

**Promoting Aquaculture for Sustainable Food Production**

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**Fisheries and Aquaculture  
Newsletter****Introduction:**

The Department of Fisheries & Aquaculture, UVAS aims to provide excellence in higher education, training, research and development, services and advice in the fields of sustainable Fisheries and Aquaculture consequently contributing to economic and social development of the country.

**Mission:**

Produce highly skilled professionals in the field of Fisheries and Aquaculture to meet the demand of growing fisheries industry by resolving food and environmental problems.

**CONTENTS**

World Fisheries Day 2022  
Observed at UVAS

Dr. Muhammad Hafeez-ur-  
Rehman awarded with gold  
medal

GC University Lahore organized  
a two-day international  
conference on "Fisheries and  
Aquaculture"

University of Education Hosts 4th  
International Symposium on  
World Fisheries Day

UE students visited Fisheries  
Research and Training Institute,  
Lahore, Pakistan

Punjab University, fisheries  
industry working group  
established

**WORLD FISHERIES DAY-2022 OBSERVED AT UVAS**

The Department of Fisheries and Aquaculture of the University of Veterinary and Animal Sciences (UVAS) Lahore observed World Fisheries Day with the theme of "Sustainable Fisheries: Building a Future for Everyone" at Ravi Campus Pattoki on 22-November-2022. Various activities including awareness walk, seminar, value added products development & amp; models of modern aquaculture competition organized to mark the day in befitting manner at Ravi Campus Pattoki. Dean Faculty of Animal Production and Technology Prof. Dr. Saima presided over the seminar while UVAS Chairman Department of Fisheries and Aquaculture Dr. Muhammad Hafeez-ur- Rehman, Chairman Department of Wildlife & Ecology/Principal Office Ravi Campus Prof. Dr. Arshad Javid, Deputy Director from Department of Fisheries Govt. of Punjab Mr. Muhammad Ashraf, Managing Director Punjab Agri Farms Mr. Saad Yousaf, fisheries professionals from public & private organizations, fish feed representatives from industries, fish farmers, stakeholders and a large number of students and faculty members attended.

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While addressing the audience in the seminars, Prof. Dr. Saima said that fisheries and aquaculture playing a remarkable role in national economy and food security. She said fisheries sector contribute directly to food supplies, sources of livelihood, export earnings and boosting economic structure. Fish eating habits and fish intake per person should be increase that would not be in specific months but should be used round the year she added.

Speaking on the occasion, Dr. Muhammad Hafeez-ur-Rehman highlighted the critical importance of healthy ocean ecosystems and to ensure sustainable stocks of fisheries in the world and the journey of fisheries and aquaculture sector of Pakistan. He emphasized that the department of fisheries and aquaculture UVAS is also playing a role in the uplift of the of sector and have mission to provide excellence in higher education, training, research and development, services in the fields of sustainable fisheries and aquaculture. All these efforts will contribute to economic and social development of the country he added. He shared that state-of-the-art Model Fish Processing and Value Addition facilities established in Department of Fisheries and Aquaculture for providing hands on training to the students and fish farmers, specialized research and innovations in the field of fish breeding, developed first ever aquaculture vaccine and promoted Small-scale Aquaculture as cottage industry.

Mr. Ashraf said that fish meat is the cheapest and valuable source of protein. He also said passed out fisheries graduate from UVAS are serving Fisheries Department, Govt of Punjab and have strong practical skill and field knowledge. Mr. Saad Yousaf highlighted the importance of fisheries sector in Pakistan. He said there is a lot of opportunities available for business for investors and entrepreneur. He said the fisheries sector has huge potential and is day by day rapidly flourishing in Pakistan. Earlier Prof. Dr. Saima along with Dr. Muhammad Hafeez-ur-Rehman, Prof. Dr. Arshad Javid and other speakers visited the new products of ready to cook and ready to eat displayed on the stalls prepared by the students and appreciated their efforts. Later they led the walk while a large number of stakeholders, students and faculty members were participated. At the end of seminar, Prof. Dr. Saima along with Dr. Muhammad Hafeez-ur-Rehman distributed the prizes among the winners of fish products and model competition.



## DR. MUHAMMAD HAFEEZ-UR-REHMAN AWARDED WITH GOLD MEDAL

Dr. Muhammad Hafeez-ur-Rehman Associate Professor/Chairman of the Department of Fisheries and Aquaculture, University of Veterinary and Animal Sciences (UVAS), Lahore, Pakistan received 4th Dr. Abdul Shakoor Gold Medal at the occasion of 5th International Conference on Applied Zoology (ICAZ)-2022 at Khwaja Fareed University of Engineering and Information Technology, Rahim Yar Khan for his extraordinary contributions in the academics and research regarding Aquaculture and Fisheries. Dr. Muhammad Hafeez-ur-Rehman, is working as an Associate Professor at the Department of Fisheries & Aquaculture, University of Veterinary and Animal Sciences, Lahore, Pakistan since 2018. He has completed his MSc and M.Phil. in Zoology at the University of Agriculture, Faisalabad, Pakistan and got his Ph.D. degree in the discipline of Fisheries and Aquaculture from UVAS, Lahore, Pakistan. Dr. Muhammad Hafeez-ur-Rehman worked on the Reproductive Biology and Induced Spawning of *Channa marulius* in captivity with manipulation of various feeding and hormonal treatments. In breeding trials, Ovaprim combined with fresh pituitary gland and/or other hormone analogues, fish spawned successfully for the first time in the history of fisheries and aquaculture in Pakistan. His findings helped fish farmers, fish hatchery managers and fish conservation strategy programs in spawning of valuable fish and its stock replenishment programs in future. Besides, this research he is also working on fish processing, value addition and quality assurance of commercially important fish species of Pakistan. He has supervised more than 20 undergraduate and 04 postgraduate researchers in the disciplines of Zoology and Fisheries & Aquaculture. He has authored and co-authored over 60 research articles, a book chapter and presented papers in various conferences.





## **GC UNIVERSITY, LAHORE ORGANIZED TWO-DAY INTERNATIONAL CONFERENCE ON “FISHERIES AND AQUACULTURE”**

The biggest immediate challenge to universities is enhancing the employability of their graduates, said Vice Chancellor Prof. Dr. Asghar Zaidi on Tuesday while addressing an international conference at the GC University Lahore. "We have been told by the industry that you send us your best graduates and we have to teach them again," said Prof. Zaidi, adding that they have to upskill their graduates to make them useful for the industry in Pakistan and abroad. The two-day international conference on “fisheries and aquaculture” is organized by the university's Zoology Department in collaboration with leading industries. Prof. Zaidi chaired the inaugural session of the conference which was also



addressed by University of Education VC Prof. Talat Naseer Pasha, Director General Punjab Fisheries Department Dr. Sikander Hayat and Secretary Forestry, Wildlife & Fisheries Mr. Shahid Zaman. Besides faculty and students from 25 universities, about 19 industries working fisheries sector are participating in the conference spread over six technical sessions. Vice Chancellor Prof. Zaidi said conferences like these are an opportunity where academia and industry can sit in a very frank atmosphere, tell them where they have fallen short and what they need to do to make their graduates productive members of Industry. He welcomed the three international participants to the conference including Dr. John Sweetman who has 40 years of experience in the field of Aquaculture. Secretary Fisheries Shahid Zaman said that no industry can flourish without support from academia and researchers. However, he said the government is providing subsidies to the private sector to flourish in the fisheries sector so that they can fulfil the commercial demand and biodiversity in the rivers can be protected. In his opening remarks, Principal Organizer Prof. Dr. Hafiz Muhammad Tahir said that the purpose of this conference is to bring together researchers, academicians, the farming community and industry stakeholders on one platform. Dr. Sikander Hayat shed light on the introduction of new technologies for improved fish production. FiskaTech Business Head Mr. Saad Yousaf and CEO Alltech Mr. Muhammad Khaleeq Arshad also addressed the first session.

## **UNIVERSITY OF EDUCATION, LAHORE HOSTS 4<sup>TH</sup> INTERNATIONAL SYMPOSIUM ON WORLD FISHERIES DAY**

The 4<sup>th</sup> One Day International Symposium on “World Fisheries Day” was observed at the University of Education, Main Campus on November 25, 2022. On this occasion training on “Small-Scale Fish Production and Its Meat Products” was also organized. The Symposium was attended by international and national speakers including Dr. Seyed Hossein Hosseinfar (Gorgan University, Iran), Dr. Sikander Hayat (DG Fisheries, Punjab), Dr. Muhammad Ayub (Ex-DG Fisheries Punjab) Prof. Dr. Atif Yaqub and Dr. Mehwish Faheem (GCU, Lahore) and Dr. Shahzad Naveed Jadoon (CEO Alltech, Pakistan). Faculty, students of many universities, Fish farmers, other stakeholders from all over the Punjab, Pro Vice-Chancellor Prof. Dr. Muhammad Arshad, Director Division of Science and Technology Prof. Dr. Alam Saeed and Chairperson Zoology Department Prof. Dr. Shagufta Andleeb also participated in the event. Addressing the symposium, Vice Chancellor, University of Education, Lahore Prof. Dr. Talat Naseer Pasha (S.I.) said that Pakistan is primarily an agricultural country, which is rich in natural water resources, but unfortunately, still we are not able to take complete advantage of these resources. Our fish production is less than one million metric tons. In recent years, the fisheries sector has faced several challenges, including natural disasters, climate change, environmental pollution, and overfishing. He said that there is a lot of potential in aquaculture and if the private sector also participates by investing in it, the best results can be achieved, through this sector we can give strong support to our economy. Our farmer is very hardworking and ready to learn new things. The Vice-Chancellor said that the main objective of this symposium is to provide a platform to all the participants, government representatives, researchers, private sector experts, and teachers related to the fishing industry. Speaking on this occasion, the guest speakers said that a substantial part of the protein required for our body is obtained

from fish and other marine life. By developing aquaculture, we can not only meet the needs of cities but also revolutionize the lives of the rural population. Aquaculture is currently the fastest-growing economy in the world, so we have to pay close attention to it as well. The speakers further said that there is not much public awareness about aquaculture but we believe that the aquaculture sector can be widely introduced by organizing this kind of symposium. At the end, Assistant Professor University of Education, Lahore Dr. Mudassar Shahzad thanked the participants of the Symposium.

### **UE STUDENTS VISITED FISHERIES RESEARCH AND TRAINING INSTITUTE, LAHORE, PAKISTAN**

Department of Zoology, Division of Science and Technology (DS&T), Township campus organized a study tour to Manawan Fish Hatchery on 13th October, 2022 for students of BS and MS Zoology. This study tour was initiated under the visionary leadership of the Worthy Vice Chancellor Prof. Dr. Talat Naseer Pasha (*S.I. & H.I.*), support of Prof. Dr. M. Alam Saeed (Director, DS&T) and motivation of Prof. Dr. Shagufta Andleeb (Chairperson, Department of Zoology). Dr. M. Mudassar Shahzad and



Dr. Fatima Sughra supervised the study tour. Students of MS and BS visited the BioFloc system, Fish Hatchery for Induced Breeding, Fish Museum (having more than 500 preserved samples), Fish Library (One of the largest Fish book collection centers in Pakistan), Biochemistry lab, Pathology lab as well as Quality and control department at Research and Training Institute. Dr. Ansar Mahmood Chatha (Director Research and Training Institute) warmly welcome to the faculty members and all students. Mr. Abdul Rehman (Deputy Director), Mr. Bilal Ahmad (DDF) Mr. M. Tanveer (Senior Chemist), Ms. Maria Yousuf (Research Assistant) and Muhammad Waqar (Fisheries Inspector) briefed the students about different parts of the center. During practical demonstration of Induced Fish Breeding Mr. Abdul Rahman guided the students how to identify the male and female fishes, how to inject Ovaprim with required quantity and where to inject the syringe in fish body. He also demonstrated the students about the procedure of selection and acclimatization of fishes and how to obtain the fish larvae after the process of artificial egg fertilization. Students learnt a lot with keen observation and interest in different segments. Study tours always play a major role in the learning of students practically at higher levels.

### **PUNJAB UNIVERSITY, FISHERIES INDUSTRY WORKING GROUP ESTABLISHED**

Punjab University (PU) Vice Chancellor (VC) Prof Niaz Ahmad Akhtar said the current university administration was encouraging such initiatives to introduce modern fish farming that would help boost the relevant industries. This was stated by him during an address to a meeting of fisheries and aquaculture industry stakeholders organized by Institute of Zoology. Pro Vice Chancellor Prof. Dr. Saleem Mazhar, Dean Prof. Dr. Javed Iqbal Qazi, Director ORIC Prof Dr Asmatullah, Prof Dr Noor Khan, Director General Fisheries Dr. Sikender Hayat, CEO Fisheries Development Board Junaid Watto, fish feed manufacturers and progressive fish farmers from all over Pakistan participated.

In the meeting, a working Group of PU-Industry Fisheries and Aquaculture was constituted. Addressing the participants of meeting, Prof Niaz Ahmed said that the curriculum regarding fisheries was being upgraded according to the needs of the fish market so that the graduates could easily get jobs and the industry could be provided manpower as per their requirement. He said that the subject of future academic research in this regard should be finalized after consultation with the companies so that positive progress could be made in solving the problems of the industry.

Prof. Noor Khan gave detailed presentation on need for constituting this group and also proposed establishing Centre of Fisheries & Aquaculture at PU. Dr. Sikender Hayat also gave presentation and shared ongoing research and development projects and demanded trained fisheries graduates to be inducted in these projects. Mr. Junaid Wattoo also emphasized on the need of producing trained manpower which is the mandate of universities. Prof Saleem Mazhar, Prof Javed Iqbal and Prof Asmatullah also lauded the initiative and said that this would bridge gap between the academia and industry in the field which was missing earlier. Representing the Bioflock industry, Dr Raees Ahmed, Director, Smart Bioflock Technologies, said that unless the research work on fish farming in educational institutions is promoted, the problems of the industry could not be solved. He thanked all the participants including PU VC and Prof Noor Khan and said that such meetings should be continued so that exports of products from the industry could be started at the earliest. The working group includes more than 30 professionals from across Pakistan, including fish farmers, feed makers, industry representatives and Fisheries Department representatives.

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