

Conservation and Management of Natural Resources

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ABSTRACT

An international webinar was arranged by Jinnah University for Women on 21st January 2021 entitled “International Conference of Biological Research and Applied Sciences”. Session II-A: Recent Trends in Zoological Research was chaired by Prof. Dr. Shahid Niaz Khan, Dean Faculty of Biological Sciences and Chairperson, Department of Zoology, Kohat University of Science and Technology, Kohat and co-chaired by Dr. Muhammad Shoiab, Associate Professor, Department of Zoology, University of Karachi, Karachi. Keynote speaker for this session was Mr. Muhammad Moazzam Khan, Technical Advisor (Marine Fisheries) Worldwide Fund for Nature (WWF-Pakistan), Karachi on “Conservation and Management of Natural Resources”.

Mr. Muhammad Moazzam Khan stressed on the importance of wildlife as it helps to preserve biodiversity, helps to maintain food chains and food web and source of useful products from wildlife like food, medicines, leather, bones, honey etc. On the conservation of wildlife he stressed on the need for preserving the natural habitats of animals, banning poaching of animals, protecting endangered species of animals and setting up of wildlife sanctuaries, national parks, biosphere.

He gave three examples where zoologist have played key role in protection and conservation of iconic animals. Indus river dolphins, according to him are found in the lower parts of the Indus River in Pakistan and in River Beas, a tributary of the Indus River in Punjab, India. In Pakistan, their numbers declined dramatically after the construction of an irrigation system, and most dolphins are confined to a 750 mile stretch of the river and divided into isolated populations by six barrages. River dolphin numbers have increased dramatically over the past 16 years, thanks largely to successful community-based conservation efforts led by women zoologists. A new WWF survey says there are now an estimated 1,816 Indus river dolphins in Pakistan—almost 50% more than the 1,200 dolphins estimated during the first comprehensive census in 2001 when the species appeared to be on the brink of extinction.

Currently confined to just 20% of their natural habitat range due to the construction of numerous dams and barrages along the Indus River, the dolphins are also threatened by worsening water pollution, stranding in irrigation canals, and accidental capture in fishing nets. Integrating research, effective law enforcement, and critical community engagement. Since 1992, WWF-Pakistan and the Sindh Wildlife Department have led a dolphin rescue program, which has saved 131 dolphins. WWF has also established a dolphin monitoring network in collaboration with local communities, Sindh Wildlife Department and other important government stakeholders, along with a 24-hour phone helpline that people can call if they see a dolphin in distress.

Second example he quoted was about Trophy Hunting. Every year Provincial Wildlife Department of GB and Balochistan issues licenses for trophy hunting for prime ungulates of Pakistan. This trophy hunting permits are issued annually for various areas including the Gilgit-Baltistan, the Tooshi Conservancy district Chitral, Gehrait Conservancy district Chitral, and Kaigah Conservancy in district Kohistan and Torghar Hills Balochistan. Trophy hunting is a major intervention designed to provide various socioeconomic and ecological benefits at the local and regional levels. So far, \$4.86 million dollar by issuing 74 permits to local and foreign

nationals for trophy hunting of Markhor, national animal of Pakistan. Trophy hunting can generate income for the local community, conservation benefits in some countries, and financial support for re-introduction of wildlife in some regions. Through the income from trophy hunting a bridge over the Indus river and a nine-kilometre road between two villages, a 4,500 feet (137 metre) long drain to irrigate farmland for three villages, the renovation of existing and construction of new classrooms in a government school, construction and repair of road network, establishment of small hydro power plants and job opportunities (Guards, guide and local support) were created. Pakistan's Trophy hunting programme is considered to be most successful programme in the world.

Mr. Moazzam further gave example of conservation of marine megafauna in Pakistan. For which he stressed the need for collection of information about population, minimizing threat, providing legal cover and implementation thereupon and creation of awareness. He pointed out that use of alternate fishing methods introduced by WWF-Pakistan under the supervision of zoologist were able to eliminate entanglement and mortality of marine dolphins. Annually about 12,000 used to be killed in tuna gillnets but use of subsurface gears has eliminated mortality in such gear. In 2020, no mortality of dolphin was reported. Since the start of this programme in 2012 so far trained fishermen have safely released 6 whales, 7 dolphin, 105, whale sharks, 88 mobulids, 76 sunfish and thousands of turtles. Such programmes are being replicated in other countries.