

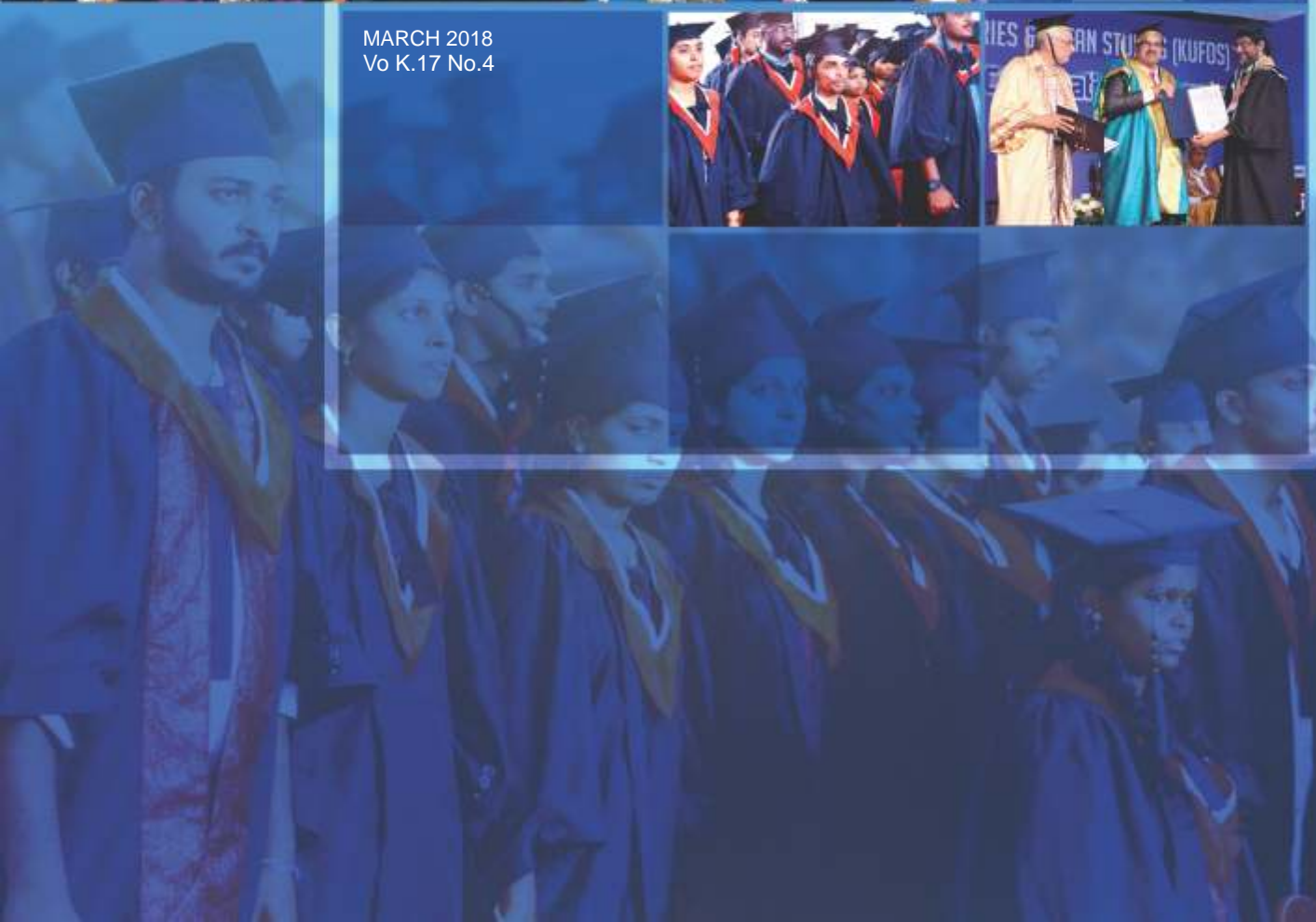


CHALLENGER

Newsletter of Kerala University of Fisheries & Ocean Studies



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KUFOS STAFF TRAINING PROGRAMME (KSTP)

KSTP is an one week long induction cum education programme conducted during May 08-15, 2017 for the non-teaching fraternity of the University who are supposed to gain insight into the legal framework within which the University carries out its day-to-day functions. Along with the history of the University, important areas such as KSR, KSSR, MOP, finance, purchase, budget, audit, KUFOS Act and Statute etc, were discussed in detail. The programme started with ice breaking session on motivation and motivational techniques and ended with a session on personality development techniques. The programme was conducted for selected twenty office employees on six half days without affecting their daily work.

The resource persons were Adv. Vincent Joseph, former Dy. Registrar, CUSAT, Mr. Ajimon P.P, Assistant Audit Officer, Kerala State Audit Department, Kochi Corporation Audit Office, Ernakulam, Mr. Rajith T.P., Section Officer (Legal affairs), CUSAT and Mr. C. Pradeep, Deputy Registrar, KUFOS.

The programme was inaugurated by Dr. T.V. Sankar, Director of Research on 8th May 2018 with welcome speech by Mr. Cleetus P.J., Asst. Registrar and felicitated by Dr. L. Suresh Mallya, Professor, CASRED. The valedictory function was presided over by our honourable Vice Chancellor, Dr. A. Ramachandran, who gave away the certificates to the participants. There was a meaningful interaction between the participants and the dignitaries, Vice Chancellor, Registrar, Director of Research, Director of Extension I/c, and Finance Officer in which the participants expressed their satisfaction in attending the programme and acknowledged what they gained from the programme. The dignitaries congratulated the organizers and the participants and appealed them to utilise their new energy, knowledge and positive attitude for the betterment of their activities and wished similar training programmes be organized in KUFOS in due course.

Mr. Cleetus P.J. delivered welcome speech and Dr. L. Suresh Mallya proposed vote of thanks.

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From the Desk of the Vice Chancellor



Kerala University of Fisheries and Ocean Studies (KUFOS) continuously combines traditional values of excellence in teaching and research with an attitude that challenges conventional practices and produces new ways of developing and delivering courses. KUFOS strictly follows its Vision 2020 Plan which aim to become an Internationally acclaimed academic organization. This is the only university in our country having a unique blend of ICAR in offering fisheries courses; under UGC in offering various M.Sc programmes and under AICTE in having M.Tech, MBA and LLM courses. By introducing specialized courses in the needy areas, the student strength has gone up above 1000. I am much proud to mention that we have 34 PG programs in different disciplines and a new PG program in M.Sc., Environmental Sciences has been started to develop a holistic approach to environmental and resource problems in students from diverse academic, professional and cultural backgrounds.

With a short span of about seven years KUFOS has identified the major research needs and gap to find solution to the problems being faced by the fisheries and oceanic sector to improve the sustainability of these resources. A vibrant culture of research with various research projects is aimed at

the integrated and sustainable growth of fisheries sector, in partnership with the Government, industry, fish farmers and fisherfolk. Under this objective KUFOS has started three Centre of Excellences in Aquaculture, Aquatic resource Management and Food processing beside a Research centre for advanced studies in Management, entrepreneurship development and in research in fisheries agri-business and allied sectors. The major objectives of the centres are to develop brood stock of cultivable fishes, improvising knowledge on conservation and management of aquatic living resources and development of value added products from fish and agricultural farm produce. An intensive training and consultancy services will be given to stake holders, artisans and students in fisheries and ocean science sectors.

I am much pleased that Referral Disease Diagnostic Laboratory is now functioning in KUFOS, this center effectively establishes a new network for disease surveillance, monitoring and prevention of disease in aquatic animals of Kerala State. In this program, 1200 farmers were benefitted. You can find the inaugural report of the State-of-art referral laboratory in this issue. Details of research and academic activities, details of collaboration of KUFOS with other research organizations and other activity reports are included in this issue.

Prof (DR).A.Ramachandran
Vice Chancellor



4th Convocation held at KUFOS



Indian Agriculture Research Council Deputy Director Dr. N.S. Rathore said that even though there is more job opportunity for the new generation Fisheries Science Graduates, they should not limit themselves as employees but should become professional entrepreneurs in the field of fish industry. He was inaugurating the 4th Convocation of KUFOS at its Headquarters, Panangad. Further he added that Fish industry will be sustainable not only with the use of modern technologies and instruments, but with the hereditary knowledge of fisherfolk too.

KUFOS Vice Chancellor Dr A. Ramachandran awarded degrees to 276 students who successfully completed course in the year 2016-17. He said that the most important specialty of KUFOS is that there is 20% seat conservation in all courses including MBA for the children of fish farmers who have membership in the Board of Fisheries Welfare fund. Also there is fees concession and scholarship for the students who are coming under this category. The Vice-Chancellor said that the KUFOS is aimed at the socio-economic development of the common man in the fishing sector. For this, KUFOS has implemented various schemes including adoption of coastal villages.

KUFOS Governing Council member Adv. A.M. Shamsir, MLA, KUFOS Senate Member Adv. M. Swaraj MLA were the chief guests at the graduation ceremony. Deans of various faculties in KUFOS Dr K Gopakumar, Dr. M. R. Bhupendranath, Dr. K. Vasudevan, Dr. N.R. Menon and Prof. S. Harihakumar were attended the

Ceremony. KUFOS Registrar Dr V.M Victor George led the ceremony.

Out of 276 candidates who received degrees in the 4th convocation ceremony, 49 candidates were completed B.F.Sc. course. They had taken admission in 2013 in Fisheries faculty. Others include 59 MBA, 114 M.Sc. course in various subjects, 13 M.Tech and 29 M.F.Sc. degrees.

Gold Medals for the students who won first rank in various courses and two Endowment Awards for the best students were also distributed in the ceremony.

Kerala Fisheries and Ocean Study University (KUFOS) was established in 2010 as the first Fisheries University of India having its Headquarters in Panangad, Kochi.

Seven years ago, there were only two courses and two hundred students in KUFOS but now there are 34 courses including two graduate courses, 28 postgraduate courses and more than 900 students. From this Academic Year KUFOS has started B.Tech course in Food Technology and M.Sc. Course in Environmental Science. In addition to academic programs, KUFOS conducts four Diploma Courses that emphasize vocational training. Graduate and Postgraduate courses of KUFOS has ICAR recognition. Courses related to Ocean Science has been recognized by UGC. Its Engineering courses have AICTE recognition. KUFOS is the only University in Kerala which has the approval of above three institutions.



KUFOS opens state-of-the-art laboratory to diagnose fish and shrimp diseases



State Fisheries Minister J. Mercykuttyamma inaugurates state of art laboratory facility in KUFOS.

As part of the efforts for enhancing disease-free shrimp and fish production in the State, the Kerala University of Fisheries and Ocean Studies (KUFOS) has set up a state-of-the-art laboratory with ultra modern facilities for shrimp and fish diseases diagnosis.

The most modern laboratory is having facilities at par with international standards, was inaugurated by the Fisheries Minister and Pro Chancellor of KUFOS J. Mercykuttyamma on Nov 21, 2017.

The laboratory facility is located in the Western Campus of KUFOS in Panangad under the Department of Animal Health Management and Environment Management is functioning as a catalyst to boost aqua production in the State in a big way from the day of inception. According to Dr A Ramachandran, Vice Chancellor of KUFOS, this facility is acting as the referral lab for technical officers of Fisheries Department in their task to diagnosis aquatic animal diseases in the State. At the same time, fish and shrimp farmers of the State can directly approach the laboratory with their samples and the lab services will be available to them in a subsidized rate. The laboratory is also providing training facilities for officers of the State Fisheries Department as well as the aqua farmers along with students of KUFOS. The laboratory is also functioning as the nerve center for the network set up jointly by KUFOS

and Department of Fisheries, to work with aqua farmers for effective disease surveillance, monitoring and control with an aim to increase fish production in the State. The laboratory facility is also facilitating the State level Fisheries Diseases Control Group comprises scientists (KUFOS and technical officers of the State Fisheries Department. The group is headed by Dr. Devika Pillai, Head, Department of Fish Diseases and Management of KUFOS.

This sophisticated laboratory was set up with the financial assistance from the National Fisheries Development board (NFDB) Hyderabad and the State Government.

To introduce the laboratory facility and its modern disease diagnosing tools, a week-long training programme was held prior to the inception. As many as 24 officials, comprising Technical Assistants to Assistant Directors of the fisheries department had attended the training.



Fisheries Minister and KUFOS Pro Chancellor J. Mercykuttyamma presents Ponnada to A.P. Joy of Moorkkannur, who won the Best Fish Farmer Award constituted by KUFOS on World Fisheries Day. K.V. Thomas M.P., KUFOS Registrar Dr. V.M. Victor George, Vice Chancellor Dr. A. Ramachandran are also seen in the picture.



KUFOS to conserve germplasm of indigenous fishes



The KUFOS Registrar Dr VM Victor George and Dr Kuldeep Kumar Lal, Director, NBFGR, exchanging the Memorandum of Understanding (MoU) of a Project conceived for the conservation of the endangered and indigenous fish species living in the rivers and waterbodies of Kerala, in the presence of the Minister for Fisheries, J Mercykuttyamma. The Kumbalam village panchayat president Sherly George, the Palluruthy Block Panchayat president C S Peethambaran, Prof. K V Thomas, MP, the KUFOS Vice Chancellor Dr A Ramachandran and M Swaraj, MLA, looks on.

A comprehensive programme FORconserving the endangered and local fish species living in the rivers and waterbodiesof Kerala has been initiated in KUFOS . The project has been conceived and implementedjointly by the Kerala University of Fisheries and Ocean Studies (KUFOS) and the Lucknow-based National Bureau of Fish Genetics Resources (NBFGR), an arm of the Indian Agricultural Research Council.

The KUFOS Registrar Dr VM Victor George and Dr Kuldeep Kumar Lal, Director, NBFGR, had signed and exchanged the Memorandum of Understanding (MoU) of the project, at function held on November 22 , 2017 at the KUFOS campus, in the presence of the Fisheries Minister Ms J Mercykuttyamma, the University Vice Chancellor Dr A Ramachandran, Prof. KV Thomas MP, and KUFOS Senate member M Swaraj MLA

As per the project proposals, the germplasm of the local and endangered fishes living in the rivers and waterbodies of Kerala would be conserved in specially-designed waterbodies,to be set up at the KUFOS campus. Samples of various baby and breeding fishes will be collected from the inland waterbodies across Kerala. The waterbodies to conserve these samples would be specially designed, taking into consideration the habitat of the respective breed, said Dr Kuldip Kumar Lal.

Researchers has estimated that there are about 189 types of fish species living in the waterbodies of Kerala. Out of these, as many as 57 variety are seen exclusively in Kerala. Among these, the scientists of KUFOS has been successful in protecting and artificially breeding as many as twelve species, including “snake head fish” (“vaaraal”) and “stinging catfish” (“kaari”) variety.

KUFOS will kickstart experimental fish farming of indigenous species , on a commercial basis, once the collection and conservation of germplasms is completed with the help of NBFGR. The germplasms thus collected would facilitate the establishment of hatchery industries, enabling the production of fish babies of local fish varieties, including that of the highly-demanded varieties like the “varaal” and “Karimeen”, on a large scale, KUFOS Vice Chancellor Dr A. Ramachandran hoped.

In addition to the rivers and backwaters, the state has as many as 66,000 hectares of inland waterbodies. And Kerala is targeting an economic boom through large-scale inland aquaculture, utilising these waterbodies, the Vice Chancellor pointed out. This would also help contribute for employment generation among the rural people. The Germplasm conservation and production at KUFOS will become the foundation stone for a massive transformation in the economic and employment scenario of the State, thanks the development of the embedded Aquaculture to be witnessed across the State of Kerala, he said. The “Gift Tilapia”, developed from “Tilapia” found in the Nile River is the one variety that is now widely cultivated in India. But the time is not too distant for the fish varieties of “karimeen” (pearl spot), “varaal” and “kaari” to be cultivated massively in Kerala replacing “gift tilapia”, Dr Ramachandran added.



KUFOS AND ASCI sign MoU for skill development in Fisheries and Ocean related jobs

Kochi based Kerala University of Fisheries and Ocean Studies (KUFOS) and Gurugram (Haryana) based Agriculture Skill Council of India (ASCI) working under the aegis of National Skill Development Corporation (NSDC), Ministry of Skill Development & Entrepreneurship, Government of India have signed a Memorandum of Understanding (MoU) today to work together in the area of skill development related to fisheries and ocean technology. According to the MoU, both institutions will join hands to establish fisheries and ocean technology skill development centres in various points across the country including one at KUFOS. Dr. A. Ramachandran, Vice Chancellor of KUFOS said that the university will extend its expertise in fisheries and ocean science to the ASCI to train the master trainers for the upcoming fisheries and ocean technology skill development centres. KUFOS possesses most modern laboratory facilities along with expertise in imparting training to farmers, which can be used for the purpose. The MoU was signed and exchanged on February 08, 2018 at KUFOS by Registrar Dr.V.M.Victor George for KUFOS and Dr.Satender Singh Arya, Chief Executive Officer, for Agriculture Skill Council of India in the presence of the Agriculture Skill Council of India Advisor Dr A Suresh, the University Vice Chancellor Dr A Ramachandran, the Director of Research Dr T V Shankar and the University Finance Officer Joby George.



According to the MoU, ASCI and KUFOS agree to conduct the following activities:

A. Training program as per National Skill Qualification Framework

KUFOS may align its short term skill based training programs with ASCI developed Qualification Packs as per National Skill Qualification Framework of Govt. of India.

B. Assessment & Certification

ASCI may conduct Assessment of trainees trained under different short term skill based training programs of KUFOS. Successful trainees may be certified jointly by ASCI and KUFOS as per NSQF levels.

C. Train the Trainer

ASCI may organize Train the trainer programs with KUFOS for KUFOS/other Universities/Institutions/ASCI affiliated training providers. KUFOS can provide technical and infrastructure support, to ASCI in organizing Train the trainer programs, as per the KUFOS norms.

D. Skill Development Centers/Training Institutes:

KUFOS and ASCI can join hands in creating skill development centers for training and capacity building across various segments of Aquaculture, Fish Processing, Feed Technology etc. If need arises, the Parties may jointly request for grant from state or central government.

E. Manpower & infrastructure required

The existing infrastructure and manpower of the Parties can be used for the implementation of the collaborative activities to the extent agreed by each Party. KUFOS will nominate a Liaison Officer for coordinating the collaborative activities with ASCI.



KUFOS researchers discover two new fish species from the Western Ghats



Two new species have been added to the list of freshwater fish species of the Western Ghats, a region already globally recognized as an exceptional hotspot of freshwater biodiversity. The two new species were discovered and formally named through on-going research activities on fish taxonomy undertaken at the Kerala University of Fisheries and Ocean Studies (KUFOS) in collaboration with the Indian Institute of Science Education and Research (IISER) - Pune, and the British Museum of Natural History, London. Scientific papers describing the two new species were published this week in the world's leading animal taxonomy journal, *Zootaxa*. The first species scientifically named, *Dario neela* was discovered from the Kabini River in Wayanad; the species name 'neela' is derived from the Malayalam word for blue and alludes to the striking iridescent blue colour of males of the fish. *Dario neela* is so far known only from a small tributary in the headwaters of the Kabini River between Periya and Boys Town, where they occur in clear-water streams within algal mats, said Anoop VK, PhD student at the School of Ocean Science and Technology of KUFOS, who first collected the fish and contributed as an author on the paper. The second species, *Pethiasahit*, described from the Hiranyakeshi River in the Western Ghats mountains of Maharashtra State, is unique as it is the first *syntopic* (joint occurrence of two closely related species in the same habitat at the same time) fish species documented from peninsular India. The species epithet 'sahit' means 'together' in Sanskrit and refers to the syntopy of the new species. The number of new fish species being described from the Western Ghats biodiversity hotspot seems far from being exhausted and comprehensive field work in poorly known areas of the region, will no doubt yield new species of fishes, said Dr. Rajeev Raghavan, Assistant Professor in Fish Taxonomy at KUFOS and one of the authors of the paper describing *Pethiasahit*. Apart from *Dario neela* and *Pethiasahit*, research undertaken at KUFOS have led to the discovery of an additional three new fish species from the Western Ghats.

Russian youth delegation visits KUFOS



The Russian delegation posing for a snap with the students of KUFOS authorities. Sitting (from left): KUFOS Eminence Professor Dr K Gopakumar, University Registrar Dr VM Victor George, Russian Team Leader Anna Saigenkova, KUFOS Vice Chancellor Dr A. Ramachandran, Central Government Representative Pankaj Damija, Deputy Team Leader Natasha, KUFOS Dean Dr Dr MS Raju and NSS coordinator Dr KRanjith.

A 48-member Russian delegation, comprising young men and women, visited KUFOS. The delegation spent a day in KUFOS on its nine-day visit to India during December last year as part of a cultural exchange programme between India and Russia. The team consists of university students from different parts of Russia, teachers and employees of the Ministry of Culture, Russia.

After meeting the Vice Chancellor Dr A Ramachandran, the Russian team made it to various departments and facilities to understand the functioning of the University and also interacted with students for over two hours. Earlier, the University Registrar Dr V M Victor George and the University students welcomed at the Russian delegation. The students also staged a cultural show of traditional art forms, comprising 'Ottamthullal' and 'Thiruvathirakali', as to entertain their foreign guests, who were at the campus till 5 in the evening.

Anna Saigenkova from Moscow led the delegation, which is accompanied by officials of the Ministry of Youth Affairs, New Delhi. KUFOS is the only University the delegation had visited during their 2-day camp in Kerala. They also visited Ayurveda college and Hill palace at Tripunithura.

The students of KUFOS greeting the Russian delegates





Fullbright folks visited KUFOS opening up the thresholds of research achievements

A 14 member team of scientists and researchers conducted a visit to Kerala University of Fisheries and Ocean Studies (KUFOS) who packed Fullbright Fellowship for the year 2018 which is given by the US government to the world's most Eminent Scientists and Researchers. They came to encourage the Fisheries and Marine Science students to take advantage of the US Government's scholarship to get a doctoral degree from the top universities in the US bearing all the expenditure by the US Govt. They communicated with the students making them confident that the students of KUFOS will be able to achieve fullbright fellowship which is given to the best scientists of the world. The team was led by Smt. Lalita Nageswari, Project Manager of Fullbright Foundation in India.



KUFOS Vice Chancellor Dr A. Ramachandran and Registrar Dr.V.M.Victor George welcoming the Fullbright team at KUFOS Headquarters. KUFOS Eminence Professor Dr.K.Gopakumar is near.

Smt. Lalita Nageswari said that over 100 hundred Indian researchers will be awarded fullbright Fellowship annually from India as part of the Fullbright-Nehru International Education Administrative program which was established as part of the collaboration between India and America in the field of education. In the coming years Fullbright Fellowship will be extended to subjects like Fisheries Science, Social Sciences including Economics and other Sciences, including them in the agriculture sector. Smt. Lalita Nageswari said that 30 per cent of the total fullbright scholarship from India has been reserved for researchers from South India.

KUFOS Vice Chancellor Dr A. Ramachandran and Registrar Dr.V.M.Victor George accompanied by students and teachers welcomed the Fullbright team at KUFOS Headquarters at 2.00 p.m. Dr. A. Ramachandran explained to the team about the areas and subjects on which American Universities and KUFOS can collaborate. After that the Fullbright team interacted with the students of KUFOS. The team included the Scientists and Researchers of top Universities of America viz., South Carolina, New Jersey, Notterdam and Kentucky.

Road Safety Observance by NSS



The NSS volunteers are seen making the two-wheeler riders put on their helmets as part of the road safety observance programmes held under the aegis of the University NSS unit at Madavana junction, near KUFOS campus.

Students of the Kerala University of Fisheries and Ocean Studies (KUFOS) had intercepted hundreds of two-wheelers, riding without wearing helmets, at the Madavana junction on the Aror-Edapalli National Highway and explained to them the need for wearing the headgear besides distributed pamphlets on road safety rules.

The exercise was demonstrated as part of the road safety awareness program conducted on October 18, 2017, organized by the NSS unit of the University, in association with the local police authorities as part of the Traffic Awareness Week observed across the State. The gravity of law-breakers were enormous that the number of two-wheeler riders who were found without helmets, during an hour between 9 and 10 a.m. alone, exceeded 100. That apart, as many as 22 drivers on four-wheelers were found without putting their seat belt. However, the NSS volunteers insisted and made the drivers put the seat belts before they let these law-breakers go. About 50 students, including girls, participated in the road safety awareness programme.

NSS Co-Ordinators, Dr K Ranjith and Dr S M Rafi led the volunteers. The NSS volunteers later staged a flash mob at the campus, as part of the road safety awareness programme.



IORA Team visits KUFOS

The Indian Ocean Rim Association (IORA), the scientific research arm of 21 countries alongside the Indian Ocean visited KUFOS on November 10, 2017. Their visit was inspecting possibilities to set up upcoming IORA Kochi Centre in KUFOS.



IORA India Head and Foreign Affairs Joint Secretary Sanjay Pande and Officer on Special Duty Ashima Chaturvedi visiting the KUFOS campus in Thursday. KUFOS Director of Research Dr. T. V. Sankaran, Registrar Dr. V. M. George, Vice Chancellor Dr. A. Ramachandran, Fisheries Department Joint Director P. Sahadevan are also seen.

The opening of the IORA centre in Kochi is aimed at facilitating the exchange of research findings and studies, in the field of Fisheries and Oceanic studies, among its member nations. IORA is planning to establish its Indian centre Kochi, which is known as the Queen of Arabian Sea, which is part of Indian Ocean.

The IORA delegation team comprising Sanjay Pande, Joint Secretary, Dept. Of Foreign Affairs and also the India Chief of IORA and Ashima Chaturvedi, Officer on Special Duty

held discussions with the University Vice Chancellor Dr. A. Ramachandran and Senior Faculty Members. The Director of Research Dr. T. V. Sankaran, and Eminence Professor Dr. K. Gopakumar made an academic presentation on KUFOS's research activities.

Speaking on the occasion, Sanjay Pande said the Central Government already sought the cooperation of the State Government to go ahead with the IORA centre in Kochi. Sanjay Pande has also revealed that the ongoing research studies at KUFOS in fisheries and ocean studies has been the primary consideration for IORA to consider KUFOS campus for setting up their Kochi centre.



Foreign Affairs Joint Secretary and IORA India Chief Sanjay Pande explaining to the KUFOS on the proposed study centre. The Officer on Special Duty Ashima Chaturvedi, Vice Chancellor Dr. A. Ramachandran and Registrar Dr. V. M. George look on.



Fish harvest enthuse Christmas market

The recent fish harvest of hundreds of kilos of Perl Spot (Karimeen) and Climbing Perch (Chemballi) witnessed at Panangad back waters in Kumbalampanchayat has given a big boost to the Christmas market. The huge catch was made possible through the pen culture model of aquaculture farming of 'karimeen' and 'chemballi' species by the Self-Help Groups (SHGs) of the area. The Self Help Groups are formed and supported by Extension Directorate of Kerala University of Fisheries and Ocean Studies (KUFOS) under the village adoption scheme. The village adoption programme is aimed at creating families with economic self-sufficiency through fish farming activities. The KUFOS has adopted two villages under this scheme - the Kumbhalam village in Ernakulam district and the Andhakaranazhi-Arattupuzha village in Alapuzha district.



The Kumbalam Grama panchayat president Sherly George, after inaugurating harvesting of the fish cultivation by SHGs through pen culture at Panangad lake, having a curious look at a big 'karimeen' that was caught in the first net. KUFOS Extension head Dr Daisy Kappen, Research Director Dr T V Shanker, Dean Dr M S Raju and Public Relations Director Raju E R are also seen.

The huge catch was in the ninth ward of the Kumbalam panchayat where the SHGs had cultivated pen culture type of fish farming. Each one of the SHGs who cultivated fishes in the lake got as many as 100 kilos of 'karimeen' and 'chempalli' during this big harvest. Aimed at the forthcoming Christmas season, it was about six months ago that the SHGs had initiated fish cultivation, thanks to the training and guidance given by KUFOS to the SHG members. The first harvest to bag a big fish catch was made by the "Unarvu SHG" of the 9th ward of the panchayat. The Kumbalam village panchayat president Sherly George inaugurated the harvest, in the presence of KUFOS Research Director Dr T V Shanker, Fisheries Dean Dr M S Raju, Head of Extension Wing Dr Daisy C Kappen and Aquaculture Head Dr K Dinesh led the fish harvest.

Fish harvesting took place in as many as 20 fish farms, cultivated by different SHGs, under the aegis of the KUFOS. Out of these 20, a bumper crop of as much as 800 kilos of fish crop was harvested from the fish farm developed by the 'Unarvu' SHG, under the leadership of ward member M V Haridasan.

AARDO and KUFOS tie up



African - Asian Rural Development Organization (AARDO), a group of 33 African-Asian countries and Kerala University of Fisheries and Ocean Studies (KUFOS) agreed for mutual collaboration in various sectors. The decision was taken in the meeting held at KUFOS Head quarters, Panangad, Kochi in which Prof. (Dr.) A.Ramachandran, Vice Chancellor of KUFOS and His Excellency Eng. Wassfi Hassan El-Sreihin Secretary General, African Asian Rural Development Organization participated.

17 African countries, 15 Asian countries that are members of the organization will benefit from this agreement. The aim of the AARDO is to promote rural development in among its member countries. Eng. Wassfi Hassan El-Sreihin said that the Cooperation will bring stability and development in the rural farming and fishing sectors in member countries of the organisation.

Training / workshops could be conducted in collaboration with KUFOS for the benefit of the member countries of African Asian Rural Development Organization. KUFOS can provide training programmes / workshops in the areas of its expertise particularly in aquaculture, post-harvest technology, ocean studies and general analytical areas. Besides, KUFOS has got renowned experts in the area of aquaculture, post-harvest fisheries management, product development, food science & technology and rural management with special reference to fisheries and Ocean Science and their services can be utilized as resource persons for capacity building of the member countries of AARDO.



KUFOS conducts Kole land fish survey



The research students of KUFOS and Forestry College at the 'kole lands' as part of the survey and census of fishwealth.

The “Kole lands” (a type of low lying paddy field extending from Kodungallur to Ponnani) is a rich source of rare and indigenous fish breeds, revealed a survey conducted by the Kerala University of Fisheries and Ocean Studies (KUFOS) in association with the Department of Forestry, Kerala Agricultural University. The survey conducted in February 2018 found that many fish species including the world's smallest fish species were found in the stretch of kolpadam. They could find “*Horadandia brittani*”, a small fish variety, from the kolpadavu of Puzhakkal and Pulezhi. A fully grown up fish of this variety will have a length of just two centimeters.

The survey also identified as many as 55 indigenous fish species and three foreign-breed fish species in this stretch of waterbody. The survey found that a large collection of indigenous fishes, which determines the tastes of the Keralites, namely ‘Karimeen (Pearl Spot)’, ‘Varaal (Murrel)’ ‘aarakan (Spiny Eel)’, ‘manjakoory (Yellow sun catfish)’ and ‘aatukozhuva (Malabar Sprat)’ were abundantly found in this stretch. The ‘kolpadams’ are paddy fields lying about one-and-a-half meter below the sea level having high level of ecological importance. The total area of the low-lying paddy field, better known as ‘kolpadangal’ is about 30,000 acres.

As many as 40 research scholars and eight teachers of KUFOS and the Forestry College participated in the survey. The habitat of various fish breeds, the quality of water, the availability of fish varieties and challenges affecting the fish ecosystems were among the topics that were the topics of study of the survey. KUFOS and the Forestry college will continue with the study, research and census of the fish wealth in the Kole lands’, said Dr M.K. Sanjeevan of KUFOS and Dr P. O Nameer of Forestry college, the duo who led the survey proceedings.

The survey report was released by KAU Director of Research Dr P Indira Devi, at a function held at Forestry College, Vellanikkara. The Forestry college Dean Dr Vidyasagar presided over the function.

National Science day observed at KUFOS

National Science day was observed at KUFOS on February 28 with various programmes to create and promote scientific awareness among general public and school students. The major attraction of the science day observation were the school students visit to KUFOS laboratories, Aquarium, Hatcheries and Departments. Hundreds of students from in and around of Kochi had utilised the opportunity and spent four to six hours in the campus learning different things. Dr K KVijayan, Director, Central Institute of Brackishwater Aquaculture (CIBA) delivered the key note address in the national seminar that was organised as part of Science day observation. Dr. Vijayan opined proper strategies should be formulated for the scientific utilisation of the water wealth of Kerala.

The Brackishwater, containing salt, cannot be used for agriculture, construction or other industrial needs. But the same is excellent for organic farming of salt water fishes like prawns, muscles (“kallumakkaai”) and crabs. An acre of organic farming of aquaculture can earn at least three lakh rupees per year. However, thousands of acres of such highly potential brackishwater reservoirs in Kerala are left unutilised, said Dr. Vijayan.

Earlier, the University Vice Chancellor Dr A Ramachandran inaugurated the celebrations as part of the Science day observance. The University Registrar Dr VM Victor George, Prof. Dr Suresh Kumar and Associate Prof. Dr K Ranjith spoke. Dr Vijayan distributed the prizes to the winners of competitions held for school students under the joint auspices of KUFOS and the Kerala State Council for Science, Technology and Environment, as part of the National Science Day observance.

Samyukta Mahesh and Maria Rojo Jose of Thevara Sacred Heart CMI Public School won the first prize in Elocution and Nithya Gireesh and Andrew Mathew of the same school shared the first prize in Concept presentation.



The KUFOS Vice Chancellor Dr A Ramachandran inaugurating the science day observance held at the campus. Professor Chair Dr Suresh Mallya, Prof. Dr M V Joseph, Director of Research Dr TV Shanker, Registrar Dr VM Victor George, the CIBA Director Dr K K Vijayan, Prof. Dr S Suresh kumar and Dr K Ranjith are also seen.

Entrepreneurship Awareness Programme in KUFOS

The awareness programme on Entrepreneurship was organized by Centre for Advanced Studies & Research in Entrepreneurship Development (CASRED) for selected students from all schools and departments of the university was held on March 21, 2017. There were 110 students who registered for this event comprising of students from B. F. Sc., M. F. Sc., M.Sc., M. Tech and M.B.A. streams.

Vice Chancellor, Dr. A. Ramachandran, while inaugurating the programme said that KUFOS will set up incubation centre and research centre under CASRED as part of developing KUFOS as a world class university. Dr. V.M. Victor George, Registrar, Dr. K. Gopakumar, Professor of Eminence and Dr. T.V. Sankar, Director of Research felicitated on the occasion. Dr. L. Suresh Mallya, Professor Chair, CASRED welcomed the guest speakers of the programme.

Mr. Salahudeen, CEO, Kerala Institute of Entrepreneurship Development (KIED), in his talk to the audience highlighted the role of entrepreneurs for the development of the society and the world as such and narrated the stories of Ralph Diesel, and Dr. Varghese Kurien, who transformed the lives of millions through their single-minded efforts and the entrepreneurial activities.



Mr. Jose Therattil, AGM and Head – Learning Centre, SBI, impressed upon the students on the financial side of the business and elaborated on the different schemes and support SBI is offering to the SME sector and the start ups.

The young and charismatic Mr. John Simon, Director, Lazza Ice cream, in his presentation narrated the hardships his grandfather and father had to undergo in setting up the business in food industry and how they succeeded in overcoming these challenges. Mr. John, the third generation entrepreneur, stressed upon the areas and the critical factors he has concentrated while expanding the ice cream business under his leadership.

Lastly, the dynamic young entrepreneurs, Mr. Tittu Thomas and Mr. Anoop Chandran, promoters of Chappathy Point in Kochi were down to earth candid enough to reveal and share the real hardship, the stages of struggle and systematic strategic plans and implementation they have undertaken through their journey towards success in their venture. They are Automobile Engineers who after testing their talent in other industries ultimately decided to venture into totally new food industry and landed into chappathy manufacturing.



Fisheries Minister and KUFOS Pro Chancellor J Mercykuttyamma presents Ponnada to A.Y.Michael, who won the Best Fisherman Award constituted by KUFOS on World Fisheries Day. Palluruthi Block Panchayath President C.S. Peethambaram, Kumalam Grama Panchayath President Sherly George, K.V.Thomas M.P, KUFOS Vice Chancellor Dr. A.Ramachandran, Registrar Dr.V.M.Victor George, are also seen in the picture.



National Workshop on Tools for Monitoring, Assessment and Management of Aquatic Ecosystems



The KUFOS Vice Chancellor Dr A Ramachandran inaugurating the three-day national workshop on "Tools for Monitoring, Assessment and Management of Aquatic Ecosystems" held at the KUFOS campus under the joint auspices of the Centre for Aquatic Management and Conservation, KUFOS and KSCSTE. Director of Research, KUFOS Dr TV Shanker, Registrar Dr VM Victor George, Chairperson, Aquatic Management and Conservation, KUFOS, Dr V N Sanjeevan, Fisheries Dean Dr M S Raju, Professors Dr S Suresh kumar, Dr T D Namboodiri and Dr Sreenivas Gopal are also seen.

During January 28-31, The Kerala University of Fisheries and Ocean Studies (KUFOS) hosted national workshop on Tools for Monitoring, Assessment and Management of Aquatic Ecosystems, in which about 50 science teachers, from various colleges in the State, participated in the workshop, which deliberated upon the various scientific management practices and management of water habitats. The workshop, chaired by Dr N R Menon, discussed in detail the various aspects that led to the decline of Vembanattu Lake and the environmental challenges faced by the lake.

While inaugurating the workshop, KUFOS Vice Chancellor Dr A Ramachandran has said that the various water resources, including rivers and lakes, play a vital role in maintaining the optimum balance of oxygen in the earth's atmosphere.

As much as seventy percent (70%) of the oxygen in the earth's atmosphere are being provided by the water ecosystem, which includes oceans, rivers, and lakes. The oxygen is produced mainly by the water fluxes, it was highlighted at the seminar. The three-day workshop was organised jointly by the Centre for Aquatic Management and Conservation, KUFOS and the Kerala State Council for Science and Technology and Environment (KSCSTE)

Dr V N Sanjeevan, Prof & chairperson of the Aquatic Management and Conservation, KUFOS presided over the inaugural function of the workshop. The KUFOS Registrar Dr VM Victor George, Director of Research Dr TV Shankar and Director of School of Oasis Science and Technology Dr S Suresh Kumar addressed the participants.

OBITUARY



Dr. N.R.Menon

Dr N R Menon (76), Dean and Governing Council Member of KUFOS passed away on March 19, 2018. Dr.Menon was one of the pioneers in fisheries oceanography and former Director of the School of Marine Sciences of CUSAT.

Remembering Dr.N.R.Menon in a condolence meeting held in KUFOS, Vice Chancellor Dr A Ramachandran said Dr Menon was a scientist of eminence as well as a good teacher who guided and mentored maritime education in India. The Registrar Dr V M Victor George presided over the meeting. Director of Research Dr T.V.Sankar, Eminence Professor Dr K Gopakumar. Fisheries Dean Dr MS Raju, Assistant Registrar PJ Cletus, Professor Dr Devika Pillai and Asst Professor Dr S.M.Rafi remembered the services of Dr Menon.

Dr Menon had played a crucial role in linking the Marine Biologists of India with the European Science world, the meeting observed.

WOMEN'S DAY CELEBRATIONS IN KUFOS



KUFOS celebrated women's day on November 07 with the theme – Women's Empowerment through Entrepreneurship - in the university seminar hall under the auspicious of CASRED.

Dr. V.M. Victor George, Registrar was the chief guest for the inaugural function. The programme was inaugurated with lighting the traditional lamp by the chief guest and the invited guests. Dr. L. Suresh Mallya, Professor Chair, CASRED welcomed the gathering after a brief introduction about the activities of CASRED. The Chief Guest in his inaugural speech highlighted the increasing role of women in the society and stressed on their importance they hold in the society.

Ms. Nirmala Lilly, CEO, Infinity Hospitality Services Ltd., & Chairperson, women's wing, KCCI

presided over the function. In his felicitation speech, Dr. M.S. Raju, Director, SME, appreciated the modern woman in her race towards self reliance and the stress and strain experienced by her.

Noted Women entrepreneurs . Nirmala Lilly (CEO, Infinity Hospitality Services Ltd, & Chairperson, women's wing, KCCI), Parveen Hafeez (MD, Sunrise Hospital group) , Lekha Balachandran (Managing Partner, Resitech Pvt Ltd), Sheela Mathai (Educationalist, Consultant) Rose Mary (Hotelier, Old Courtyard Hotel) and Beena Manoj (Partner, Excellent Furniture) were honored in the meeting.

In their talks, the women entrepreneurs narrated their journey towards setting up their ventures, hardships and obstacles faced by them and the ways and means by which they are overcoming the hurdles and marching ahead. According to them, passion, determination, hard work and their USPs have helped them to achieve as what they are at present. The guests clarified and explained the questions and doubts raised by the audience especially regarding the balancing act they are playing in their personal life as well as their profession.

The programme was attended by students, faculty members, non-teaching staff and others.

Dr. Anu Gopinath, proposed vote of thanks

PROGRAMME ON VALUE ADDITION OF FISH PRODUCTS



Dr M S Raju, Dean, KUFOS, inaugurating the two-day training programme on value addition and marketing techniques of fish produces held at KUFOS campus. KUFOS faculty Dr Abhilash Sasidharan and Dr B Manoj Kumar, Director of Research Dr T V Shanker, Extension Wing head Dr Daisy C Kappen, and Scientists of CIFT Dr Dreealakshmi and Dr Anooj kumar looks on.

About 50 homemakers from different parts of the State had participated in the two-day workshop on value addition of fish products held in Kerala University of Fisheries (KUFOS) . The workshop provided scientific training in making-and-marketing, aimed at adding value to the fish produces and marketing them. The training programme held during December 28-29, 2017 gave insight to participants into various methods and strategies to boost the value of products made of fish.

KUFOS Dean Dr M S Raju inaugurated the workshop at a function presided over by Director of Research Dr T V Shankar.



Participants of the training programme on value addition & marketing techniques of fish produces seen attending a session on making fish samosa.

The Central Institute of Fisheries Technology (CIFT) was the technology partner of the free-of-cost workshop that was organised by the Dept of Fish Processing Technology of KUFOS. Dr Abhilash Sasidharan and Dr B Manoj kumar Faculty Member of KUFOS, CIFT scientists Dr. Bincy P K, Dr Anooj kumar and Dr Sreelakshmi K R led the training programme.

