

ORL - EE&P-5**Fisheries Education and Training in Nepal: Current Status and Future Prospects**

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Potential of fisheries sector in providing quality food and nutrition, creating livelihoods in the rural and remote areas, reducing poverty, contribution to national economies, employment generation, foreign exchange earnings and advancing inclusive economic development is widely recognized globally. Nepal has abundant water resources in the form of rivers & streams, lakes, reservoirs, ponds, irrigated paddy fields and swamps suitable for fisheries and aquaculture supporting wide range of fish species making the sector important part of country's agriculture economy. Fisheries and aquaculture contribute about 2.5 percent of Nepal's Agricultural Gross Domestic Product (AGDP). Presently, only about 2 percent of total water resources in Nepal are utilised for aquaculture and the country imports fish to meet its demand.

Well planned fisheries higher education and training programmes are essential to produce qualified fisheries professionals and adequately skilled technicians to meet the growing needs of research, education, development and private sector organisations. However, fisheries education in Nepal is still in its infancy. Agriculture and Forestry University (AFU) and Tribhuvan University (TU) are the two main universities in Nepal which offer formal education in fisheries science. AFU offers four year B.Sc. Fisheries and two year M.Sc. in Fisheries (Aquaculture), while TU conducts two year M.Sc. in Aquaculture. Certificate and Diploma courses are lacking although there is a growing demand for hatchery/farm technicians in the country. The Council for Technical Education and Vocational Training (CTEVT), Nepal, through its constituent institutions conducts sponsored Junior Technician courses in fisheries. In addition, international organisations such as Food and Agriculture Organisation (FAO) of the United Nations and some NGOs also impart training in collaboration with local institutions/communities.

In spite of these efforts, Nepal faces several challenges in fisheries education and training. There is a need for establishing Fisheries College dedicated to impart formal professional fisheries education in the country. Existing Course curricula at Graduate and Post graduate (PG) level need revision/updating. Further, strengthening of infrastructure in terms of field facilities, class rooms, laboratories and libraries is required. Internship program for B.Sc. Fisheries, may be introduced to provide field/work experience. There is a need for adding new specialisations at Masters level in Fisheries Resources Management (FRM) and subsequently in Health Management and Nutrition. Doctoral programs may be initiated in Aquaculture, FRM and other emerging areas. As the capacity of human resources is critical to ensure relevance and quality of teaching/research outputs, providing overseas training for scientists/teachers is necessary. Training for technicians/extension staff of the Department of Fisheries development is crucial for providing quality technical backstopping and delivery of effective and meaningful extension services to fishers and fish farmers. Foundation training for newly recruited Fisheries Officers will go a long way in introducing and tuning them to the specific needs of the sector.

The CTEVT, Nepal may start one year Certificate and two year Diploma courses in fisheries and aquaculture to produce middle level human resources required to guide and support fisheries sector at fishers and fish farmers' level. Capacity building of fishers, farmers as well as hatchery and feed mill operators is emphasised to ensure higher productivity and easy availability of seed and feed. As females constitute about 60 percent and 33 percent of the total number of persons involved in capture fisheries and aquaculture respectively, short term training programmes directed towards women's empowerment need to be conducted. Periodic assessment of demand and supply of human resources for the sector is crucial to envisage future fisheries education and training needs of the country. In order to attract talent, students pursuing fisheries education may be provided with scholarships and financial assistance. Moreover, there is a need for strengthening and building new partnerships with international institutions to provide opportunities for collaboration and exchange of faculty and students in research and education.