature of University	
Nature of University	State University

Type of University	
Type of University	Unitary

Establishment Details	
Establishment Date of the University	20-11-2010
Status Prior to Establishment, If applicable	Constituent College
Establishment Date	12-10-1979

Recognition Details		
Date of Recognition as a University by UGC or Any Other National Agency :		
Under Section	Date	View Document
2f of UGC	20-11-2010	View Document
12B of UGC	01-07-2021	View Document

University with Potential for Excellence	
Is the University Recognised as a University with Potential for Excellence (UPE) by the UGC?	No

Location, Area and Activity of Campus							
Campus Type	Address	Location*	Campus Area in Acres	Built up Area in sq.mts.	Programmes Offered	Date of Establishment	Date of Recognition by UGC/MHRD
Main campus	Kerala University of Fisheries and Ocean Studies Panangad P.O. Ernakulam	Rural	62.845	41000	BFSc, BTech, MFSc, MSc, MBA, MTech, PhD		

2.2 ACADEMIC INFORMATION

Affiliated Institutions to the University

Type of Colleges	Permanent	Temporary	Total
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Furnish the Details of Colleges of University

Type Of Colleges	Numbers
Constituent Colleges	0
Affiliated Colleges	0
Colleges Under 2(f)	0
Colleges Under 2(f) and 12B	0
NAAC Accredited Colleges	0
Colleges with Potential for Excellence(UGC)	0
Autonomous Colleges	0
Colleges with Postgraduate Departments	0
Colleges with Research Departments	0
University Recognized Research Institutes/Centers	15

Is the University Offering any Programmes Recognised by any Statutory Regulatory Authority (SRA)	: Yes						
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SRA program	Document						
AICTE	106464_14647_1_1712140098.pdf						
ICAR	106464_14647_3_1710398978.pdf						

Details Of Teaching & Non-Teaching Staff Of University

Teaching Faculty												
	Professor				Associate Professor				Assistant Professor			
	Male	Female	Others	Total	Male	Female	Others	Total	Male	Female	Others	Total
Sanctioned	5				12				41			
Recruited	1	1	0	2	5	3	0	8	21	17	0	38
Yet to Recruit	3				4				3			
On Contract	0	0	0	0	0	0	0	0	0	0	0	0

Non-Teaching Staff				
	Male	Female	Others	Total
Sanctioned				119
Recruited	36	46	0	82
Yet to Recruit				37
On Contract	9	16	0	25

Technical Staff				
	Male	Female	Others	Total
Sanctioned				14
Recruited	1	2	0	3
Yet to Recruit				11
On Contract	1	5	0	6

Qualification Details of the Teaching Staff

Permanent Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/ LLD/DM/M CH	0	0	0	0	0	0	0	0	0	0
Ph.D.	1	1	0	5	3	0	21	13	0	44
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	0	4	0	4
UG	0	0	0	0	0	0	0	0	0	0

Temporary Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	3	5	0	8
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	1	11	0	12
UG	0	0	0	0	0	0	0	0	0	0

Part Time Teachers										
Highest Qualification	Professor			Associate Professor			Assistant Professor			Total
	Male	Female	Others	Male	Female	Others	Male	Female	Others	
D.sc/D.Litt/LLD/DM/MCH	0	0	0	0	0	0	0	0	0	0
Ph.D.	0	0	0	0	0	0	4	13	0	17
M.Phil.	0	0	0	0	0	0	0	0	0	0
PG	0	0	0	0	0	0	2	11	0	13
UG	0	0	0	0	0	0	0	0	0	0

Distinguished Academicians Appointed As

	Male	Female	Others	Total
Emeritus Professor	0	0	0	0
Adjunct Professor	8	0	0	8
Visiting Professor	0	0	0	0

Chairs Instituted by the University

Sl.No	Name of the Department	Name of the Chair	Name of the Sponsor Organisation/Agency
1	Department of Fisheries Extension Economics Statistics	Pandit Karuppan Chair for policy studies on livelihood security and socioeconomic empowerment of fisherfolk	Government of Kerala
2	Department of Aquaculture	Professor Alikunhi Chair for sustainable aquaculture systems	Gouvernement of Kerala

Provide the Following Details of Students Enrolled in the University During the Current Academic Year

Programme		From the State Where University is Located	From Other States of India	NRI Students	Foreign Students	Total
UG	Male	26	3	0	0	29
	Female	81	2	1	0	84
	Others	0	0	0	0	0
PG	Male	63	27	2	0	92
	Female	192	20	0	0	212
	Others	0	0	0	0	0
Doctoral (Ph.D)	Male	11	0	0	0	11
	Female	35	0	0	0	35
	Others	0	0	0	0	0

Does the University offer any Integrated Programmes?	No
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Details of UGC Human Resource Development Centre, If applicable

Year of Establishment	Nil
Number of UGC Orientation Programmes	0
Number of UGC Refresher Course	0
Number of University's own Programmes	0
Total Number of Programmes Conducted (last five years)	0

2.3 EVALUATIVE REPORT OF THE DEPARTMENTS

Department Name	Upload Report
Department Of Aquaculture	View Document
Department Of Aquatic Animal Health Management	View Document
Department Of Aquatic Environment Management	View Document
Department Of Fisheries Extension Economics And Statistics	View Document
Department Of Fisheries Resource Management	View Document
Department Of Fishing Technology	View Document
Department Of Fish Processing Technology	View Document
Faculty Of Fisheries Engineering	View Document
Faculty Of Fisheries Management	View Document
Faculty Of Fisheries Science	View Document
Faculty Of Ocean Science And Technology	View Document

Institutional preparedness for NEP

1. Multidisciplinary/interdisciplinary:	The New Educational Policy can provide an added impetus to the steps that KUFOS has taken to transform itself into an institution of global recognition. As part of its academic restructuring, KUFOS has taken measures to include a curriculum integrating multiple disciplines for its UG and PG programmes. It also emphasises on practical skill development, provides project-based and experiential learning to its students. The vision and mission of KUFOS is in line with the NEP, and it is with this in mind the initial programmes offered by KUFOS were
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all developed as new generation courses. By aligning with the goals of the NEP, KUFOS aims to contribute to the transformation of the education system and produce graduates who are equipped to address the challenges of the 21st century. Faculty development has been at the core for strengthening professional development. Faculties are encouraged to pursue collaborative teaching crossing the boundaries of department for co-teach courses. Similarly interdisciplinary research and collaborations among faculty members are facilitated by four Centres for Excellences in Research. Faculty and students also share the resources across the departments for their research and learning processes. To promote collaboration among faculties interdisciplinary centres under the aegis of state government funded Plan projects are running in KUFOS. Mentorship of students has been done in a systematic manner in KUFOS. At the UG level every 10 students are provided with a faculty mentor, who helps them both personally and professionally. At the PG level, the mentor usually is the research supervisor of the students. Various co-curricular and extra activities are organised by clubs and societies that focuses on interdisciplinary themes such as personality development, community services, arts, sports, literature, and social awareness. To support students who need medical and psychological support, a medical doctor and social worker are functioning in the campus. To ensure flexible learning pathways, KUFOS has made provisions for elective courses and open courses on SWAYAM, NPTEL platforms. The credit transfer facility and requirements under ABC that the university agrees upon can help students build a multidisciplinary skill set and explore their interests. The Faculty of Ocean Sciences in KUFOS has proposed a set of programmes to be included in the next academic year under integrated mode. In these programmes provision for multiple entry and exit options are provided. To formulate policies that support interdisciplinary initiatives, including flexible course requirements and recognition of interdisciplinary work in faculty promotions, the IQAC of the university has been asked to layout timely proposals, adhere to the guidelines issued by UGC, enrol under SII, UTSAH portals. The University has developed a multidisciplinary and cross-disciplinary business innovation ecosystem

	<p>with incubators for startups and innovators titled KUFOS Business Incubation Centre (BIC) with the financial support of Atal Innovation Mission (AIM). KUFOS has brought multidisciplinary/interdisciplinary approaches by redesigning the curriculum, creating advanced learning platforms, promoting cross-disciplinary research, and training faculty members. By fostering collaboration, flexibility, and innovation, KUFOS envisages to create a dynamic and integrative learning environment that aligns with the objectives of NEP 2020.</p>
<p>2. Academic bank of credits (ABC):</p>	<p>The Academic Bank of Credit (ABC) is a transformative initiative under the National Education Policy (NEP) 2020 that aims to facilitate flexibility and lifelong learning in the higher education system. KUFOS has registered with the Academic Bank of Credits and until May 2024, has created 1001 ABC IDs, and uploaded 727 ABC marksheet data to the portal. A dedicated cell under the Examinations section of the University updates the ABC registry and creates a repository of students within the University, who have registered for courses offered through MOOC platform by other institutes. Students are given freedom to accumulate credits from different courses and institutions over time, and transfer these credits at the end of each semester. KUFOS supports such flexibility and has also taken steps to identify programme specific courses that could be taken by students within the major disciplines for enabling required credits. For students of Faculty of Fisheries Science, with the help of ICAR, a consortium of institutes is being identified and online courses are being offered through Agri-Diksha portal which the students are encouraged to take. The state government through its Higher Education Council has devised a draft proposal for implementing ABC in Kerala. To increase the Gross Enrolment Ratio of students in KUFOS, the university has devised certificate courses. Since most of these modular courses can be taken individually or as part of a degree program, with credits accumulated in the ABC, students from neighbouring institutes are benefitted. The university has run evening courses for its LLM programme, which had great demand among the practicing advocates. Similarly, from this year onwards,</p>

	<p>KUFOS has initiated part-time MTech programmes for engineers. Working professionals and adult learners can benefit from the ABC by accumulating credits over time and applying them towards degrees or certifications. ABC can facilitate international collaborations and student exchange programs, allowing students to earn credits from foreign institutions and transfer them back to their home institutions. To conclude through ABC, KUFOS envisaged to diversify its academics, supporting lifelong learning, reducing the drop-out percentage and thereby to provide a more dynamic and student-centric educational experience.</p>
<p>3. Skill development:</p>	<p>KUFOS offers various several skill development programs aimed at enhancing the expertise and employability of students, updating or sharpening the competency of its staff, and capacity building of its stakeholders. Skill Development is an integral part of KUFOS curriculum design, and every program offered has at least one component related to skill development thereby enriching the skillset of the students. The curriculum includes practical components such as laboratory work, field studies, and hands-on training, allowing learners to develop practical skills. The major attraction of the undergraduate programs is the Experiential Learning (EL). EL is an integrated learning system to promote professional skills and knowledge through hands on experience and personal involvement. The Student Rural Entrepreneurship Awareness Development Yojna (READY) is one such initiative where the undergraduate students undergo one-year training in their respective discipline and undergo hands-on training, in-plant training with industrial attachment. Students of PG and PhD are encouraged to attend various training programmes in their domain, the registration fee of which is met from the KUFOS Plan fund. The Centre for Excellence in Advanced Studies and Research in Entrepreneurship Development (CASRED) offers training and skill development programme for youth and women in various aspects of processing, packing and value addition of food products. Under the DBT Skill Vigyan State Partnership Programme, specific programs aimed at developing skilled human resources in biotechnology and related fields is being done. The programs offer stipendiary, hands-on</p>

training to students and technicians, ensuring alignment with industry standards and enhancing job readiness. Additionally, the KUFOS Business Incubation Centre, under the Atal Innovation Mission (AIM), provides training on the development of various food products, and focusing on innovative and sustainable packaging solutions. KUFOS provide timely upgradation of the skill capabilities of teaching and non-teaching staff through training and professional development. Faculties attend various training workshops focusing on modern teaching methodologies and analytical skills, while the support staff upgrade their e-skills as part of office automation. KUFOS has invested hugely in developing infrastructure for digital tools and platforms, curriculum restructuring, student and staff training, industry collaborations, e-automation, and entrepreneurship to enhance skill development.

4. Appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course):

Integrating the Indian Knowledge System (IKS) into the curriculum involves incorporating traditional Indian knowledge, philosophies, and practices into modern education. Being a specialized university, KUFOS has not been offering conventional subjects such as Literature, Humanities, Social Sciences or Liberal Arts. However, Fisheries and Ocean studies while embracing new developments has traditionally been rooted to IKS. This is particularly evident in the syllabi that encompasses both traditional knowledge and present-day science especially in aquaculture, fishing techniques, fishing crafts building, navigation, processing, resource identification, traditional medicines, eco-friendly practices, weather forecasting, assessing current patterns and predicting disasters. To percolate IKS to the public in general and students of fisheries in particular, KUFOS has established a Pandit Karuppan Chair for the empowerment of fisherfolk and archiving the indigenous technical knowledge (ITK). ITK which has been transferred from generation to generation, is the accumulated information, vision and philosophy of the life acquired by traditional people through experience and which even in the present day provides solutions for various problems faced by them. The digitized format of various such knowledges is documented and a book providing a nutshell of some salient ITK has been published. Integrating IKS into the curriculum holistically

enhances the students understanding of the issue, motivating them to look for practical solutions. This cultivates skills and insights in the individual that can contribute in addressing contemporary societal challenges. Yoga is a compulsory subject in the UG curricula of KUFOS. KUFOS routinely celebrates International Yoga Day and conducts awareness programmes, and participates in cultural festivals under the patronage of National Service Scheme (NSS) and Students Union. The library in KUFOS has good representation of books in IKS. By blending traditional knowledge with modern education, KUFOS provides a more inclusive and comprehensive learning experience. Through the adoption of National Education Policy 2020, KUFOS envisages to diversify its platter of courses it would be offering in future. This would also include various multidisciplinary programmes cutting across a vast variety of subjects including those directly pertaining to IKS. Integrating the IKS into the curriculum would thereby enriches students' understanding of their cultural heritage and promotes a holistic education.

5. Focus on Outcome based education (OBE):

Outcome-Based Education (OBE) is a student-centric learning model that focuses on measuring student performance through outcomes. KUFOS has implemented OBE to ensure that its graduates meet specific competencies and skills relevant to their fields. Curriculum reformation is a continuous process in KUFOS. While for the programmes offered by Faculty of Fisheries, the syllabus is framed by a national level high-power committee of Indian Council of Agricultural Research (ICAR), for all other Faculties an expert committee restructures the syllabus once in three years. Specific learning outcomes for each course and program that align with industry needs and academic standards are identified. The curriculum so developed integrates theoretical knowledge with practical applications. Diverse assessment tools are evaluated to check whether students have achieved the desired outcomes. To top it all regular review and feedback of the performance ensures continuous improvement in the curriculum and teaching methods. For the PG programmes under the ICAR stream, a Broad Subject Matter Area (BSMA) committee has recently revised the curriculum identifying programme outcomes (PO) and course outcomes (CO). This has led to

	<p>redesigning classroom activities, lab work, field trips, and projects that directly contribute to achieving these COs. University has been given the liberty to modify 20% of this curriculum to suite their agroclimatic zones, expertise of the faculty and mandate of the institute. Under this new scheme both formative assessments through feedback system, and summative assessments, evaluating student learning at the end of an instructional period is made more transparent. Focus on student outcomes ensures that teaching methods and assessments are designed to support student success. Implementing OBE requires significant time and resources for curriculum development, training, and continuous assessment. Hence for other programmes Curriculum Development workshops are organised by concerned Faculty to adopt new educational schemes. KUFOS publishes the curriculum and its outcomes in the university website which makes it easier for the student to measure the effectiveness of educational programs. Hence by adopting OBE, KUFOS is committed to enhance the quality of education and ensure that students are well-prepared to meet the demands of the fisheries and ocean studies industry.</p>
6. Distance education/online education:	<p>KUFOS has taken some initial steps to offer online and Massive Open Online Courses (MOOCs) to provide flexible and accessible education opportunities in the field of fisheries, ocean studies, and related areas. These courses are designed to cater to a wide audience, including students, professionals, and enthusiasts who wish to enhance their knowledge and skills in these domains. KUFOS had initiated the MOOC programme in association with Amrita Virtual Interactive e-Learning World (A-VIEW), which is an indigenously built multi-modal, multimedia e-learning platform. At the start, KUFOS had offered four online courses and had listed another 13 in different disciplines targeting students who had passed 12th grade. A dedicated portal mooc.kufos.ac.in was launched in January 2016 for this purpose. However, later in 2023 KUFOS and the National Programme on Technology Enhanced Learning (NPTEL) coordinated by the Indian Institute of Technology-Madras, joined hands to offer courses in food technology, with special focus on seafood value addition. Presently KUFOS offers two MOOC courses on the SWAYAM (NPTEL) platform</p>

i.e., (1) Canning Technology and Value Addition of Seafood and (2) Food Packaging technology. These are 8-week courses with 2 credits, and can be accessed through the link https://onlinecourses.nptel.ac.in/noc23_ge31/preview and https://onlinecourses.nptel.ac.in/noc23_ge32/preview respectively. Till date over 5600 students have enrolled for these courses. The learners include students, academicians and professionals from the industry. These courses are also accepted as Faculty Development Programmes by the AICTE. During the Covid pandemic, KUFOS initiated its online Learning management system (LMS) through the Microsoft-Teams platform. Both teaching and evaluation of students was conducted through this mode. To facilitate content creation, a recording station with facilities for editing, mixing and web casting has been established. This unit is now being used for producing instructional films for the farming community. A series of such videos have been uploaded on YouTube with free access to public. KUFOS has also registered in the Agri-Diksha portal of ICAR for creating content for programmes offered by the Faculty of Fisheries. In future, KUFOS aspires to broaden its reach to a wider audience by catering to their specific need either as beginners or advanced learners.

Institutional Initiatives for Electoral Literacy

1. Whether Electoral Literacy Club (ELC) has been set up in the College?	No. The student's union in KUFOS is elected annually through a democratic process of election as prescribed by the Lyngdoh committee. Students are politically oriented and well aware of the electoral processes. The student's union through its activities undertakes the function of Electoral Literacy Clubs (ELCs), and play a crucial role in fostering democratic engagement and promoting electoral awareness among students.
2. Whether students' co-ordinator and co-ordinating faculty members are appointed by the College and whether the ELCs are functional? Whether the ELCs are representative in character?	Yes. A senior faculty of the university has been appointed as the Associate Patron, who takes care of the student's electoral process. He is assisted by two other faculty members for conducting a free and fair election. Prior to the election, this committee

	<p>conducts series of deliberations with the students, distributes materials and information about how to register to vote, the significance of each vote, and the mechanics of voting. The student's union also host debates, discussions, and forums on political and electoral issues, helping students form informed opinions. The Associate Patron works in partnership with the Election Commission and other electoral bodies to ensure that the latest information and resources are available to the students.</p>
<p>3. What innovative programmes and initiatives undertaken by the ELCs? These may include voluntary contribution by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc.</p>	<p>These may include voluntary contributions by the students in electoral processes-participation in voter registration of students and communities where they come from, assisting district election administration in conduct of poll, voter awareness campaigns, promotion of ethical voting, enhancing participation of the under privileged sections of society especially transgender, commercial sex workers, disabled persons, senior citizens, etc. The National Service Scheme (NSS) as part of its annual activities has taken up efforts through mass campaigns to educate students about the electoral process, the importance of voting, and their rights as voters. Prior to the General Elections 2024, it also conducted a voter registration drives in the campus to facilitate easy registration for students, ensuring that a greater number of eligible voters are registered. On 25th January every year in the university premises the staff and students take the National voter's day pledge. Members of the National Cadet Corps (NCC) of KUFOS facilitates as volunteers during the conduct of polls in the university.</p>
<p>4. Any socially relevant projects/initiatives taken by College in electoral related issues especially research projects, surveys, awareness drives, creating content, publications highlighting their contribution to advancing democratic values and participation in electoral processes, etc.</p>	<p>Dr. Rajesh K, Assistant Professor at the Faculty of Fisheries Management is an economist and column writer in various Malayalam dailies. Through his social handles, he creates awareness among the Public of the actual process of election, issues faced by the officials while conducting the poll and based on his suggestions the Election Commission has recommended for changes in the distribution of election materials during polls. Through his articles Dr. Rajesh emphasizes the importance of ethical voting practices, discouraging corrupt practices such as vote-buying and emphasizing the impact of each vote on the democratic process.</p>
<p>5. Extent of students above 18 years who are yet to be</p>	<p>Through awareness programmes, there has been a</p>

enrolled as voters in the electoral roll and efforts by ELCs as well as efforts by the College to institutionalize mechanisms to register eligible students as voters.

concerted effort to register maximum students for voter registration. All students who are domicile of Kerala have been registered in the portal of Election Commission, however, some student from outside Kerala have faced difficulties in registering due to non-submission of required original documents.

Extended Profile

1 Students

1.1

Number of students on rolls year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
1104	1128	1114	1076	904
File Description		Document		
Institutional Data in prescribed format		View Document		

1.2

Number of final year outgoing students year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
440	360	373	332	265
File Description		Document		
Institutional data in prescribed format		View Document		

2 Teachers

2.1

Number of full time teachers in the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
44	41	41	45	29
File Description		Document		
Institutional data in prescribed format		View Document		

2.2

Total number of full time teachers worked/working in the institution (without repeat count) during last five years:

Response: 47

File Description	Document
Institutional data in prescribed format	View Document

3 Institution

3.1

Total expenditure excluding salary year wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
2545.25841	2650.13758	2200.82927	2048.75234	1795.260

4. Quality Indicator Framework(QIF)

Criterion 1 - Curricular Aspects

1.1 Curriculum Design and Development

1.1.1

Curricula developed and implemented have relevance to the local, regional, national, and global developmental needs, which is reflected in the Programme outcomes (POs), and Course Outcomes(COs) of the Programmes offered by the University

Response:

Established as India's pioneering Fisheries University, our institution has meticulously designed academic programs under the Credit and Semester System (CSS) to align with local, national, regional, and global developmental goals. Organized into four faculties—Fisheries Science, Ocean Studies, Ocean Engineering, and Fisheries Management—our university offers a diverse range of programs catering to the multifaceted needs of the industry and society.

With nine MFSc (Master of Fisheries Science) programs, 12 MSc programs, one MBA program, five M Tech programs (including two part-time courses), two UG programs, and a range of diploma and certificate programs, our offerings span disciplines such as Fisheries Science, Ocean Studies, Management, Economics, and Law. Admission to the MBA program hinges on prestigious entrance exams like KMAT, CAT, and CMAT, while other programs admit students through a common entrance test conducted by the University.

Integral to our academic ethos is the curriculum's harmonization with real-world challenges and developmental imperatives. Through meticulous development and implementation, our curriculum addresses local, national, regional, and global needs, evident in our Programme Outcomes (POs), Programme Specific Outcomes (PSOs), and Course Outcomes (COs), ensuring graduates are adeptly equipped for their fields.

A distinctive aspect of our academic approach is the mandatory inclusion of projects and internships. Under faculty mentorship, students engage with issues pertinent to various contexts, fostering critical thinking, problem-solving, and social responsibility. Additionally, extension activities are intrinsic to our curriculum, acting as a conduit between academia and industry to address the evolving needs of fishermen and fisheries industrialists.

Admission to our undergraduate programs—Bachelor of Fisheries Science (B.F.Sc.) and Bachelor of Technology (B.Tech.) in Food Technology—is facilitated by the Commissioner for Entrance Examinations (CEE), Kerala State, through exams such as Kerala Engineering, Architecture, and Medical Courses (KEAM) and National Eligibility cum Entrance Test (NEET).

Our commitment to educational innovation extends to Curriculum Revision Workshops, where stakeholders like teachers, alumni, parents, professionals, R&D experts, and industry representatives contribute their insights. These revisions undergo rigorous review by the Department Council and CSS Academic Committee before approval by the Academic Council. Evaluation methods encompass

Continuous Assessment and End Semester Assessment, ensuring alignment with PSOs and COs.

Support structures like the Placement Cell, Incubation Centre, and Career Guidance Bureau enhance employability prospects by providing skill-based training aligned with PSOs/COs. Furthermore, our curriculum places emphasis on professional ethics, gender equity, human values, environmental consciousness, creativity, innovation, and sustainability, adhering to government ethical guidelines.

Embracing Scientific Social Responsibility alongside an ethical curriculum underscores our dedication to global food security and sustainable development while remaining rooted in local contexts. This reinforces our pivotal role in the emerging global knowledge economy, where academic rigor converges with societal relevance.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.1.2

The Programmes offered by the institution focus on employability/ entrepreneurship/ skill development and their course syllabi are adequately revised to incorporate contemporary requirements

Response:

As India's pioneering Fisheries University, Kerala University of Fisheries and Ocean Studies (KUFOS) has meticulously designed academic programs under the Credit and Semester System (CSS) to align with local, national, regional, and global developmental goals. The university is organized into four faculties—Fisheries Science, Ocean Studies, Ocean Engineering, and Fisheries Management—offering a diverse range of programs tailored to meet the multifaceted needs of the industry and society. Emphasizing academic excellence, research, and extension, KUFOS stands apart from other universities.

Our academic programs aim to build a broad set of skills and attributes that enable graduates to succeed throughout their careers. The curricula are designed to facilitate the competency development required for today's workplace, focusing on employability, entrepreneurship, and skill development, particularly in the fisheries sector. The curriculum, designed with industry-specific goals, is revised every three years, incorporating contemporary requirements based on feedback from stakeholders. All programs at KUFOS follow an Outcome-Based Education (OBE) approach and the CSS system. The graduate attributes and program outcomes are aligned with employability, entrepreneurship, and skill development.

The National Service Scheme (NSS) and National Cadet Corps (NCC) provide training for acquiring social skills and practicing community services. The university's Placement and Training Cell (PTC) organizes placement drives and job fairs to benefit students. KUFOS places great emphasis on infusing elements of entrepreneurial skills into the curriculum. Established in 2016 with seed money of three crore rupees sanctioned by the Government of Kerala, the Business Innovation and Incubation Centre (BIIC)

fosters a vibrant innovation ecosystem and effective university-industry linkage. BIIC promotes innovation and entrepreneurship by extending administrative, academic, and incubation support to innovators. It also supports students and faculty in translating their business ideas and concepts into market-ready products and services. In 2023, the first fishery incubation centre in India was sanctioned under the Atal Incubation Centre with an outlay of eight crore rupees by the Government of India.

Students are trained in income generation by marketing the processed and value added products that they prepare during their experiential learning programme. University has allotted space in the Amenity centre where students as part of “Earn while you learn’ scheme maintain fish outlet. Sales of fresh fish and products to public give them enough exposure to start their own ventures.

The applied and interdisciplinary programs under the faculties of Fisheries Science, Ocean Studies, Ocean Engineering, and Fisheries Management address industry needs with a focus on employability, entrepreneurship, and skill development. To enhance students' job skills, KUFOS offers value-added courses that enable their holistic development.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.2 Academic Flexibility

1.2.1

Percentage of new courses introduced out of the total number of courses across all programmes offered during the last five years

Response: 43.95

1.2.1.1 Number of new courses introduced during the last five years:

Response: 276

1.2.1.2 Consolidated number of courses offered by the institution across all Programmes (without repeat count) during the last five years :

Response: 628

File Description	Document
Subsequent Academic Council meeting extracts endorsing the decision of BOS	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Minutes of Board of Studies meeting clearly specifying the syllabus approval of new courses	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

1.3 Curriculum Enrichment

1.3.1

Institution integrates cross-cutting issues relevant to Professional Ethics, Gender, Human Values, Environment and Sustainability and other value framework enshrined in Sustainable Development Goals and National Education Policy – 2020 into the Curriculum

Response:

Our academic approach is distinguished by the mandatory inclusion of projects, internships, and fisheries extension, all under the guidance of faculty mentors. These experiences immerse students in real-world challenges, nurturing critical thinking, problem-solving, and social responsibility. Our contemporary curriculum, with its holistic content, serves as a bridge between education and professionalism, facilitating seamless integration into the outside world. We prioritize the incorporation of professional ethics, gender equity, human values, environmental quotient, creativity, innovation, and sustainability into our curriculum, aligning closely with the university's vision and mission. Ethics are woven into our Program Outcomes (POs) and Program Specific Outcomes (PSOs), with measures such as mandatory plagiarism checks for dissertations and theses, ensuring academic integrity.

Furthermore, our Ph.D. coursework includes 'Research and Publication Ethics', emphasizing ethical research practices. We are proud of our commendable achievements in Goal No. 5 of the UN Sustainable Development Goals (UN-SDGs), with 78% of postgraduates and 74% of research scholars being women. To complement this achievement, we offer over 48 courses directly or indirectly addressing gender issues, empowerment, sensitization, entrepreneurship, and welfare measures, promoting gender equity within academia. Additionally, our curriculum reflects an enduring concern for human values, with several programs addressing issues of deprivation, marginalization, environmental protection, balanced regional development, equity, access, and inclusivity. Beyond the classroom, KUFOS actively engages in practical initiatives such as beach clean-ups, addressing sea erosion, ecosystem evaluation and restoration, training for fish farmers, and providing guidance to youth entrepreneurs. These activities demonstrate our tangible commitment to environmental stewardship and community welfare, further integrating crosscutting issues of professional ethics, gender, human values, environment, and

sustainability into the fabric of our curriculum and institutional ethos. through these endeavors, we aim to prepare our students not only for academic success but also for meaningful contributions to society and the environment, embodying the values of ethical leadership and responsible citizenship.

University also has made it mandatory to celebrate various events on the occasion of World Environment day, Water day, Ozone day, World Ocean day, World Wetland day etc. In doing so it shows its commitment towards creating awareness among its staff and students on exemplifying the significance of these events. Every year Onam, is celebrated with all its zest wherein the community as such get involved. Hence the social atmosphere in KUFOS prepares students to pragmatically approach issues the society in facing without losing the nuances of cultural integrity and human values.

File Description	Document
Upload Additional information	View Document
Provide Link for Additional information	View Document

1.3.2

Number of certificate/value added courses/Diploma Programme offered by the institutions and online courses of MOOCs, SWAYAM/e Pathshala/ NPTEL and other recognized platforms (without repeat count) where the students of the institution have enrolled and successfully completed during the last five years

Response: 12

File Description	Document
Institutional programme brochure/notice for Certificate/Value added programs with course modules and outcomes	View Document
Institutional data in the prescribed format (data template)	View Document
Evidence of course completion, like course completion certificate etc.	View Document

1.3.3

Percentage of programmes that have components of field projects / research projects / internships during the last five years.

Response: 100

1.3.3.1 Total Number of programmes that have components of field projects / research projects / internships (without repeat count) during the last five years

Response: 25

1.3.3.2 Total Number of programmes offered (without repeat count) during the last five years

Response: 25

File Description	Document
Sample Internship completion letter provided by host institutions	View Document
Program and course contents having element of field projects / research projects / internships as approved by BOS	View Document
Institutional data in the prescribed format (data template)	View Document

1.4 Feedback System**1.4.1**

Structured feedback for curriculum and its transaction is regularly obtained from stakeholders like Students, Teachers, Employers, Alumni, Academic peers etc., and Feedback processes of the institution may be classified as follows:

Response: A. Feedback collected, analysed, action taken & communicated to the relevant bodies and feedback hosted on the institutional website

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Feedback analysis report submitted to appropriate committee/bodies	View Document
At least 4 filled-in feedback form from different stake holders like Students, Teachers, Employers, Alumni etc.	View Document
Action taken report on the feedback analysis and its report to appropriate committee/bodies	View Document

Criterion 2 - Teaching-learning and Evaluation

2.1 Student Enrollment and Profile

2.1.1

Enrolment percentage

Response: 97.49

2.1.1.1 Number of sanctioned seats year wise during last five years

2022-23	2021-22	2020-21	2019-20	2018-19
455	455	448	436	441

2.1.1.2 Number of seats filled year wise during last five years (Only first year admissions to be considered)

2022-23	2021-22	2020-21	2019-20	2018-19
429	426	448	436	440

File Description

Document

Provide the relevant information in institutional website as part of public disclosure

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Document relating to sanction of intake as approved by competent authority

[View Document](#)

Admission extract signed by the competent authority (only fresh admissions to be considered)

[View Document](#)

2.1.2

Percentage of seats filled against reserved categories (SC, ST, OBC etc.) as per applicable reservation policy for the first year admission during the last five years

Response: 99.08

2.1.2.1 Number of actual students admitted against the reserved categories in the first year of the programme year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
215	213	225	218	210

2.1.2.2 Total number of seats earmarked for reserved category as per GOI or State Government rule year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
215	213	225	218	220

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document
Final admission list indicating the category as published by the HEI and endorsed by the competent authority.	View Document
Copy of the letter issued by the State govt. or Central Government Indicating the reserved categories(SC, ST, OBC, Divyangjan, etc.) to be considered as per the state rule (Translated copy in English to be provided as applicable)	View Document

2.2 Catering to Student Diversity

2.2.1

The institution assesses the learning levels of the students and organises special Programmes to cater to differential learning needs of the student

Response:

The Kerala University of Fisheries and Ocean Studies (KUFOS) stands out with its unique approach to education. It assesses students' learning levels and organizes specialized programs for advanced and slow learners. These programs, such as hands-on training in processing and marketing dried and value-added fruits and vegetables, and skill development in value-added fishery products, are not only theoretical but also provide practical experience. Events like Fishackathon 1.0 further enhance the learning experience, fostering educational support for diverse learning needs.

The Faculty of Fisheries Management (FFM) offers programs such as "What Do Corporates Expect of Management Graduates?", "Right Focus, Right Decision", "Resume Building", "Attitude, Skills, and Knowledge Building", "Introduction to Transactional Analysis", and "Introduction to R" align education with industry standards. They also host management fests such as Evoque, which a great way to engage students from diverse backgrounds and interests within the University. It additionally provides a platform for students to showcase their management skills.

The University leverages major ICT initiatives from the Ministry of Education, Government of India, by encouraging students to register for MOOCs and credit courses as per university regulations. This approach caters to student diversity by providing flexible learning opportunities, accommodating different learning paces, and offering a wide range of subjects. Access to research databases like Google Scholar, Academia, Research Gate, Scopus, and Web of Science further supports diverse research interests and academic needs, ensuring comprehensive educational support.

Diverse institutional visits, including trips to the National Institute of Oceanography, ICAR-CIFT, Plant Lipids, Campco Chocolate Factory, Achal Industries, Nirapara Rice Processing Plant, and the India International Seafood Show, expose students to practical and theoretical aspects, accommodating different interests and learning styles, bridging classroom learning and real-world applications.

The University organizes Intellectual Property Rights (IPR) workshops to educate students about the importance and management of intellectual property. These workshops, along with the Business Incubation Centre's programs.

Various activities cater to student diversity by offering specialized training, lectures, workshops, and conferences across multiple disciplines. Programs like Electrical Resistivity Method training, lecture series, and events on World Food Day, aquaculture, food adulteration, career orientation, and environmental initiatives accommodate different interests, learning styles, and career goals. This comprehensive educational approach ensures practical training, interdisciplinary learning, and real-world engagement, bridging academic knowledge with industry demands and benefiting all students. The University provided HACCP Level 3 training programs to B.Tech students, contributing Rs. 3000 per student.

The University's Business Incubator, KUFOS Business Incubation Centre, organizes programs like entrepreneurship training for all students, with a special emphasis on women's entrepreneurship.

File Description	Document
Upload Any additional information	View Document
Provide link for additional information	View Document

2.2.2

Student - Full time teacher ratio (Data for the latest completed academic year)

Response: 25.09

File Description	Document
List showing the number of students in each of the programs for the latest completed academic year across all semesters	View Document
Certified list of full time teachers along with the departmental affiliation in the latest completed academic year.	View Document

2.3 Teaching- Learning Process

2.3.1

Student centric methods, such as experiential learning, participative learning and problem solving methodologies are used for enhancing learning experience and teachers use ICT- enabled tools including online resources for effective teaching and learning process

Response:

Our university is committed to a student-centric approach to education, utilizing experiential learning, participative learning, and problem-solving methodologies, so as to enhance the learning experience. Faculty members employ ICT-enabled tools and online resources for effective teaching and learning processes.

Experiential Learning: Experiential learning methods are actively integrated into our programs to achieve specific outcomes. These methods include:

- 1) Research Projects: Students engage in research projects that align with their academic and professional interests;
- 2) Campus Entrepreneurship/Incubates: Encouraging students to participate in entrepreneurship and incubation activities;
- 3) Case Studies: Analysing real-world data and scenarios to develop critical thinking and problem-solving skills;
- 4) Cooperative Education: Combining classroom learning with practical work experience in relevant industries;
- 5) Field Experience: Providing hands-on experience through field trips, and practical exposure in real-world environments;
- 6) Simulation and Interactive Simulation: Using simulated environments for experiential learning and decision-making practice;
- 7) Industry/Community Research Projects: Collaborating with industries and community partners for research projects;

8) Internships and Lab Experience: Offering internships and lab work to gain practical knowledge and skills;

9) Service Learning: Integrating community service with academic coursework;

10) Participatory Learning: Participatory learning is fostered by providing opportunities for students to engage in activities encouraging analysis, exploration, evaluation, synthesis, and criticism. Approaches include:

Brainstorming Sessions: Encouraging creative thinking and idea generation.

Debates and Case Studies: Facilitating critical thinking and articulation of viewpoints.

Discussion Methods: Using various discussion techniques to enhance understanding and engagement.

Wall Writing, Buzz Groups, and Role Play: Interactive activities to improve and strengthen understanding of concepts.

Problem-Solving Methodologies: Problem-solving skills are developed through various methodologies that include 1) Analytical and Creative Problem-Solving: Encouraging both logical analysis and creative thinking, 2) Individual and Group Projects: Promoting collaboration and independent problem-solving, 3) Blended Learning: In line with UGC recommendations, we implement a blended learning approach, 4) Blended Face-to-Face and Online Classes: Combining traditional classroom methods with online learning, 5) Blended MOOCs and Flipped Classrooms: Utilizing online courses and flipped classroom techniques, 6) Online Quizzes and Interactive Simulations: Engaging students through digital quizzes and simulations.

ICT Initiatives: The University leverages major ICT initiatives of the Ministry of Education, Government of India. Encouraging students to register for MOOCs and credit courses as per university regulations.

Faculty Resources: Faculty members utilize various research databases and ICT tools for effective teaching, including:

Research Databases: Google Scholar, Academia, Research Gate, Scopus, and Web of Science.

Institutional LMS and Other Platforms: Google Classroom, Google Meet, Cisco WebEx, and Microsoft Teams.

Library Resources: The University library is fully automated with Koha software and subscribes to numerous e-resources through consortia such as:

UGC-Infonet E-journals Consortium, EShodsindhu Consortium, Infflibnet, KSHEC Consortium, and others: Providing extensive resources for faculty and students.

Grammar and Writing Tools: Grammarly and Quillbot for academic writing.

Plagiarism Checking: Urkund and DrillBit software for maintaining academic integrity.

File Description	Document
Upload any additional information	View Document

2.3.2

The institution adopts effective Mentor-Mentee Schemes to address academics and student-psychological issues

Response:

Mentoring Policy and Structure: The University has a well-defined mentoring policy where teachers are systematically assigned to mentees. Each department allocates students to faculty members based on faculty strength and student numbers, with the mentor-to-mentee ratio decided by the departmental staff council. The University's mentoring policy is a key component of our educational support system. It is not just about assigning teachers to students, but about creating a supportive learning environment. Each department carefully allocates students to faculty members, considering the faculty strength and student numbers. The mentor-to-mentee ratio, decided by the departmental staff council, ensures that each student receives the necessary guidance and support.

Mentoring Focus and Process: Mentoring aims to boost mentees' confidence, foster essential skills, and provide robust networks for long-term benefits.

Mentoring Meetings:

Mentor-mentee meetings are structured to address academic, personal, professional, and health-related topics. Mentors guide mentees in identifying solutions to problems, areas for personal improvement, and strategies for change. Discussions cover career advice, personal development, medical support, and referrals to experts as needed. Progress is monitored in subsequent meetings to ensure continuous support and development.

Continuous Improvement: The mentor-mentee system is regularly reviewed, with provisions for feedback and improvements, to ensure it meets students' evolving needs. Through these comprehensive mentoring practices, the University supports its students' academic, personal, and psychological well-being and fosters a nurturing and effective learning environment.

File Description	Document
Upload any additional information	View Document
List of Active mentors	View Document

2.4 Teacher Profile and Quality

2.4.1

Average percentage of full time teachers appointed against the number of sanctioned posts year wise during the last five years

Response: 69

2.4.1.1 Total Number of Sanctioned year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
58	58	58	58	58

File Description	Document
Sanction letters indicating number of posts sanctioned by the competent authority (including Management sanctioned posts).	View Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template merged with 2.4.3 and 2.4.4)	View Document

2.4.2

Percentage of full time teachers with Ph.D./D.M/M.Ch./D.N.B/ Superspeciality/L.L.D/D.S.C/D.Litt. during the last five years

Response: 93.62

2.4.2.1 Number of full time teachers with Ph.D./D.M/M.Ch./D.N.B/ Superspeciality/L.L.D/D.S.C/D.Litt Superspecialist during the last five years

Response: 44

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
List of faculty having Ph.D./D.M/M.Ch./D.N. Superspeciality/ along with particulars of the degree awarding university, subject and the year of award per academic year.	View Document
Institutional data in the prescribed format (data template)	View Document
Copies of Ph.D./D.M/M.Ch./D.N.B Superspeciality awarded by UGC recognized universities	View Document

2.4.3

Average teaching experience of full time teachers (Data to be provided only for the latest completed academic year, in number of years)

Response: 9.91

2.4.3.1 Total teaching experience of full-time teachers as of latest completed academic year

Response: 436

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document

2.5 Evaluation Process and Reforms**2.5.1**

Average number of days from the date of last semester-end/ year- end examination till the last date of declaration of results during the last five years

Response: 23

2.5.1.1 Number of days from the date of last semester-end/ year- end examination till the last date of declaration of results year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
9	21	28	31	26

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
Institutional data in the prescribed format (data template)	View Document

2.5.2

Percentage of student complaints/grievances about evaluation against total number of students appeared in the examinations during the last five years

Response: 9.46

2.5.2.1 Number of complaints/grievances about evaluation year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
45	42	36	39	25

2.5.2.2 Number of students appeared in the examination conducted by the institution year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
440	424	434	399	279

File Description	Document
List the number of students who have applied for re-valuation/re-totalling program wise and the total certified by the Controller of Examinations year-wise for the assessment period.	View Document
Institutional data in the prescribed format (data template)	View Document

2.5.3**Status of automation of Examination division along with approved Examination Manual/ordinance**

Response: B. Only student registration, Hall ticket issue & Result Processing

File Description	Document
The screenshot should reflect the HEI name and the name of the module.	View Document
The report on the present status of automation of examination division including screenshots of various modules of the software.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

2.6 Student Performance and Learning Outcomes**2.6.1**

The institution has stated learning outcomes (Program and Course outcomes)/graduate attributes which are integrated into the assessment process and widely publicized through the website and other documents and the attainment of the same are evaluated by the institution

Response:

The University's academic excellence is attained by undertaking graduate and postgraduate teaching and research programmes in emerging fisheries and ocean sciences disciplines. University has started an OBE-based curriculum in 2022 to enhance the quality of the educational system. All academic activities involved in OBE help the students achieve the actual goals, and help the teachers explain what is expected of them by adopting appropriate teaching methodologies. Based on the different seminars and workshops on OBE organised by IQAC, program outcomes are developed to define the skills, abilities and knowledge that the students should gain when they complete their course.

It also ensures teachers and students are aware of the programme and course outcomes. The students of subsequent semesters were intimated about the Course outcomes of individual courses. Before orienting the students, the teachers studied the Programme and Course Outcomes in detail, which helped teachers and students understand the importance of knowing about them.

The Faculty of Fisheries Management has taken significant steps in implementing Outcome-based education. This was exemplified by the adoption of this pattern for the Master of Business Administration (MBA) course in 2022. This decision, approved as Agenda item No.336 in the academic council, resulted in substantial changes in the course curriculum. These changes, a reflection of the institution's commitment to keeping pace with evolving educational practices, have been well-received

by the students and faculty.

The major highlights of the course are as follows

- Five Programme Educational Objectives (PEOs) added
- Ten Programme Outcomes (POs) added
- Course Outcomes (COs) for each subject added
- The number of subjects in each area of specialisation has been increased to four as against three earlier

The syllabus prepared for the M.Sc. programme in Environmental Sciences and for the M.Sc. programme in Climate Sciences under the Faculty of Ocean Science and Technology also considers Outcome Education; Bloom's taxonomy was followed while preparing both the Program-Specific Outcomes and Course Outcomes.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document

2.6.2

Pass percentage of students (excluding backlog students) (Data to be provided only for the latest completed academic year)

Response: 90.91

2.6.2.1 Total number of final year students who passed the examination conducted by Institution.

Response: 400

File Description	Document
percentage of students of the final year (final semester) eligible for the degree program-wise / year wise	View Document
Institutional data in the prescribed format (data template)	View Document
Certified report from the Controller of Examinations indicating the pass	View Document
Annual report of COE highlighting the pass percentage of students	View Document

2.7 Student Satisfaction Survey

2.7.1

Online student satisfaction survey regarding teaching learning process

Response: 3.52

File Description	Document
Upload any additional information	View Document

Criterion 3 - Research, Innovations and Extension

3.1 Promotion of Research and Facilities

3.1.1

The institution's Research facilities are frequently updated and there are well defined policy for promotion of research which is uploaded on the institutional website and implemented

Response:

Kerala University of Fisheries and Ocean Studies (KUFOS) is committed to fostering a culture of research excellence and integrity among its staff and students through a well-defined and inclusive Research Policy. The revised Research Policy of 2024 (<http://kufos.ac.in/wp-content/uploads/2024/06/KUFOS-RESEARCH-POLICY.pdf>) reflects the University's unwavering commitment to maintaining high standards in research, ethical conduct, collaboration, and knowledge transfer. This policy serves as a guiding framework to ensure that our research activities meaningfully contribute to the advancement of fisheries and ocean sciences, while also upholding the University's dedication to societal impact and sustainable management of marine and aquaculture resources.

All research activities at KUFOS fall under the purview of the Directorate of Research, headed by the Director of Research. This centralized structure ensures streamlined management and oversight of the University's research endeavors. KUFOS operates a two-tier system to manage its research activities, comprising the Research Council (RC) and Faculty Doctoral Committees. The Research Council is responsible for monitoring the progress and quality of research conducted at the University.

To financially support research scholars who do not receive national or state fellowships, KUFOS provides an upgraded Junior Research Fellowship (JRF) of Rs. 14,000 per month for up to three years, and Post-Doctoral Fellowships at Rs. 42,000 per month for a maximum of two years. The University also offers seed money to faculty members, providing essential momentum for their research activities.

KUFOS continuously updates its research facilities to promote cutting-edge research. The University has established several state-of-the-art facilities, including:

- Referral Laboratory for Aquatic Animal Disease Diagnosis and Quality Testing
- Central Instrumentation Laboratory
- Mobile Aqua Clinic
- Biosecure Wet Lab (Animal house)
- Bussiness Incubation Centre
- Engineering Workshop
- Public Aquarium
- Museum
- Well-Equipped Centers and Departmental Laboratories
- Recording Studio

These facilities ensure that researchers have access to the latest technology and tools necessary for groundbreaking scientific exploration and innovation. Additionally, KUFOS extends the use of these facilities to students and researchers from other institutions, demonstrating its commitment to social

responsibility.

KUFOS faculty have secured 32 government and non-government funded research projects and collaborative ventures worth Rs. 3087.6056 lakhs. The University regularly receives funding from various agencies, including DST, DBT, INCOIS, MoES, SAC/ISRO, NITI Aayog, PMMSY, KSCSTE, Kerala Forest Development, and the Government of Kerala.

The outcomes of KUFOS research are evident in its numerous publications in high-impact journals, high citation rates, numerous awards won by faculty and students in research and innovation, and significant technology transfers. Notable faculty members, such as Dr. Rajeev Raghavan, listed among the Top 2% Scientists in the World by Stanford University, and Dr. Anu Gopinath, who participated in Indian Arctic Expeditions, exemplify the University's research excellence.

KUFOS has also established collaborative partnerships with top-ranking academic and research institutions to promote an interdisciplinary research culture and a robust innovation ecosystem. The University's commitment to research and innovation is further recognized by its "BEGINNER" ranking in the Atal Ranking of Institutions on Innovation Achievement (ARIIA) in 2021, 25th position among ICAR institutions in the NIRF ranking and **Membership in the UArctic Network**.

Despite being a relatively young institution, KUFOS has carved out a niche in the field of Fisheries and Ocean Sciences and continues to promote a thriving research environment that contributes significantly to scientific advancement and societal well-being.

File Description	Document
Upload COs for all courses (exemplars from Glossary)	View Document
Upload any additional information	View Document
Provide links as Additional Information	View Document

3.1.2

The institution provides seed money to its teachers for research (average per year)

Response: 41.07

3.1.2.1 Amount of seed money provided by institution to its teachers for research year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
183.67	10	0	11.69	0

File Description	Document
Sanction letters of seed money to the teachers is mandatory	View Document
List of faculty who have been provided with seed money for research along with the title of the project, duration and amount year-wise	View Document
Institutional data in the prescribed format (data template)	View Document
Audited Income-Expenditure statement highlighting the expenditure towards seed money endorsed by the Finance Officer	View Document

3.1.3

Percentage of teachers receiving national / international fellowship / financial support by various agencies for advanced studies / research during the last five years.

Response: 17.02

3.1.3.1 Number of teachers who received national/ international fellowship/financial support from various agencies, for advanced studies / research; year-wise during the last five years

Response: 8

File Description	Document
List of teachers who have received the awards along with the nature of award, the awarding agency etc.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the award letters of the teachers.	View Document

3.1.4

Percentage of JRFs, SRFs among the enrolled PhD scholars in the institution during the last five years

Response: 42.42

3.1.4.1 The Number of JRFs, SRFs among the enrolled PhD scholars in the institution during the last five years

Response: 165

3.1.4.2 Number of PhD Scholars enrolled during last five years

Response: 389

File Description	Document
List of JRFs, SRFs, Post Doctoral Fellows, Research Associates and other research fellows along with the details of the funding agency is to be provided.	View Document
Institutional data in the prescribed format (data template)	View Document
E copies of fellowship award letters (mandatory)	View Document

3.2 Resource Mobilization for Research**3.2.1**

Total Grants research funding received by the institution and its faculties through Government and non-government sources such as industry, corporate houses, international bodies for research project, endowment research chairs during the last five years (INR in Lakhs)

Response: 3087.6056

File Description	Document
List of Extramural funding received for research, Endowment Research Chairs received during the last five years along with the nature of award, the awarding agency and the amount.	View Document
Institutional data in the prescribed format (data template)	View Document
E-copies of the letters of award for research, endowments, Chairs sponsored by non-government sources	View Document

3.2.2

Number of research projects per teacher funded by government, non-government, industry, corporate houses, international bodies during the last five years

Response: 0.51

3.2.2.1 Number of research projects funded by government and non-government agencies during the last five years

Response: 24

File Description	Document
List of project titles with details of Principal Investigator, amount sanctioned and sanctioning agency etc.	View Document
Institutional data in the prescribed format (data template merged with 3.2.1)	View Document
E-copies of the grant award letters for research projects sponsored by government agencies.	View Document

3.3 Innovation Ecosystem

3.3.1

Institution has created an ecosystem for innovations, Indian Knowledge System (IKS), including awareness about IPR, establishment of IPR cell, Incubation centre and other initiatives for the creation and transfer of knowledge/technology and the outcomes of the same are evident

Response:

Adopting the Indian Knowledge System (IKS) and promoting the development and dissemination of technology and knowledge is demonstrated by a diverse range of projects and academic centres. Kerala University of Fisheries and Ocean Studies pioneered an ecosystem that promotes innovations and entrepreneurship among students offering a nurturing environment where innovation can flourish and thrive. KUFOS Business Incubation Centre(KUFOS-BIC) intends to be an augmented platform to produce successful Entrepreneurs to back them up with necessary resources and mentorship that will eventually make the program financially viable and free-standing, create jobs, commercialize new technologies and strengthen national economies. Preincubation, incubation (which includes idea mentorship, idea screening, concept development, product development, and facilitating assistance) skill development training are some of the different offerings in business incubation centre. KUFOS-BIC collaborate with various organisations for conducting various training programs to promote entrepreneurial networks with Kerala Startup Mission(KSUM), National Institute of Agricultural Extension Management(MANAGE), *Kerala State Council for Science, Technology and Environment (KSCSTE)* ,Entrepreneurship Development Institute of India(EDII),National Intellectual Property Awareness Mission(NIPAM),K-DISC. BIC acts as Nodal agency for Innovation Entrepreneurship Development Centre(IEDC), Institute Innovation Council(IIC), Young Innovators Programme (YIP). . For the benefit of the student body, it actively hosts lectures, hackathons, idea hunts, pitchfest and received many awards and prizes upto 3 lakhs for idea generation and prototype preparations. KUFOS serves as the Nodal Centre for Innovation and Entrepreneurship Development Center (IEDC), Institute Innovation Council,MSME Additionally BIC has 3 production lines-Meat,poultry,kheema line, Bakery and confectionery line, Fruit and vegetable processing line for new products developments and holding skill development trainings. KUFOS has been selected to establish Atal Incubation Centre by NITI Aayog to nurture knowledge-based and innovation-driven enterprises to increase the successful development of new businesses, job creation and employment. In conclusion

KUFOS foster culture of creativity, collaboration, and experimentation empower young entrepreneurs to turn their vision into action and create lasting impact.

Since 2019, KUFOS has been an active participant in the **Young Innovators Programme (YIP)** under the Kerala Development and Innovation Strategic Council (K-DISC). This program enables students to engage in innovation challenges, encouraging them to develop creative solutions to real-world problems. Through YIP, students gain hands-on experience in innovation, research, and entrepreneurship.

KUFOS is the Central Zone domain partner of K-DISC in Fisheries. The following is the summary of **ideas selected from KUFOS at State Level :**

YIP 2.0 State level Ideas selected - 1/102

YIP 3.0 State level ideas selected - 7/96

YIP 4.0 State level ideas selected - 1/114

YIP 5.0 ideas are under evaluation

Incubated 4 teams of YIP 3.0 at KUFOS (3 internal & 1 external), and currently incubating 1 team of YIP 4.0 (external).

File Description	Document
Upload any additional information	View Document

3.3.2

Total number of awards received for *research/innovations* by institution/teachers/research scholars/students during the last five years

Response: 62

File Description	Document
Institutional data in the prescribed format (data template)	View Document
e- Copies of award letters issued by the awarding agency	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4 Research Publications and Awards

3.4.1

The institution ensures implementation of its stated Code of Ethics for research

The institution has a stated Code of Ethics for research and the implementation of which is ensured through the following:

- 1. Inclusion of research ethics in the research methodology course work**
- 2. Presence of institutional Ethics committees (Animal, chemical, bio-ethics etc.,)**
- 3. Plagiarism check through software**
- 4. Research Advisory Committee**

Response: A. All of the above

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Copy of the syllabus of the research methodology course work to indicate if research ethics is included	View Document
Constitution of the ethics committee and its proceedings as approved by the appropriate body.	View Document
Constitution of research advisory committee and its proceedings as approved by the appropriate body.	View Document
Bills of purchase of licensed plagiarism check software in the name of the HEI.	View Document

3.4.2

Total number of Patents awarded during the last five years

Response: 1

File Description	Document
Institutional data in the prescribed format (data template)	View Document
e-copies of letter of patent grant	View Document

3.4.3

Number of Ph.Ds awarded per recognized guide during the last five years

Response: 1.17

3.4.3.1 How many Ph.D s were awarded during last 5 years

Response: 48

3.4.3.2 Number of teachers recognized as guides during the last five years

Response: 41

File Description	Document
PhD Award letters to PhD students.	View Document
Letter from the university indicating name of the PhD student with title of the doctoral study and the name of the guide.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.4**Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years****Response:** 17.38**3.4.4.1 Number of research papers published in the Journals as notified on UGC CARE list during the last five years**

Response: 817

File Description	Document
List and links of the papers published in journals listed in UGC CARE list and	View Document
Institutional data in the prescribed format (data template)	View Document
Link to the institutional website where the first page/full paper (with author and affiliation details) is published	View Document

3.4.5**Number of books and chapters in edited volumes published per teacher during the last five years****Response:** 1.21

3.4.5.1 Total Number of books and chapters in edited volumes published during the last five years

Response: 57

File Description	Document
List of chapter/book with the links redirecting to the source website	View Document
Institutional data in the prescribed format (data template)	View Document
E-copy of the Cover page, content page and first page of the publication indicating ISBN number and year of publication for books/chapters	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.6*E-content is developed by teachers :*

- 1. For e-PG-Pathshala*
- 2. For CEC (Under Graduate)*
- 3. For SWAYAM*
- 4. For other MOOCs platform*
- 5. Any other Government initiative*
- 6. For institutional LMS*

Response: B. Any 4 of the above

File Description	Document
Supporting documents from the sponsoring agency for the e- content developed by the teachers need to be provided.	View Document
Institutional data in the prescribed format (data template)	View Document
Give links to upload document of e-content developed showing the authorship/contribution	View Document
For institution LMS a summary of the e-content developed and the links to the e-content should be provided	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

3.4.7**Bibliometrics of the publications during the last five years based on average Citation index in Scopus/ Web of Science****Response:** 8.16

File Description	Document
Bibliometrics of the publications during the last five years	View Document
Any additional information	View Document

3.4.8**Bibliometrics of the publications during the last five years based on Scopus/ Web of Science – h-index of the Institution****Response:** 32

File Description	Document
Bibliometrics of publications based on Scopus/ Web of Science - h-index of the Institution	View Document
Any additional information	View Document

3.5 Consultancy**3.5.1****Revenue generated from consultancy and corporate training during the last five years****Response:** 53.3**3.5.1.1 Total amount generated from consultancy and corporate training year-wise during the last five years (INR in lakhs).**

2022-23	2021-22	2020-21	2019-20	2018-19
18.21	11.53	7.32	7.39	8.85

File Description	Document
Letter from the corporate to whom training was imparted along with the fee paid	View Document
Letter from the beneficiary of the consultancy along with details of the consultancy fee.	View Document
Institutional data in the prescribed format (data template)	View Document
Audited statements of accounts indicating the revenue generated through and corporate training/consultancy.	View Document

3.6 Extension Activities

3.6.1

Outcomes of extension activities in the neighborhood community in terms of impact and sensitizing the students to social issues and holistic development, and awards received if any during the last five years (Showcase at least four case studies to the peer team)

Response:

Kerala University of Fisheries and Ocean Studies is not only an academic institution, but also a catalyst for community engagement and sustainable development. Through diverse extension activities, the university is actively contributing to the welfare of local communities (especially marginalized communities) and subsequently to the advancement of Kerala's fisheries sector. This overview highlights collaborative efforts across the various units and departments of the University, showcasing the institution's commitment to holistic progress.

NSS and NCC Initiatives:

The National Service Scheme (NSS) and National Cadet Corps (NCC) units are instrumental in fostering social responsibility and leadership qualities among students. Observation of days such as World Environment Day, World AIDS Day etc, organizing events such as awareness talks, cleanliness drives, health camps, gender sensitization efforts, flood relief activities, food distribution to under privileged and health check-up camps contribute to holistic community well-being, as well as promoting inclusivity and resilience. These initiatives empower students to become proactive agents of change in society.

Departmental Engagements:

Departments within the university actively participate in a range of initiatives to address societal challenges. Activities such as bleach cleanup drives, organizing of exhibitions and talks, and raising awareness about critical issues such as antibiotic resistance and plastic pollution. All these activities also demonstrate a commitment to preserving Kerala's rich aquatic biodiversity.

Directorate of Extension Endeavours:

The Directorate of Extension plays a pivotal role in empowering fisher communities across Kerala. Village adoption programs, studies on the effect of flood on cage aquaculture, and training initiatives focus on capacity building and livelihood enhancement, thereby ensuring sustainable development. Training programs on seed production and aquaculture techniques equip farmers with necessary skills, while advisory services facilitate innovation and best practices adoption. Conducting and participating in exhibitions serve as an important means of transfer of technology to the fish farmers and fishers in the sector. In addition, arranging Aqua-clinics along with these exhibitions have ensured the services of experts working in the different sectors of fisheries, and help to solve the problems of the stakeholders to a great extent

Restoration of Chellanam Panchayat

Chellanam, a coastal village in Ernakulam District, has been facing the problem of coastal erosion and related issues since the last few decades. The University was directed by the Fisheries Minister of Kerala to coordinate a study on challenges ranging from engineering solutions to coastal protection and prevention of flooding, rehabilitation, livelihood enhancement, health care, education, infrastructure development, social and psychological upliftment, etc. Both the interim and final report was submitted by the KUFOS Chellanam committee to the Government of Kerala in this regard.

The extension activities not only yield tangible outcomes like environmental conservation and economic empowerment, but also sensitize students to social and societal issues and help develop their leadership skills. Additionally, engagement with fisher communities facilitates meaningful interaction and knowledge exchange. Students gain first-hand insights into rural life, and exposure to diverse challenges help broaden their perspectives, fostering empathy and a commitment to social justice.

Restoration of Vembanad Lake

Survey and Study of Vembanad Lake Biodiversity has helped in Capacity building, focus attention on issues on lake deterioration and biodiversity decline and bring issues into public domain.

File Description	Document
Provide the link for additional information	View Document

3.6.2

Number of extension and outreach programs conducted by the institution through organized forums like NSS/NCC with involvement of community year wise during the last five years

Response: 99

3.6.2.1 Number of extension and outreach programs conducted by the institution through

organized forums including NSS/NCC with involvement of community year wise during the last five years.

2022-23	2021-22	2020-21	2019-20	2018-19
38	21	7	25	8

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Geo-tagged Photographs and any other supporting document of relevance should have proper captions and dates.	View Document
Detailed list and report for each extension and outreach program to be made available, with specific mention of number of students participated and the details of the collaborating agency	View Document

3.7 Collaboration

3.7.1

Number of functional MoUs/linkages with institutions/ industries in India and abroad for internship, on-the-job training, project work, student / faculty exchange and collaborative research during the last five years

Response: 23

File Description	Document
List of year wise activities and exchange should be provided	View Document
List and Copies of documents indicating the functiona MoUs/linkage/collaboration activity-wise and year-wise	View Document
Institutional data in the prescribed format (data template)	View Document

Criterion 4 - Infrastructure and Learning Resources

4.1 Physical Facilities

4.1.1

The institution has adequate infrastructure facilities for

a. teaching - learning. viz., classrooms, laboratories,

b. ICT enabled facilities such as smart classes, LMS etc.

c. Facilities for cultural and sports activities , yoga centre, games (indoor and outdoor) gymnasium, auditorium etc.

Describe the adequacy of facilities within a maximum of 500 words

Response:

The University is situated in Kochi, Kerala, spanning over 62.845 acres along NH-66, with an additional satellite campus at Puthuvype covering 50 acres. Established in 2010, KUFOS is dedicated to advancing research and education in the fields of fisheries and ocean studies.

Academic Facilities: KUFOS boasts 51 classrooms and 3 seminar halls equipped with modern amenities such as Wi-Fi and ICT facilities. These spaces prioritize ventilation and lighting for optimal learning environments. LCD projectors are available in all classrooms, with one smart classroom featuring advanced technology like AC and LCD projectors.

Research Infrastructure: The university houses 80 research laboratories designed with proper ventilation, lighting, and safety measures. Facilities include the State Referral Lab, Central Instrumentation Facility, and a feed mill for aquaculture research. Specialized centers of excellence focus on areas like aquatic resource management and food processing.

Technological Resources: KUFOS provides computing facilities across all departments, offering internet access, digital classroom amenities, and software licenses for ARC GIS and DGPS receivers. The university also supports audio-video recording and MOOC facilities for flexible learning options.

Multipurpose Facilities: Beyond academics, KUFOS offers amenities for holistic development. Multipurpose halls, examination centers, and conference rooms cater to various academic and professional activities. Cultural events and yoga sessions promote creativity and mindfulness among students and staff.

Student Life and Accommodation: Separate hostel facilities for both genders, including international student hostels, ensure comfortable living environments. Student-run mess facilities and a canteen managed by self-help groups foster community engagement. Round-the-clock security measures prioritize safety, with amenities like ATMs available for convenience.

Health and Wellness: KUFOS provides comprehensive health services, including access to doctors and

emergency telephones. Specialized sports facilities, such as a gymnasium and swimming pool, promote an active lifestyle. ATMs and an amenity center contribute to overall convenience.

Sustainable Ambience: The campus is characterized by lush greenery and proximity to nature, with scenic views of Vembanad backwaters. Sustainability efforts include 24-hour foot and vehicle patrolling, emergency telephones, and lighted pathways.

KUFOS offers a comprehensive academic and research environment supported by modern facilities and a commitment to sustainability. With a focus on holistic development and community engagement, the university provides students with opportunities for academic growth and personal enrichment.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.1.2

Percentage of expenditure excluding salary, for infrastructure development and augmentation year wise during the last five years

Response: 41.64

4.1.2.1 Expenditure for infrastructure development and augmentation, excluding salary year wise during last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
1091.48	800.97	1153.51	919.69	714.77

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for infrastructure augmentation should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.2 Library as a Learning Resource

4.2.1

Library is automated with digital facilities using Integrated Library Management System (ILMS), adequate subscriptions to e-resources and journals are made. The library is optimally used by the faculty and students

Response:

The KUFOS Library and Information System (KUFOS-LIS) is a robust institution equipped with modern technology and resources to effectively serve its academic community. Established in 2011, the Central Library boasts a substantial floor space of 774 m², while Faculty Libraries are situated on a separate campus. Central to its operations is the implementation of Koha 21.05.08.000, an open-source Library Management Software facilitating automation and management across core library functions such as Acquisition, Circulation, Online Catalog, and Serials Management. Additionally, the system employs barcoding and the Dewey Decimal Classification Scheme for efficient organization and retrieval of books and documents, ensuring ease of access for users through the Online Public Access Catalog (OPAC).

A significant aspect of the KUFOS Library's digitization efforts includes the cataloging of over 200 PhD theses, which are readily accessible on the Knimbus digital library platform. Moreover, the library offers a wide array of electronic resources, including access to CeRA (Consortium for e-Resources in Agriculture) for online journal access in the agricultural domain, and J-Gate, a bibliographic database enabling access to global e-journal literature. Complementing its digital offerings, the library provides a 12-hour reading room for research scholars and students, equipped with Wi-Fi connectivity and CCTV surveillance for security purposes.

In terms of collection, the KUFOS Library houses a diverse range of materials, including 22,198 books, 121 e-books, 4000+ e-journals, 95 Indian journals, and special collections comprising 810 rare documents, 1050 FAO publications on Fisheries, 1200 bound volumes, 600 reports, 150 standards and specifications, 480 CD-ROM databases, and 9 national & regional newspapers. Such a comprehensive collection caters to the diverse needs of its user base, encompassing both academic and research interests.

Educational and training initiatives form an integral part of the KUFOS Library's mandate, with User Orientation Programs conducted regularly for faculty and students to acquaint them with various library services and activities. Additionally, the library offers In-Service training for Library and Information Professionals and Users, along with hosting extension programs related to Library & Reading services. Notably, the library staff also delivers the ICAR Course PGS 501 (Library and Information Science) to PG and PhD students, further contributing to the academic development of the community.

Ensuring academic integrity, the KUFOS Library employs DRILLBIT, a cloud-based plagiarism detection software, leveraging AI and machine learning technology to uphold content integrity. Previously, the institution utilized URKUND executed by INFLIBNET for plagiarism detection from 2019 to 2023, underscoring its commitment to maintaining academic standards.

Ultimately, the KUFOS Library System, guided by its dedicated Library Purchase Committee chaired by the Vice Chancellor and comprising All Deans and the Assistant Librarian, remains steadfast in its commitment to providing exemplary library and information services, supporting the research and

educational objectives of its community through a blend of traditional and cutting-edge digital resources and technologies.

File Description	Document
Upload any additional information	View Document
Provide the Paste link for additional information	View Document

4.2.2

Percentage of expenditure for purchase of books/ e-books and subscription to journals/e-journals year wise during the last five years

Response: 1.04

4.2.2.1 Annual expenditure for purchase of books and journals year-wise during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
4.70	36.25	20.49	8.0	46.92

File Description	Document
Institutional data in the prescribed format	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for purchase of books/ e-books and subscription to journals/e-journals should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3 IT Infrastructure

4.3.1

Institution frequently updates its IT facilities and provides sufficient bandwidth for internet connection

Describe IT facilities including Wi-Fi with date and nature of updation, available internet

bandwidth within a maximum of 500 words

Response:

Response:

Kerala University of Fisheries and Ocean Studies utilizes ICT for all its activities and Rs. 2.4 Crore has been utilized for ICT development during the assessment period. The University IT Cell monitors distinct backup procedures in a variety of IT/ICT-related tasks. University has one Tire data center, Cloud Space, E-Payment services, Data, Voice, Audio video devices, CCTV's, Recording studios, etc.

Servers and Storage: The University has an in-house Hyper-Converged Infrastructure (HCI) with 3 server nodes for running multiple virtual servers. Currently, HCI is loaded with 11 VMs.

Network Infrastructure: University has a full-fledged LAN infrastructure controlled by the IT Cell Network team. The University offers extensive Wi-Fi connectivity in the campus. The Wi-Fi network allows faculty, staff, and students to log on to the Internet at any point of time. University has leased line internet connectivity from National Knowledge Network (NKN) through BSNL with a supply bandwidth of 1 GBPS. The University maintains 2 subdomains for File flow system and KUFOS Academic admission system. Online Services: All students, and staff of the University have access to the University Official email ID supported by Google Workspace Educational account. File management through University Suite (Online File management system from NIC) facilitates the paperless file management system used by all offices in the University. Online meetings are conducted over licensed Microsoft Team accounts with recording facilities. Network connections in and out are maintained over Redundant Next Generation Firewall. Payments related to admission are made online through the SBI Collect and other academic fees are paid through QFix provided by HDFC.

As a State University, KUFOS adopted Kerala State IT policy. Customised to meet its unique needs, the University created a backup plan, and also has an IT Policy.

The university has procured a Hyper Converged Infrastructure (HCI) with three Server nodes for running multiple virtual servers. The virtual servers include a File flow system, IP exchange, Attendance system, IP Based PA System, development server and staging server.

Internet: 1 Gbps Connection from National Knowledge Network (NKN) through BSNL

Wi-Fi: one Wi-Fi controller and 32 Access Points; Firewall: Redundant Next-generation Firewall

Network Infrastructure: 3 Layer - Core - Distribution - Access Level. Redundancy up to Distribution Switch 10G OFC backbone connecting all campus

IP-PABX: IP exchange with 100 DID number

IP Based PA system

CCTV system covering the entire campus

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

4.3.2**Student - Computer ratio (Data for the latest completed academic year)****Response:** 7.36**4.3.2.1 Number of computers available for students usage during the latest completed academic year:**

Response: 150

File Description	Document
Stock register/extracts highlighting the computers issued to respective departments for student's usage	View Document
Purchased Bills/Copies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.3.3**Institution has the following Facilities for e-content development and other resource development**

- 1. Audio visual center, mixing equipment, editing facilities and Media Studio**
- 2. Lecture Capturing System(LCS)**
- 3. Central Instrumentation Centre**
- 4. Animal House**
- 5. Museum**
- 6. Business Lab**
- 7. Research/statistical database**
- 8. Moot court**
- 9. Theatre**
- 10. Art Gallery**
- 11. Any other facility to support research**

Response: A. Any 7 or more of the above

File Description	Document
Videos and geo-tagged photographs of each of the facilities available in the HEI. Details of the structures of each of the facilities available in the HEI.	View Document
Purchase Bill / stock register, entry for lecture capturing system, mixing equipment, software for editing	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of the subscription letter for database is essential for Option Research/Statistical Databases	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4 Maintenance of Campus Infrastructure

4.4.1

Percentage expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component, during the last five years

Response: 9.81

4.4.1.1 Expenditure incurred on maintenance of physical facilities and academic support facilities excluding salary component year - wise during the last five years (INR in lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
259.61943	206.89150	203.70510	248.31696	184.58038

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Audited income and expenditure statement of the institution to be signed by CA and counter signed by the competent authority (relevant expenditure claimed for maintenance of infrastructure should be clearly highlighted)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

4.4.2

There are established systems and procedures for maintaining and utilizing physical and academic support facilities – laboratory, library, sports complex, computers, classrooms etc.

Describe policy details of systems and procedures for maintaining and utilizing physical, academic and support facilities within a maximum of 500 words

Response:

The Kerala University of Fisheries and Ocean Studies (KUFOS) has established procedures overseen by the Engineering wing to maintain and utilize its physical, academic, and support facilities. This includes adhering to norms set by the Public Works Department (PWD) for civil works. Academic facilities such as laboratories, classrooms, and ICT resources are regularly maintained with budget allocations. Equipment is monitored for utilization by students and researchers, with maintenance and repair following established procedures and financial rules.

The university's library operations are monitored by the Librarian and an Advisory Committee. IT services, including admission procedures and administrative activities, are managed through two subdomains maintained by the Computer Cell. Additionally, the Cell is responsible for maintaining university computers and laptops.

Transportation at KUFOS involves the management of seven vehicles, including buses and cars, all insured with the Kerala State Insurance Department. Maintenance and utilization are supervised by an officer, with trip details recorded for verification.

The Engineering unit oversees the maintenance of buildings, premises, electrical, and water distribution systems. Regular cleaning of rainwater harvesting facilities and drinking water maintenance are part of their responsibilities. Power supply on campus is ensured by a 500KVA transformer, with support from a rooftop solar power plant. The electrical wing maintains the system.

Support facilities such as playgrounds, swimming pools, hostels, and staff quarters are managed by the Engineering wing. Maintenance activities are carried out regularly to ensure their proper functioning.

KUFOS is committed to achieving a green campus status through waste management initiatives. This includes waste segregation, biogas production from food waste, and collaboration with local authorities *Hartihakarmasena* of Kumbalam Grama Panchayath for plastic-based, metallics and other wastes, which are collected periodically. The university's efforts reflect its dedication to maintaining its facilities while implementing sustainable practices.

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

Criterion 5 - Student Support and Progression

5.1 Student Support

5.1.1

Percentage of students benefited by scholarships and freeships provided by the institution, government and non-government bodies, industries, individuals, philanthropists during the last five years

Response: 54.62

5.1.1.1 Number of students benefited by scholarships and freeships provided by the institution, Government and (NGOs)non-government bodies, industries, individuals, philanthropists year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
565	640	720	553	431

File Description

Document

Year-wise list of beneficiary students in each scheme duly signed by the competent authority

[View Document](#)

Upload Sanction letter of scholarship and free ships (in English).

[View Document](#)

Upload policy document of the HEI for award of scholarship and freeships.

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.1.2

Efforts taken by the institution to provide career counselling including e-counselling and guidance for competitive examinations during the last five years

Response:

Over the past five years, KUFOS has implemented a range of programs aimed at providing comprehensive career counselling and guidance for competitive examinations to its students. These initiatives span across various fields such as fisheries, food technology, business, and environmental sciences, highlighting the institution's commitment to supporting students in diverse career paths. The

University has established a central University Placement Cell, with the Director of Research serving as the Chairman, to oversee and coordinate the activities of Faculty-level Placement Cells. Each faculty has its own placement cell, led by the respective Deans, focused on organizing awareness programs about career opportunities in both public and private sectors, both within India and abroad. These initiatives include 'Placement Readiness Programs,' 'Finishing Schools,' and various skill development programs. By maintaining connections with prospective employers, these cells regularly organize career guidance sessions and training in research, teaching, entrepreneurship, and administration, employing both traditional and modern innovative tools. Additionally, the University Placement Cell, in collaboration with alumni from various faculties, conducts training and capacity-building programs aimed at enhancing soft skills and life skills. It also offers coaching for competitive exams relevant to job positions in both private and public sectors.

Over the past five years, several significant events have been organized to enhance students' career readiness. The Faculty of Fisheries Engineering hosted two "3-Day Placement Readiness Enhancement Workshops" for the B.Tech Food Technology cohorts. The Faculty of Ocean Science and Technology, conducted a 'Placement Readiness Programme' for M.Sc. students. The Faculty of Fisheries Management organized a 'Two-Day Finishing School Programme' for MBA and M.Sc. Statistics students. This program featured extensive sessions on career advancement and life skills, delivered by experts such as corporate trainers, bank managers, senior management officials, and motivational speakers. This was followed by an orientation program for civil service aspirants was organized by the University in partnership with the Manappuram Foundation Civil Services Academy, which saw the registration of over 200 students.

The College of Fisheries Panangad Alumni Association (CoFPAA) routinely conducts an 'ICAR-JRF Entrance Examination Crash Course' for final-year Masters of Fisheries Science students and recent graduates. Through their 'Professional Upgradation Programme (PUP),' the alumni also support final-year Bachelor of Fisheries Science students and graduates in preparing for competitive examinations conducted by the Union and State Public Service Commissions for various roles in fisheries departments and related agencies. It organized an orientation program on "Interview Skills and Mock Interviews" for candidates shortlisted by the Kerala Public Service Commission for positions within the Department of Fisheries, Government of Kerala.

For facilitating guidance in Agri- business start- up opportunities, the institute has organized several series of webinars, lectures and specialized trainings on entrepreneurship development during this period. These programs underscore KUFOS's dedication to fostering a supportive environment for career growth, entrepreneurial ventures, and competitive examination success. The initiatives cater to a broad spectrum of student needs, from technical training in food safety to comprehensive career planning and startup guidance, ensuring that graduates are well-equipped for their future professional journeys.

File Description	Document
Upload any additional information	View Document

5.1.3

Following capacity development and skills enhancement activities are organised for improving

students' capability

- 1.Soft skills**
- 2.Language and communication skills**
- 3.Life skills (Yoga, physical fitness, health and hygiene, self-employment and entrepreneurial skills)**
- 4.Awareness of trends in technology**

Response: A. All of the above

File Description	Document
Report with photographs on soft skills enhancement programs	View Document
Report with photographs on Life skills (Yoga, physical fitness, health and hygiene) enhancement programs	View Document
Report with photographs on Language & communication skills enhancement programs	View Document
Report with photographs on ICT/computing skills enhancement programs	View Document
Institutional data in the prescribed format (data template)	View Document

5.1.4

The institution adopts the following for redressal of student grievances including sexual harassment and ragging cases

- 1.Implementation of guidelines of statutory/regulatory bodies**
- 2.Organisation wide awareness and undertakings on policies with zero tolerance**
- 3.Mechanisms for submission of online/offline students' grievances**
- 4.Timely redressal of the grievances through appropriate committees**

Response: A. All of the above

File Description	Document
Report of Organisation wide awareness and undertakings on policies with zero tolerance	View Document
Proof related to Mechanisms for submission of online/offline students' grievances	View Document
Proof for Implementation of guidelines of statutory/regulatory bodies	View Document
Institutional data in the prescribed format (data template)	View Document
Details of statutory/regulatory Committees (to be notified in institutional website also)	View Document
Annual report of the committee monitoring the activities and number of grievances	View Document

5.2 Student Progression

5.2.1

Percentage of placement of outgoing students during the last five years

Response: 50.77

5.2.1.1 *Number of outgoing students placed year wise during the last five years*

2022-23	2021-22	2020-21	2019-20	2018-19
272	152	127	98	80

File Description	Document
Number and List of students placed along with placement details such as name of the company, compensation, etc and links to Placement order (the above list should be available in institutional website)	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.2.2

Percentage of graduated students who have progressed to higher education year-wise during last five years

Response: 32.08

5.2.2.1 Number of outgoing students progressing to higher education

2022-23	2021-22	2020-21	2019-20	2018-19
63	87	87	46	51

File Description**Document**

List of students progressing for Higher Education, with details of program and institution that they are/have enrolled along with links to proof of continuation in higher education. (the above list should be available in institutional website)

[View Document](#)

Institutional data in the prescribed format (data template)

[View Document](#)

Provide Links for any other relevant document to support the claim (if any)

[View Document](#)

5.2.3

Percentage of students qualifying in state/ national/ international level examinations out of the graduated students during the last five years

(eg: NET/SLET/ Civil Services/State government examinations etc.)

Response: 9.38

5.2.3.1 Number of students qualifying in state/National/International level Examination during last five years (eg. SLET, NET, UPSC etc)

Response: 166

File Description	Document
List of students qualified year wise under each category and links to Qualifying Certificates of the students taking the examination	View Document
Institutional data in the prescribed format (data template)	View Document

5.3 Student Participation and Activities

5.3.1

Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/national/international events (award for a team event should be counted as one) during the last five years

Response: 11

5.3.1.1 Number of awards/medals won by students for outstanding performance in sports/cultural activities at inter-university/state/ national/international level (award for a team event should be counted as one) year-wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
11	0	0	0	0

File Description	Document
Provide the relevant information in institutional website as part of public disclosure	View Document
list and links to e-copies of award letters and certificates	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.3.2

Presence of an active Student Council & representation of students on academic & administrative bodies/committees of the institution.

Describe the Student Council activity and students' role in academic & administrative bodies

within a maximum of 500 words

Response:

Activity of Student Council – known as the Students' Union

Democratically elected Students' Union of KUFOS includes representatives from each of the batches of all academic programmes from the main campus at Panangad, Puthuvype campus and CoF, Payyanur. The student community has a mandatory representation in bodies including the Syndicate, Senate, Academic Council, Governing Council, IQAC, Hostel committee and Anti-ragging committee.

Formed through electoral processes, involving notifications, press releases, electoral roll generation followed by a disciplined election procedure. The Students' Union serves as a 'via-media' between the student community and the University for presenting the interests and grievances of the student community before the authorities, besides promoting academic deliberations as well as extracurricular activities in the University. The Students' Union comprises 20 members including eight executive members

The University Students' Union enhances the participation of the students in social activities, community services, as well as cultural, literary and sports competitions.

Major Activities of Students' Union in the assessment were:

Annual arts festivals including around 100 off-stage and on-stage events ensuring participation of the student community.

Annual sports meets which enabled the athletes to reach their maximum potential by competing in intra university and inter university sports meets.

KUFOS Premier League (Cricket) and KUFOS Champions League (Football) were organized and the talented players selected for the University Cricket and Football teams respectively.

Two-day book fest as part of the World Book Day celebrations and encouraging reading habits in students as well as staff and faculties.

Fisheries Fest that showcased a diverse array of fish products, and ornamental fishes, helping students to gain hands-on exposure in production, marketing and management of fish resources

University magazine exhibiting the literary abilities of the students.

Other activities organized includes:

Dance Club – Flash mobs for different awareness programs, and performances at various programmes

Film Club – Film Quiz, Microfilm Competition and documentary screening

Nature Club – Poster-making competitions, cleaning activities and awareness programmes

Music Club – Organized freshers programme into the campus, and music performance in accordance with pride day celebration

Organized celebrations and festival such as Onam, Christmas, Iftar, New year, Keralapiravi, Holi, Vishu, Ethnic day, Valentine’s Day etc. with an aim of promoting cultural exchange and community building.

Organized various Career guidance sessions and campaigns on relevant social issues like drug abuse, ragging, dowry, violence against women, environmental issues and constitutional matters

Students’ Union played an active role in socially relevant activities like:

Collection and distribution of meals to needy

Distribution of study materials to needy

Contributed to CMDRF by conducting vaccine challenge during Covid - 19 pandemic

Organized assistance desks during admission procedures and entrance exams

Assisted in the conduct of International Fisheries Congress and Expo 2024 by organizing cultural events including various art forms of Kerala and India.

Under the guidance of the Students’ Union, the University student team were able to secure third runner up position among 60 universities in the National Agri Unifest held at Bengaluru.

File Description	Document
Upload any additional information	View Document

5.3.3

The institution conducts / organizes following activities:

- 1.Sports competitions/events**
- 2.Cultural competitions/events**
- 3.Technical fest/Academic fest**
- 4.Any other events through Active clubs and forums**

Response: B. Any three of the above

File Description	Document
Report of the Technical fest/academic fests along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Sports competitions/events along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Cultural competitions/events along with photographs appropriately dated and captioned year- wise.	View Document
Report of the Any other events through active clubs and forums along with photographs appropriately dated and captioned year- wise.	View Document
List of students participated in different events year wise signed by the head of the Institution.	View Document
Institutional data in the prescribed format (data template)	View Document
Copy of circular/brochure indicating such kind of activities	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4 Alumni Engagement

5.4.1

Alumni contribution during the last five years to the University through registered Alumni Association

Response: 52.6

5.4.1.1 Total Amount of alumni contribution during the last five years (INR in lakhs) to the institution year wise through registered Alumni association:

2022-23	2021-22	2020-21	2019-20	2018-19
45.22	4.25	3.13	0	0

File Description	Document
List of alumnus/alumni with the amount contributed year-wise	View Document
Annual audited statements of accounts of the HEI highlighting the Alumni contribution duly certified by the Chartered Accountant/Finance Officer.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

5.4.2

Alumni contributes and engages significantly to the development of institution through academic and other support system

Describe the alumni contributions and engagements within a maximum of 500 words

Response:

The College of Fisheries Panangad Alumni Association (COFPAA) is the only registered alumni association of Kerala University of Fisheries and Ocean Studies. It was formed by the Alumni of erstwhile College of Fisheries, Panangad, which was later upgraded as KUFOS. Since its inception, the association was working relentlessly for the job reservations of fisheries graduates. Currently, there are almost 2000 members in the association. In the past five years (2019-24) the association organized several programmes for the students helping in preparation for higher studies as well as for examinations conducted by the Kerala Public Service Commission (KPSC) for the Department of Fisheries, Kerala. These include three professional upgradation programmes which benefitted many students as well as alumni to get coveted posts in the government sector. Our alumni in the Kerala Administrative Service, and faculties provided orientation and mock interview for those who cleared written examinations of KPSC. The association is also organizing talks which benefits research scholars and scientists alike. Every year, the alumni meet final year students to give orientation and motivation, and to familiarize them with industry requirements. In January 2024, COFPAA provided financial as well as technical support for the first ever International Fisheries Congress and Expo 2024, which was organized at the headquarters of KUFOS at Panangad. The theme of the congress was “Charting Sustainable Horizons: Fisheries, Blue Economy, and the Global Goals”. There were 16 technical sessions arranged under seven themes, and four additional panel discussion sessions, as well as a farmer-fisher conclave in which fishers and farmer from 5 states participated. All the programs were conducted in four venues inside the campus. There were about 120 invited guests from 36 organizations representing 12 countries worldwide, and about 800 delegates in total. Representative fishers and farmers from states such as Kerala, Maharashtra, Andhra Pradesh, Karnataka and Tamil Nadu were identified by the Fisheries Department of the respective states and attended the Fisher farmer conclave. Book of Abstracts with more than 350 abstracts, and a souvenir book with invited articles from reputed Scientists in the fisheries sector was also released as part of the congress. Thus, the Alumni association stands firmly with the University for the benefit of students, faculties. alumni, and every stakeholder of fisheries sector.

File Description	Document	
Upload any additional information	View Document	
Provide the link for additional information	View Document	

Criterion 6 - Governance, Leadership and Management

6.1 Institutional Vision and Leadership

6.1.1

The institutional governance and leadership are in accordance with the vision and mission of the Institution and it is visible in various institutional practices such as NEP implementation, sustained institutional growth, decentralization, participation in the institutional governance and in their short term and long term Institutional Perspective Plan.

Response:

Kerala University of Fisheries and Ocean Studies (KUFOS) is India's first Fisheries and Ocean Studies University, operating under the Department of Fisheries, Government of Kerala. KUFOS Acts (2010 and 2021) and Statute (2013) provide the foundational stones and legal basis for the governance structure. This is further augmented with the adoption of UGC and ICAR Regulations and other directions time to time including the NEP implementation and adhering to Kerala Service Rules (KSR) and Kerala State and Subordinate Services Rules (KSSR).

His Excellency, the Governor of Kerala, serves as the Chancellor, and the Hon'ble Minister for Fisheries acts as the Pro-Chancellor. The Hon'ble Vice Chancellor is the chief executive officer of the University. Other statutory Officers include the Registrar, Controller of Examinations, Finance Officer, Director of Planning, Director of Research, Director of Extension and Deans of respective faculties. The University Governing Council, chaired by the Vice-Chancellor, holds supreme authority of the University. Representatives from various sections of the society are included in the statutory bodies like the University Governing Council, Senate, and Academic Council to ensure inclusive policy formulation for diverse stakeholders, and to meet the vision and mission of the University.

1. **University Governing Council** include the Vice-Chancellor, Secretaries from the government (i.e., Fisheries, Higher Education, Law and Finance departments) and one Dean of Faculty based on alphabetical turn. Elected members include one teacher from each faculty and a student representative, while nominated members include individuals from legislative assemblies, agricultural research, fishing communities, ocean studies, fishermen organisations, fisheries industry, and a woman social worker. This diverse composition ensures comprehensive representation and effective governance of the university. The University Governing Council meets at least once in every month.
2. **University Senate** comprises members from diverse academic, administrative, governmental, industry, students and local bodies in addition to University Governing Council members. The Senate reviews the general policies of the university and suggests measures for improvement and development from time to time, and convenes at least twice a year.
3. **Academic Council** composed of the Vice-Chancellor, Deans of Faculties, Directors of Research and Extension, representatives from fisheries and ocean studies research institutes, nominated educationalists, elected teacher and student members. Academic Council oversees and coordinates academic programs, policies, and standards of instruction, research, education, and examination. Meetings are held at least once every three months.
4. **Research Council** consists of members from ICAR institutions, fisheries industry, and fish farmers in addition to ex-officio members. The Research Council formulate research policies,

identifying thrust areas and plan projects and research activities, prepare blue print for creating physical environment needed for research and approve annual research reports.

5. **Extension Council** formulate the University's knowledge extension policies, provide education, training and technical advice to farmers / fishermen.
6. **Faculty Board of Studies** recommends revisions to syllabi, propose new courses, and suggest new specializations, with input from various stakeholders.
7. Planning Committee, Finance Committee, and Staff Council are involved in various general decision-making policies.
8. The University comprises four Faculties, each headed by a Dean. They oversee academic coordination and research within their respective domains.
9. The university also operates various committees for participative management including the Purchase Committee, Waste Disposal Committee, Anti-Ragging Committee, Sexual Harassment Committee, Anti-drug Committee, and Grievance Redressal Cell.

File Description	Document
Upload any additional information	View Document

6.2 Strategy Development and Deployment

6.2.1

The institutional perspective plan is effectively deployed and functioning of the institutional bodies are effective and efficient as visible from policies, administrative setup, appointment, service rules, and procedures, etc

Response:

The Kerala University of Fisheries and Ocean Studies maintains defined mission, vision, specific goals and hierarchy in line with the University Act, Statutes, Ordinances, Regulations, Kerala State Service Rules, and UGC/ICAR Regulations. Resourceful and serious deliberations focused on equity, social inclusiveness and participative democracy helped in formulating and implementing policy decisions. The functioning of the institutional bodies such as Governing Council, Senate, Academic Council, Research Council, Extension Council, Board of Studies, Research Committees, etc., are effective and efficient as visible from academic research & extension achievements, policies, service rules, administrative setup, appointment and academic events. The Vice Chancellor is the Chief Executive of the University. The Registrar heads the administrative branch. The Director of Research and The Director of Extension head the research and extension activities of the University, respectively. Dean is the Academic Head of a Faculty. The Controller of Examinations handles matters related to Examinations and the Finance Officer administers the financial matters. The University Engineer heads the development and maintenance of infrastructure of the University. The decentralization and participative management is ensured through well-defined organisational structure as specified in the organograms.

- Statutory Officers are appointed as per the Act and Statutes.
- Faculty members appointed by the University as per UGC regulations and Government reservation policies maintaining transparency.

- Faculty promotions are done as per UGC-CAS regulations.
- Non-teaching staff are appointed through the Kerala Public Service Commission (KPSC) in accordance with the Government reservation policy. Promotions are done as per Kerala Service Rules (KSR) and Kerala State Subordinate Service Rules (KSSR).
- The University facilitates faculty orientation/refresher/short-term courses from time to time.
- E-Governance, including digital file flow movement and online applications to the various services offered to the stakeholders.

Student admission: Students are admitted for the various programmes through a national-level admission online test adhering to Kerala Government rules.

Special reservation (@20%) is provided to Children of Fishermen for all UG & PG programmes offered by the University. Supernumerary seats are also available for outside-State students, Children of Ex-Servicemen, Persons with Disability, and Foreign/Person of Indian Origin (PIO)/Overseas Indian Citizen (OIC) and NRI candidates.

Extension and Institutional Social Responsibility Programs: Village Adoption for Empowerment and Capacity Building Ensuring Livelihood of Fisherfolk in Central Kerala, Establishment of Fisheries Technical, Portal and Knowledge Centre, Farm Advisory Services, Farmers Training Centre, Model Fish Processing Plant and Training Centre, etc.

Right to information Act is adopted in the University to ensure proper and timely delivery of information and to ensure transparency in the system.

The following policies, programmes and procedures are framed to ensure the efficient operation and overall development of the University.

- Curriculum policy
- Research policy
- Consultancy policy
- Extension policy
- Gender related programs
- Training, placement and career counselling programs
- Student grievance redressal mechanisms
- IT Policy
- Start-up and incubation programs
- Seed research grant
- Experiential learning programs
- Policy on Infrastructure development
- Procedures on laboratory safety

File Description	Document
Upload any additional information	View Document

6.2.2

Institution implements e-governance in its operations. e-governance is implemented covering the following areas of operations:

- 1. Administration including complaint management**
- 2. Finance and Accounts**
- 3. Student Admission and Support**
- 4. Examinations**

Response: A. All of the above

File Description	Document
Screen shots of user interfaces of each module reflecting the name of the HEI	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.3 Faculty Empowerment Strategies

6.3.1

The institution has performance appraisal system, effective welfare measures for teaching and non-teaching staff and avenues for career development/progression

Response:

The institution maintains a well-defined performance-appraisal system and well-defined criteria for promotion and professional development. The emotional, social and financial well-being of the teaching and non-teaching staff is ensured through effective staff welfare measures. The teachers' promotion is based on API score as stipulated in UGC regulations. API score is used for performance appraisal for teachers through CAS. The eligible faculty submits their applications through proper channel, which is verified and processed by the University. Based on the recommendations of the IQAC, Performance Appraisal Reports are placed before the screening/selection committee constituted as per UGC mandate. Some of the incentives given to the faculty include plan fund for research given to newly recruited teachers, financial and administrative support for travel grant attending Conferences, Workshops and Seminars. The promotion of the non-teaching staff is carried out as per the KUFOS Statute. The non-teaching staff enjoy promotion avenues up to the post of Joint-Registrar. The data and reports of all the employees are periodically uploaded to the AISHE, KSHEC and NIRF. Annual performance reports are submitted to the Hon'ble Vice chancellor through proper channel. The meetings convened by the Hon'ble Chancellor and Pro-Chancellor attended by the Vice-Chancellor and other authorities of the University help assess the University's strengths and weaknesses.

The welfare schemes for teaching and non-teaching staff include:

Scheme	Remarks
Pension	Statutory / Contributory (NPS)
Group Insurance Scheme	KSR Vol 1 Chapter III 22B
State Life-Insurance	
Accident Insurance	
Free counselling facility within the campus	
MEDISEP (Government sponsored insurance facility for employee and family)	
Earned leave encashment	
Free/ Subsidized transportation	
Salaried vacation for teachers	
Inter University transfer for staff	
Free access to library	KNIMBUS https://www.knimbus.com
Fully Wifi covered Campus	yes
KUFOS Campus suite	http://14.139.185.227/university/home/start.html
Maternity/Paternity leave	Maternity, Miscarriage & Hysterectomy Leave [Rule 100] Paternity Leave [Rule 102 B]
Leave for higher studies	KSR PART 1 Chapter XI C
Special Casual leave, Duty leave for faculty as per UGC Regulations.	
Leave benefits as per KSR	
Special allowance for extra-time/compensation	
UNISPARK- University Service and Payroll Administrative Repository.	https://unispark.kerala.gov.in/
Special casual leave for treatment and recovery of staff with serious illnesses like cancer, heart transplantation, kidney transplantation	
Special casual leave/allowance to staff with Divyanggan children	
Special Casual leave and work-from-home facility instituted during pandemic	
Festival advance/allowance	
Faculty staff club	
Sports and recreational facilities	
Fitness	
Women cell, anti-harassment cell	
Campus alumni associations COFPAA	
Alloted space for student's unions	
Family Teacher's Quarters and Staff Quarters along with quarters on sharing basis for individuals	
Guest House	
Subsidized Canteen/Cafeteria	
SBI ATM (Campus branch is getting ready)	
Subsidised transport for Staff/Students	
Security Wing	

These amenities ensure a healthy professional environment.

File Description	Document
Upload any additional information	View Document

6.3.2

Percentage of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies during the last five years

Response: 14.5

6.3.2.1 Number of teachers provided with financial support to attend conferences/workshops and towards membership fee of professional bodies year wise during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
3	3	3	20	0

File Description	Document
Institutional data in the prescribed format (data template)	View Document
E-copy of letter/s indicating financial assistance to teachers and list of teachers receiving financial support year-wise under each head	View Document

6.3.3

Percentage of teachers undergoing online/ face-to-face Faculty Development Programmes (FDPs)/ Management Development Programmes (MDPs) during the last five years

Response: 24.5

6.3.3.1 Total number of teachers who have undergone online/ face-to-face Faculty Development Programmes (FDP)/ Management Development Programs (MDP) during the last five years

2022-23	2021-22	2020-21	2019-20	2018-19
14	13	7	10	5

File Description	Document
Institutional data in the prescribed format (data template)	View Document
E-copy of the certificates of the program attended by teachers.	View Document

6.4 Financial Management and Resource Mobilization

6.4.1

Institutional strategies for mobilisation of funds other than salary and fees and the optimal utilisation of resources

Describe the resource mobilisation policy and procedures of the Institution within a maximum of 500 words

Response:

Being a state University, the Government (plan fund) is the primary source of income that fuels the developmental activities of KUFOS . Apart from that fund for research, development and Maintenance of infrastructure is obtained through various projects supported by the Government and Non-Government organizations at national/international levels.

Some of the funding agencies of KUFOS are, Kerala State Council for Science, Technology and Environment (KSCSTE), National Bank for Agriculture and Rural Development (NABARD), Kerala Infrastructure Investment Fund Board (KIIFB), Kerala Startup Mission(KSUM), Department of Science and Technology-Government of India, Science and Engineering Research Board (SERB), Department of Environment and climate Change (DOECC)-Govt. of Kerala, Ministry of Earth Sciences(MOES), United Nations Development Project(UNDP), Department of Biotechnology (DBT), Kerala State Higher Education Council(KSHEC), University Grants Commission(UGC), Indian Council of Agriculture Research (ICAR), Indian Space Research Organisation(ISRO), Indian national Centre for Ocean Information Services(INCOIS), Council of Scientific and Industrial Research(CSIR),National Council for Coastal Research (NCCR).National Fisheries Development Board (NFDB).

The faculty from various discipline such as Fisheries, Ocean Studies, Fishery Engg and Fishery Management offer consultancy and extension services. Income is generated by, providing training and skill development programme to various faculty and employers of different industries. Revenue is also generated by providing training for various stakeholders/general public under Fisheries, Ocean Science and Management. Revenue is also generated through conduct of MOOC courses. Revenue is also generated by providing equipment facility for external students for implementing their projects. The University is also having an audio video studio facility which provides revenue through rent.

Capital is further generated by the utilization of various scientific analytical equipment installed in different departments as well as Central Instrumentation Facility and Aquatic Referral Lab by both external and internal users. Additional income is generated by collecting rent from hostels, staff and faculty quarters, guest house, canteen and farm products. Revenue in the form of fees are collected from

various research centres associated with KUFOS.

6.4.2

Funds / Grants received from government bodies/non government and philanthropists during the last five years for development and maintenance of infrastructure (not covered under Criteria III and V)

Response: 5506.55

6.4.2.1 Total Grants received from government and non-government bodies and philanthropists for development and maintenance of infrastructure (not covered under Criteria III and V) year-wise during the last five years (INR in Lakhs)

2022-23	2021-22	2020-21	2019-20	2018-19
1191.92	1840.93	1025.03	615.96	832.71

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Annual audited statements of accounts highlighting the grants received.	View Document

6.4.3

Institution regularly conducts internal and external financial audits regularly

Enumerate the various internal and external financial audits carried out during the last five years with the mechanism for settling audit objections within a maximum of 500 words

Response:

KUFOS has internal as well as external audit wing functioning under the Finance Officer. The financial planning and accountability is maintained through an efficient Finance Wing under the leadership of the Finance Officer.

The sections under Finance Wing are Internal Receipt, Audit, Planning, Public Fund Management System(PFMS), Accounts, Bills, Pension and UNISPARK Cell . The disbursement of salary of the employees are done mainly through UNISPARK software. Finance officer regulates the inflow and outflow of funds under the supervision of the Hon'ble Vice-Chancellor.

University has implemented the treasury bill system for increased efficiency and access of data. All

plan/non-plan payments are effected efficiently through the treasury accounts facilitating easy management of accounts. All financial transactions and purchases are carried out in accordance with the Kerala Financial Code and Store Purchase Manual respectively.

A Pre-Audit is conducted on all bills as a part of internal audit mechanism to improve efficiency and to facilitate proper utilization of financial resources. Funds under various external aided projects are managed through accounts under the Finance Officer and subsidiary accounts of the Principal Investigators thereby facilitating regular cash flows within the University. Due care is given for settling the audit objections within the time limit .

Regular scrutiny of financial transactions under the external aided projects are carried out by the Finance Officer to ensure that the projects are implemented successfully within the fixed time frame and without any financial liability to the University. Personal service files of retired officials are scrutinised efficiently by the pension wing so that the pensionary benefits of the employees can be released in time after fixing liability if any. Externally funded projects are audited as per the guidelines proposed by the funding agencies. External audit is conducted by Kerala State Audit Department (KSAD) and Account General (AG). The Kerala State Audit Department (KSAD) has a permanent office space inside the University Campus. A fullfledged KSAD office headed by the Joint Director is stationed in the campus that carries out the audit throughout the year. The status of utilization regarding the Sanctioned funds are audited annually. The University responds to the comments/queries by the audit in a time-bound manner by furnishing satisfactory replies/ necessary corrections as proposed by audit . The final audit report, to be submitted to the Government is placed before the Governing Council for approval. The Annual Audit Report is forwarded to the Government and placed before the Legislative Assembly (LA). The University is committed to answer any Audit Queries made by the 'Committee on Local Fund Accounts' of the Legislative Assembly. The Committee makes the final decision on the Audit Report. The Accountant General does a Supplementary Audit of the annual accounts every year. The Accountant General's audit team make initial audit enquiries which have to be clarified by the University. Based on the clarification and remarks from the University, a draft report is submitted to the University for further clarification and remarks. After due consideration of the reply, the Accountant General forwards the final report to the Government, which is placed before the LA. On further rectifications and comments from the University, any unsettled queries will be placed before the public accounts committee of the Legislative Assembly. The final decision is made by the Legislative Assembly, which is binding.

6.5 Internal Quality Assurance System

6.5.1

Internal Quality Assurance Cell (IQAC)/ Internal Quality Assurance System (IQAS) has contributed significantly for institutionalizing the quality assurance strategies and processes, by constantly reviewing the teaching-learning process, structures & methodologies of operations and learning outcomes, at periodic intervals

Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes visible in terms of –

- **Incremental improvements made for the preceding five years with regard to quality (in case**

of first cycle)

- **Incremental improvements made for the preceding five years with regard to quality and post accreditation quality initiatives (second and subsequent cycles)**

Describe two practices institutionalized as a result of IQAC initiatives within a maximum of 500 words

Response:

The internal quality assurance cell (IQAC) of KUFOS is committed to contribute to the quality assurance and sustenance in all the activities including teaching, learning and research of the University. A dynamic core committee headed by the Vice Chancellor, faculty and administrative staff representation and supported by the local society and the fisheries stakeholders is monitoring the functioning of IQAC. The following practices were institutionalised to ensure quality:

1. Outcome based education (OBE) has been implemented in department of business administration and management under the Faculty of Faculty of Fisheries Management and in the departments under Faculty of Ocean Science and Technology.
2. Academic bank credit has been implemented in KUFOS. A dedicated National Academic Depository (NAD) cell has been constituted to monitor the uploading of certificates in digilocker.
3. Steps for implementation of Blended Learning Platform (BLP) in the Faculty of Fisheries Science are underway. This is being implemented by NAHEP, ICAR and sensitization workshop and master trainer workshops have already been completed.
4. Seminars and workshops aiming at quality enhancement such as implementation of OBE, NAAC assessment, accreditations and certifications by agencies including NIRF, AISHE and KIRF have been conducted.

File Description	Document
Upload any additional information	View Document

6.5.2

Institution has adopted the following for Quality assurance:

1. **Academic and Administrative Audit (AAA) and follow up action taken**
2. **Conferences, Seminars, Workshops on quality conducted**
3. **Collaborative quality initiatives with other institution(s)**
4. **Orientation programme on quality issues for teachers and students**
5. **Participation in NIRF and other recognized ranking like Shanghai Ranking, QS Ranking Times Ranking etc**
6. **Any other quality audit recognized by state, national or international agencies**

Response: A. Any 5 or more of the above

File Description	Document
Supporting documents pertaining to NIRF (along with link to the HEI's ranking in the NIRF portal) / NBA / ISO as applicable and valid for the assessment period.	View Document
List of Orientation programmes conducted on quality issues for teachers and students along with geotagged photos and supporting documents	View Document
List of Conferences / Seminars / Workshops on quality conducted along with brochures and geo-tagged photos with caption and date.	View Document
List of Collaborative quality initiatives with other institution(s) along with brochures and geo-tagged photos with caption and date.	View Document
Institutional data in the prescribed format (data template)	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

6.5.3

Incremental improvements made for the preceding five years with regard to quality (in case of first cycle NAAC A/A)

Post accreditation quality initiatives (second and subsequent cycles of NAAC A/A)

Response:

Some of the quality enhancement measures adopted by the University during the past five years are described below:

1. Staff strength:

a. Non teaching staff-Thirty non teaching posts including 24 new posts and six redesignated posts were created in 2021

b. Faculty recruitment- Twenty nine new faculty members were recruited since 2019. In addition, for fulfilling the requirements of additional staff required in various faculties/departments, qualified candidates were empanelled.

2. New academic programmes:

- a. A new batch of Bachelor of Fisheries Science accommodating 40 students has been started with effect from the academic year 2022-23 at Payyannur College, Kerala
 - b. A new batch of MFSc (Fish genetics and breeding) was started with effect from the academic year 2023-24.
 - c. The recommendation of Faculty Board of Studies to start PhD programme in 1. Fish nutrition and Feed technology and 2. Fish genetics and breeding was approved by the KUFOS Academic Council.
 - d. The proposal of academic council to start MTech Food Technology (Food safety and quality assurance) was approved by the KUFOS Governing Council.
3. Creation of new departments under Faculty of Fishery Engineering- Six new departments were created under the Faculty of Ocean Engineering as per the decision of Academic Council were approved by the University Governing Council.
 4. Allowances to students participating in events representing University: Rates of allowances to students participating in sports, youth festival and other competitions within and outside the sates have been fixed.
 5. "Aquatic Referral Lab for Quality Testing and Disease Diagnosis in the State of Kerala" has been established under the PMMSY utilising central and state shares. A vehicle for "Mobile Aqua Clinic" has also been purchased under this project.
 6. Entrepreneurship and start ups: KUFOS -Business incubator has been set up that improves the growth survival of entrepreneurial unit. A total of 45 incubatees have been trained in the centre during the period from 2019-2023.
 7. Seed grant for carrying out research (KARP-KUFOS aided research projects) were granted to 15 faculties during the period 2019 to 2023.
 8. MOOC courses- KUFOS has partnered with the National Programme on Technology Enhanced Learning (NPTEL), coordinated by the Indian Institute of Technology (IIT), Madras, to offer courses in food technology, with a special focus on seafood value-addition.
 9. Societal linkage through village adoption - Directorate of Extension, KUFOS) is implementing the "Village Adoption for Empowerment and Capacity Building Ensuring Livelihood of Fisherfolk in Central Kerala" from the year 2015 onwards.
 10. ICAR Virtual class room- Virtual class room with AR VR facility has been provided by ICAR in the academic block in July, 2023
 11. Library resources:
 - a. Knimbus, the leading digital library platform has been introduced in KUFOS in the year 2022. Knimbus mLibrary is a powerful and user friendly digital library through which users can seamlessly access the digital resources.
 - b. The plagiarism detecting software "DrillBit" has been purchased by the University in 2023.

Submission of plagiarism report has been made compulsory for PhD thesis submission.

File Description	Document
Upload any additional information	View Document

Criterion 7 - Institutional Values and Best Practices

7.1 Institutional Values and Social Responsibilities

7.1.1

Institution has initiated the Gender Audit and measures for the promotion of gender equity during the last five years.

Describe the gender equity & sensitization in curricular and co-curricular activities, facilities for women on campus etc., within 500 words

Response:

KUFOS strives to promote gender equality, equity and sensitization in education, research and outreach activities. KUFOS provides an inclusive environment by providing equal access and opportunities and promotes and undertakes programs and initiatives to overcome gender-based barriers. In particular, KUFOS addresses the issues concerning gender inequality in the broader society by undertaking extension and outreach projects that support women. KUFOS has almost three times female students than males. There is also equal representation of women in teaching positions and higher number of women among the administrative staff. The University has significant representation of women in leadership positions including the Director of Research and Director of Extension. In addition, except for one, all University teaching departments have women as Heads. All committees and consortia formed at the University, has equal representation of men and women. This ensures that gender balance is maintained in all administrative decision-making processes. Overall, the University aligns with SDG 5 in all its activities.

The University also has active research and outreach activities on gender including a dedicated project on gender studies under the School of Management and Entrepreneurship. The Directorate of Extension has successfully undertaken (and currently undertakes) several projects and programs aimed at the empowerment of women through income generating activities by way of providing self-employment and motivating them in taking up gainful employment which will lead to ensure gender equality in all aspects of life. An example of this is the women activity group in Thiruthoor Panchayat who produced a record harvest of 250 kg of Pearls spot (*Etroplus suratensis* – the state fish of Kerala) after a six-and half month's farming period, helping earn an approximate profit of Rs. 1.25 lakh. The safety of women is also at the top of the KUFOS mandates, and towards this the university has a well-defined women's cell, and an anti-sexual harassment policy at work place. As part of gender equality initiatives of the University, hostel timings were made uniform both boys and girls.

Some examples of the activities carried out at the University related to gender equity & sensitization:

- Drawing competitions to create awareness on Breast Cancer
- Awareness programs and protest rallies against dowry-related issues and domestic violence against women
- YouTube Videos providing awareness on domestic violence against women

- Poster competitions on “No TO DOWRY”.
- Celebration of annual International Women’s Day
- Workshops and training programs for women fishers including a national workshop on ‘women in fisheries sector’
- Cup of Life movement to revolutionize the society by spreading awareness about menstrual hygiene.
- Anaemia campaign

The University also has the following specific facilities catering to women staff and students that highlights the University’s commitment to gender equity and responsibility.

- a. Lady Doctor and a full-time woman counsellor, and a dedicated counselling room
- b. Common Rooms for girl students
- c. Sanitary pad vending machines, disposer and incinerators
- d. Women security staff at gates and individual buildings
- e. CCTV cameras at all University buildings and hostel for enhanced security

File Description	Document
Upload any additional information	View Document
Provide the link for additional information	View Document

7.1.2

The Institution has facilities for alternate sources of energy and energy conservation measures

1. Solar energy
2. Biogas plant
3. Wheeling to the Grid
4. Sensor-based energy conservation
5. Use of LED bulbs/ power efficient equipment
6. Wind mill or any other clean green energy

Response: B. Any 3 of the above

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric	View Document

7.1.3

Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 500 words)

- **Solid waste management**
- **Liquid waste management**
- **Biomedical waste management**
- **e-Waste management**
- **Waste recycling system**
- **Hazardous chemicals and radioactive waste management**

Response:

The green campus initiatives at KUFOS are primarily based on the concept of sustainability and modelled largely on the Sustainable Development Goals (SDGs). The University is equipped to responsibly manage the waste generated from its various campuses/buildings. A campus development officer is responsible for the overall management of wastes originating from the University, and this officer is duly assisted by the Farm Manager. Directions are provided to students and staff to minimize waste and adhere to responsible and sustainable use of resources.

The University makes every effort to reduce the waste through the principles of reduce, reuse, and recycle. There is an effective placement of bins in every floor of the campus buildings where the waste is collected, segregated and managed. The University has employed dedicated staff who are involved in this management. Non-biodegradable waste is collected at a central facility and handed over to the relevant municipality/Panchayat authorities. Effective management of plastic waste from the campus is handed over to the Kudumbasree Haritha Karma Sena authorities. Solid waste, the most significant of which is food waste is collected in multiple bins placed at various points on each floor of every campus building, and is then taken to a biogas plant where it is converted to manure. An aerobic compost pit/unit is also maintained at the undergraduate hostel for ladies. A Sewage Treatment Plant (STP) caters to the requirement of wastes generated (especially biological and biomedical wastes) from the Aquatic Animal Health Referral Laboratory.

Training programs on Lab Waste Management, for example, the IMAGE (Indian Medical Association Goes Ecofriendly) sponsored Workshop on Biohazard Waste Disposal (conducted on 1st July 2022) are undertaken to train various sections of the staff and students on waste containment and management procedures.

E-waste disposal are reduced by routine servicing of outdate systems. There has been instances where old computers have been handed over to local schools or fishing community students. One such attempt was during the Corona pandemic period when used laptops were distributed among financially needy students. Alumni and other philanthropist clubs also contributed for the distribution of mobile phones which was a timely help to the financially poor students. The University has large number of trees and the canopy leaves are being collected in the campus and made use for preparing green manure. Similarly, the bio-waste generated from the hostel kitchen is sent for bio-compost and biogas plants.

File Description	Document
Geo-tagged photographs of the facilities	View Document
Relevant documents like agreements/MoUs with Government and other approved agencies	View Document

7.1.4

Water conservation facilities available in the Institution:

1. Rain water harvesting
2. Borewell /Open well recharge
3. Construction of tanks and bunds
4. Waste water recycling
5. Maintenance of water bodies and distribution system in the campus

Response: C. Any 2 of the above

File Description	Document
Institutional data in the prescribed format (data template)	View Document
Green audit reports on water conservation by recognised bodies	View Document
Geo-tagged photographs of the facilities.	View Document
Bills for the purchase of equipment's for the facilities created under this metric.	View Document

7.1.5

Green campus initiatives include

Describe the Green campus initiative of the institution including Restricted entry of automobiles, Use of Bicycles/ Battery powered vehicles , Pedestrian Friendly pathways , Ban on use of Plastic, landscaping with trees and plants etc in 500 words

Response:

The main campus and its associated buildings are integrated in harmony with the extensive green-area in Panangad. The 62.845 ha campus at Panangad comprises some of the most intact mangrove patches in Ernakulam. The University maintains a green and clean campus adhering to SDG 6 (Clean Water and Sanitation) and SDG 11 (Sustainable communities). Several green initiatives are undertaken at the campus including minimal use of plastics (especially single-use plastics) both among students as well as teaching and administrative staff. All events at the campus are plastic-free and environmental-friendly, with restrictions on the use of flex/plastic banners, plastic water bottles and other plastic items.

The University is also moving towards a paperless office, as part of which majority of the official communication to staffs and students is done through email and/or the Campus Suite – an online administrative management system for staff. University has conducted a Green audit, Environmental Audit and Energy audit to assess its status in reducing the green house emission. With an aim to reach net zero carbon footprint, KUFOS has installed roof top solar panels and is generating 400 units of electricity daily. The green campus and fringing mangrove vegetation is also a major sink for carbon emission.

Many students at the campus now use bicycles for commuting from their hostels/place of stay and the numbers of such users are increasing every year. The University has well-lit pathways for pedestrians where appropriate signages and direction boards are provided. Regular planting of trees including Guava (*Psidium guajava*), Anonna (*Annona muricata*), Mango (*Mangifera indica*), Chicoo (*Manilkara zapota*) are carried out to maintain green spaces at the University. The University NSS team in association with the National Highway Authority of India (NHAI) is regularly involved in planting trees on the sides of the National Highway in front of the University campus to increase the greenery along the boundary walls of the University.

File Description	Document
Geo-tagged photographs/videos of the facilities.	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.6

Quality audits on environment and energy are regularly undertaken by the institution

The institutional environment and energy initiatives are confirmed through the following

- 1.Green audit / Environmental audit**
- 2.Energy audit**
- 3.Clean and green campus recognitions/awards**
- 4.Beyond the campus environmental promotion and sustainability activities**

Response: B. Any 3 of the above

File Description	Document
Report on environmental promotional activities conducted beyond the campus with geo-tagged photographs with caption and date	View Document
Policy document on environment and energy usage Certificate from the auditing agency.	View Document
Institutional data in the prescribed format (data template)	View Document
Green audit report of all the years from recognized bodies	View Document
Provide Links for any other relevant document to support the claim (if any)	View Document

7.1.7

The Institution has Differently-abled (Divyangjan) friendly, barrier free environment

Write description covering the various components of barrier free environment in your institution in maximum of 500 words

- **Built environment with Ramps/lifts for easy access to classrooms**
- **Divyangjan friendly washrooms**
- **Signage including tactile path, lights, display boards and signposts**
- **Assistive technology and facilities for Divyangjan accessible website, screen-reading software, mechanized equipment**
- **Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading material, screen reading**

Response:

Following the enactment of the RPwD ACT 2016, KUFOS has been committed to, and made several initiatives to transform itself into an institution that is disability friendly. The University has reserved 5% of seats in the Masters programs (MSc, MBA and MTech) for candidates with disabilities. Every building in the campus has been equipped with ramps with railings, and elevators for easy and quick access. Disability-friendly washrooms are available at all buildings, and so is a wheelchair facility. A state-of-art language lab caters to students with hearing impairment. The University administration strives to make the campus disability friendly not only for its students but also its staff by allotting office rooms in the ground floors of the buildings. Most pathways and parking facilities at the campus are also barrier-free enabling easy use by persons with disability. For the purpose of examination assistance and support for students with disabilities, a group of scribes have been selected and are available.

File Description	Document
Upload supporting document	View Document

7.1.8

Describe the Institutional efforts/initiatives in providing an inclusive environment i.e., tolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and such other diversities (within 500 words).

Response:

KUFOS prides itself in being a multicultural University. During the five-year period for which accreditation is being considered, more than 120 students representing as many as 14 states and Union territories of the country have studied and graduated with various degrees including BFSc, MFSc, MSc and PhD, from the University. In many years, these students have topped the class and secured ranks, as well as represented the University in inter-University arts, cultural and sports meets and festivals, bringing laurels to the campus.

KUFOS strives towards inclusiveness in the campus through the following activities:

- SC/ST cell
- Minority cell
- OBC cell
- Divyangjan-friendly buildings

The University has established “The Pandit Karuppan Chair for Policy Studies on Livelihood Security and Socio-economic Empowerment of Fisherfolk (PKC)’ which works for the betterment and socio-economic upliftment of fisher communities along the Kerala coast. As part of the Government of India’s *Unnat Bharat Abhiyan*, KUFOS has been working to bring about transformational changes in rural development, particularly within the fisheries sector. As envisaged through the *Unnat Bharat Abhiyan* KUFOS has been working with the people of many villages and Panchayats in identifying challenges and evolving appropriate solutions for accelerating sustainable growth in fisheries and allied sectors. The University has adopted the Azheekal village at Andhakaranzhy near Chertala (Alappuzha District), Puthenvelikkara near Paravur (Ernakulam District), and Cheppanam Panchayat (adjoining the University) to carry out fisheries-related activities and bring about a change in their socio-economic status. A regular project funded by the Kerala State Planning Board entitled ‘Village Adoption for Empowerment and Capacity Building Ensuring Livelihood of Fisher folk in Central Kerala’ is also being implemented at KUFOS.

The following activities also demonstrate the initiatives taken by KUFOS to create an inclusive environment:

- Regular medical camps
- Farmers festival
- Celebrating all national festivals and days including Holi, Onam and Christmas
- Iftar parties during the Ramzan Festival

- Observance of Hindi Diwas
- Annual University Arts and Cultural Festival
- Annual Sports Week
- Bharana Bhasha Prathinja
- Hostel Day celebrations
- International Yoga Day celebrations led by NSS
- Kerala Piravi Celebration
- World Environmental Day celebrations led by NSS

File Description	Document
Any other relevant information	View Document

7.1.9

Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and responsibilities of citizens

Describe the various activities in the Institution for inculcating values for being responsible citizens as reflected in the Constitution of India within 500 words.

Response:

KUFOS upholds constitutional obligations highly and makes sure that every student and staff of the institution is aware of the values, rights, duties and responsibilities related to the Constitution of India. The University takes pride in celebrating and commemorating days of national importance such as the Independence Day, Republic Day, National Education Day, National Sports Day, Ambedkar Jayanti, Voters Day, Human Right's Day, Mother Tongue Day, Martyr's Day, Constitutional Day, World AIDS Day, and other important days listed by the University Grants Commission vide circulars to the Universities in the country. On each of these days, the statutory officers of the University together with the teaching and administrative staff and students converge together at the lobby of the administrative building and take the pledge.

The Vice Chancellor hoists the National flag during the Independence Day and Republic Day, where he emphasizes about the duties and responsibilities of staff and students towards the country and the constitution. This is followed by celebrations and programs including Quiz, Debates and other intellectually-stimulating events related to the theme of National Integration, and Indian History.

KUFOS takes pride as the first University in the State of Kerala to sign and hand over anti-dowry affidavits (declaration that no dowry will either be received or handed over) before the graduation ceremony. The first set of anti-dowry signed affidavits were handed over during the 2021 convocation ceremony by 386 students, and this has been followed every subsequent year.

7.1.10

The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard.

- 1. The institutional Code of Conduct principles are displayed on the website**
- 2. There is a committee to monitor adherence to the institutional Code of Conduct principles**
- 3. Institution organizes professional ethics programmes for students, teachers, administrators and other staff**
- 4. Annual awareness programmes on Code of Conduct are organized**

Response: C. Any 2 of the above

File Description	Document
Policy document on code of ethics.	View Document
Institutional data in the prescribed format (data template)	View Document
Document showing the Code of Conduct for students, teachers, governing body and administration as approved by the competent authority.	View Document

7.2 Best Practices

7.2.1

Describe two best practices successfully implemented as per NAAC format provided in the Manual.

Response:

1. Title of the Practice I

National Surveillance Programme for Aquatic Animal Diseases (NSPAAD)

2. Objectives of the Practice

1. To undertake targeted surveillance of freshwater and brackishwater aquatic organisms and their pathogens including snakeheads (EUS), Tilapia (TiLV, TiPV and *Streptococcus* spp.), Pangasius/Basa (*Edwardsiella* spp.) Seabass (RSIV, ISKNV), Pearlsplit (EUS, Streptococcus), and penaeid shrimps (EHP, WSSV, MBV, IHHNV, HPV).
2. To undertake passive surveillance of selected freshwater and brackishwater aquaculture farms in Alappuzha, Ernakulam, Thrissur, and Kannur districts of Kerala (an additionally in all farms where diseases outbreaks are reported)
3. To organize awareness programmes for fish and shrimp farmers of selected districts, on existing or emerging diseases of both freshwater and brackishwater fishes to the farmers of the.

3. Context

Diseases comprise one of the major challenges for sustainable aquaculture with recurrent disease outbreaks threatening the long-term sustainability of the sector. Early detection and regular monitoring

are key to responsible aquatic animal health management. It is in this context that designing and implementing a National Surveillance Program for Aquatic Animal Diseases attains immense significance.

4. The Practice

The National Surveillance Program for Aquatic Animal Diseases (NSPAAD) is a comprehensive initiative aimed at monitoring and managing aquatic animal health across India. This project, embedded within the higher education framework, particularly in universities, plays a crucial role in safeguarding the health of aquatic ecosystems and the sustainability of the aquaculture industry. As part of this initiative, the team undertakes regular and systematic disease surveillance across different regions and aquatic environments of the country, and is involved in implementing advanced diagnostic tools and techniques to accurately identify pathogens.

The NSPAAD program ensures the directional flow of research insights, and in addition provides free consultation and free of cost disease diagnosis to relevant stakeholders, especially farmers. Training and awareness programs are integral components of the National Surveillance Program for Aquatic Animal Diseases (NSPAAD). These initiatives aim to build capacity, enhance skills, and raise awareness among various stakeholders involved in aquatic animal health management. NSPAAD's training and awareness programs are crucial for building the capacity and fostering a culture of proactive disease management among all stakeholders involved in aquatic animal health. These initiatives contribute significantly to the overall effectiveness and success of the surveillance program.

5. Evidence of Success

A state-of-art Aquatic Referral Lab has been developed which serves as a central hub for advanced diagnostics, data analysis, and expertise dissemination. The lab makes use of advanced molecular diagnostics such as PCR, qPCR for precise pathogen identification and conducts serological assays to detect antibodies and antigens, aiding in the diagnosis of various diseases. The lab also contributes to the development and testing of vaccines and therapeutic agents for aquatic animal diseases. On an average of 700 samples per year are being tested which includes disease diagnosis and seed quality testing. During the past four years eight awareness programs on existing and emerging diseases, biosecurity measures were conducted across Kerala, which has helped improve early disease diagnosis and ensured responsible health management in the aquaculture sector.

The overall impact of this surveillance program has helped the University acquire a state-of-art Mobile (a modified bus) Referral Lab with facilities for analysis of soil and water quality, sample/ smear preparation, and examination of parasites and necropsy. The mobile lab also has portable generator set, oxygen cylinder, microscopes, balances, small refrigerator, etc. This facility was acquired through the PMMSY scheme of the Government of India.

6. Challenges and Resources

Implementing the National Surveillance Program for Aquatic Animal Diseases (NSPAAD) involves various challenges, as well as the need for specific resources. Challenges include difficulty in reaching remote or inaccessible areas for surveillance activities and sample collection, as well as ensuring timely and safe transportation of samples from field locations to laboratory facilities. Extensive and regular resources are required including laboratory facilities which are available at the University campuses. The University has also received funds through the PMMSY program of the Government of India which has been utilized for purchasing a mobile (bus) laboratory. However, there is still a need for regular budget head and availability of funding to meet the operational costs of the project/practice.

1. Title of the Practice II

Special admission quotas for Children of Fishermen (CoF)

2. Objectives of the Practice

To build capacity and empower the fisher community of Kerala through providing admission to children of fishers/fishermen in various academic programs at the University

3. Context

Fishers (a gender-neutral term: previously fisherman/fishermen) are an example of a marginalized community who have faced and continue to face severe educational challenges. Poverty as well as various other kinds of vulnerabilities have resulted in a low number of children from fisher communities attending schools. There is also a perception, that if boys of fishers do not acquire the capacity to participate in fishery at an early age, they would never be able to do so. Majority of the children of fishers do not study beyond high school. This educational backwardness remains despite living in urban areas in close proximity to communities with better exposure, and are linked to financial compulsions of families, lack of an environment conducive for studies, and absence of a system that encourages them to pursue it further. Also, the programs offered by conventional colleges are not in line with their occupation or aspiration. There is hence a need for more focused and additional efforts to ensure that children from these groups also opt for and benefit from a good quality of education.

4. The Practice

To uplift the economically and socially downtrodden fisher communities of Kerala, KUFOS has taken a proactive step to allocate additionally 20% of seats in each academic programme at the University to Children of Fishermen. KUFOS has designed a curriculum that fishers can easily relate to, as it echoes their need, scope for skill development in allied sectors and alternate avocation through value addition. The fee concession and fellowship these students receive also provides additional financial support and encourages them to complete the program successfully.

5. Evidence of Success

Of the 222 fishing villages in Kerala, there are only very few which do not have KUFOS alumni. These alumni adorn respectable and leading positions in academia (Assistant Professors, Scientists) State Fisheries Department, National and International Fisheries Industries, as entrepreneurs or self-employed professionals supporting their community. Inclusion of children of fishers in KUFOS has helped to identify issues the community is facing and to find sustainable solutions for the same. Village adoption programme is one such initiative that has reduced the gap of the University with this community to find solutions to their problems and also uplifting their standard of life.

6. Challenges and Resources

This practice comes with a few challenges for which the University is working together to find solutions. Being a four-year undergraduate degree, the students have to spend an extra year compared to conventional degree programs at traditional Universities. In addition, several new-generation, job-oriented degree programs are being offered at several colleges and Universities in the state, many of them located close to the fishing villages from where the CoF students come from. There is also a dearth of students from the CoF community for higher degree programs especially research programs such as

PhD. The lack of ample job opportunities in the Government Sector (which most students aim for) is also another challenge for maintaining continuity and receiving interested students for higher degree programs.

7.3 Institutional Distinctiveness

7.3.1

Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

Response:

KUFOS takes extreme pride in its societal interventions, particularly aimed at the fisher communities in the state of Kerala. A significant example of this is village adoption program of the University, where prioritised villages located along the Arabian Sea or the Vembanad backwaters are adopted for empowerment and capacity building with an aim to ensure improved livelihood of fishers and aquafarmers in Central Kerala. This scheme/program has been undertaken in the University throughout the last five years (and previously as well) and has brought about positive impacts to several villages and their marginalized communities. A brief overview of this program can be accessed at <http://kufos.ac.in/wp-content/uploads/2020/12/I-Village-Adoption-for-Empowerment-and-Capacity-Building-Ensuring-Livelihood-of-Fisher-folk-in-Central-Kerala.pdf>.

Of the various village and coastal community adoption programs, the most significant and impactful has been the intervention of the University at Chellanam. The University has been lauded for its strong presence and facilitation of programs in helping improve the lives of the fisher communities (and all members of the village) at Chellanam, a coastal village with about 16000 families and 45000 people, located close to the metropolis of Kochi. Chellanam faces extreme effects of sea erosion, which has resulted in loss and destruction of houses near the shore. Large stretches of revenue land and properties owned by the local community have been eroded over a period of 40-50 years.

The Kerala State Fisheries Minister had directed the Kerala University of Fisheries and Ocean Studies (KUFOS) to adopt Chellanam coastal panchayat and work towards developing a sustainable management plan for the village. Since then, KUFOS has proactively involved in the development and implementation of a sustainable development plan for Chellanam, after carrying out a one-year monitoring at the village and adjacent coastal areas. The University carried out a series of meetings, consultations and a generic survey, as well as undertook awareness programmes on different options of shore protection in the village. A door-to-door survey with a questionnaire was specifically carried out to understand the socio-economic living standards of residents of the village.

A group of 80 Bachelor of Fisheries Science (BFSc) students of the University visited around 8,500 houses in the coastal village to collect suggestions on steps to be taken to empower and rehabilitate villagers, and find a permanent solution to their miseries. A questionnaire with 39 questions to understand the social and economic status of the villagers was administered as part of the survey. Each student visited approximately 100 households to administer the questionnaire and gather responses from the residents.

The University also provided several key recommendations such as beach nourishment and “heaping of sand in the nearshore waters, like the ‘Netherlands model’, for coastal protection”. The sand from dredging conducted by the Cochin Port Trust is proposed to be used for this purpose. Creating bio-shields with mangroves was another key recommendation made by the KUFOS team to address the issue of coastal erosion. Another recommendation was for a multi-purpose rehabilitation centre to be constructed with a minimum total area of 9,000 square meter to rehabilitate people on ‘turbulent days’. The facility was envisaged as one that could be used for purposes related to tourism during alternate times.

A technical committee constituted by the University also submitted a detailed project report to the Kerala State Fisheries Department to develop Chellanam panchayat as a model fishing village. The Chellanam model is considered to be a pilot project, which will be subsequently extended and replicated to other coastal villages of Kerala. Overall, the interventions of KUFOS at Chellanam has not only helped improve environmental consciousness, stewardship but also facilitated economic empowerment. The project could also help sensitize students (especially children of fishers and other marginalized communities) to societal issues and help develop their management and leadership skills.

The Chellanam project of KUFOS was highly appreciated by various stakeholders and the government machinery of the State and found its place in the local and national media. Some examples of media attention received are provided below:

<https://www.newindianexpress.com/cities/kochi/2022/Aug/06/kufos-submits-dpr-for-chellanam-model-fishing-village-2484552.html>

<https://www.thenewsminute.com/kerala/restore-beaches-create-bio-shields-check-chellanam-s-coastal-erosion-kufos-152423>

<https://timesofindia.indiatimes.com/city/kochi/kufos-begins-survey-on-model-fishing-village/articleshow/88230267.cms>

<https://www.newindianexpress.com/states/kerala/2021/Dec/10/final-survey-for-keralas-chellanam-model-project-to-start-today-2393785.html>

<https://www.thehindu.com/news/cities/Kochi/kufos-submits-interim-report-on-protection-of-chellanam/article37505280.ece>

<https://www.thehindu.com/news/cities/Kochi/talks-on-for-implementation-of-chellanam-model-fishing-village-project/article66866420.ece>

<https://www.newindianexpress.com/cities/kochi/2021/Jul/10/an-idea-to-turn-chellanam-around-2327903.html>

<https://timesofindia.indiatimes.com/city/kochi/care-chellanam-submits-memorandum-to-kufos/articleshow/83698215.cms>

File Description	Document
Appropriate webpage in the Institutional website	View Document
Any other relevant information	View Document

5. CONCLUSION

Additional Information :

The academic programs in KUFOS are offered under three streams; the ICAR, UGC and AICTE, meticulously crafted to meet the evolving demands of the industry, fostering interdisciplinary collaboration, and promoting sustainable practices. KUFOS which was ranked 25th in NIRF among the agricultural and allied sector universities provides an equitable and affordable quality education to all, especially its major stakeholder, the fisher community. This is why KUFOS has set aside 20% of its seat in all its academic programmes to Children of Fishermen. KUFOS supports the student community by providing scholarships, fellowships, endowments and fee concession under the state government schemes. Presently over 60% of the students in KUFOS are availing these facilities. The academic programs offered by KUFOS depend on a cutting-edge curriculum designed by leading experts in the field. Emphasizing both theoretical foundations and practical applications. These courses equip students with a comprehensive understanding of their subject and the interdisciplinary nature of these programs encourage collaboration across diverse fields. Students have the opportunity to engage in interdisciplinary research projects, gaining invaluable insights and skills that transcend traditional disciplinary boundaries. For many programmes that require hand holding especially with skilling component, hands-on learning experiences are provided. The state-of-the-art laboratories, research facilities, and fieldwork opportunities provide students with immersive learning experiences that complement classroom instruction and foster critical thinking and problem-solving skills. With a focus on bridging the gap between academia and industry, the academic programs are very much tuned to incorporate industry-relevant training and skill development initiatives. Through internships, industry partnerships, and practical training modules, students gain first-hand exposure to real-world challenges and opportunities in the field. KUFOS has ongoing MoUs with nine International Universities and is exploring the possibilities of conducting academic programs that offers international exchange opportunities, collaborative research projects with global partners, and exposure to best practices from around the world. With a focus on specialized education and research, capacity building to train a new generation of professionals, community engagement and socio-economic development of its stakeholders, KUFOS has set goals to transform in to a premier institution contributing to the well-being of coastal communities and ecosystem.

Concluding Remarks :

Established in 2010, the Kerala University of Fisheries and Ocean Studies (KUFOS) was formed to address several key objectives and challenges related to fisheries and ocean studies in the state of Kerala. Within the past 14 years, the university has grown leaps and bounds with a steadfast commitment to academic excellence and research innovation, and has transformed into an internationally acclaimed institution contributing valuable skilled workforce. KUFOS stands out for its specialized focus, experienced faculty, and strategic location, though it faces challenges in funding, administrative efficiency, and curriculum updates. However, by leveraging opportunities in research expansion, international collaboration, and government support, it can further enhance its impact and reputation in the field of fisheries and ocean studies. KUFOS is determined to achieve its goal by equally strengthening three of its basic foundation pillars i.e., Education, Research and Extension. Under the National Education Policy, a holistic academic and research environment is envisaged that would transform as the bedrock of its future development. This has already shown signs of success in the form of high-quality research outputs, faculty publications, collaborations, student involvement in research, MOOC programmes in association with NPTEL and UGC, extension activities, establishment of State Referral lab and Business Incubation centre. However, for it to sustain the growing competition from other universities

and private educational institutions, it needs a facelift, drop its traditional outlook and embrace a wider level of learners. Addressing these challenges requires a multifaceted approach involving strategic planning, seeking diverse funding sources, fostering industry and international partnerships, updating curricula, and enhancing administrative efficiency. By overcoming these challenges, KUFOS can strengthen not only its position as a leading institution in fisheries and ocean studies, but also diversify its services that caters to the needs of a wider cross-section of the society.