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Successful Implementation of International Trends in Fishery and Fish Culture in Nepal

András Woynarovich* and Sunila Rai

International consultant in fishery and fish culture 1123 Csörsz u. 5. Budapest, Hungary dr.woynarovich.andras@gmail.com

As the different countries and their scientists, technical and administrative professionals became well connected, international trends in inland fishery and fish culture gradually influenced or even determined the national development of these subsectors. Since the middle of the 19th century inland fishery and the very beginning of the 20th century fish culture started developing on an increasingly rapid way. One of the effects of these processes was that countries started to study, consider, adapt and implement the new findings and results of others, which on this manner developed into international trends of inland fishery and fish culture.

Nepal, where small scale artisanal fishery on an exceptionally diverse fish fauna in a magnificent environment was practiced for centuries, the development of modern fish culture started only in the 1950's first in temple pools and village ponds (Figure 1 and Figure 2). This paper covers the last seventy years of the fishery and fish culture development in Nepal. The findings are based on own experiences gained from early 1970's, the work and publications of national and international scientists, as well as on the technical reports of concerned organizations. The list of fish species annexed to this paper, based on outstanding work of national scientists shows the size and conservation status of all fish species found in Nepal. In this list actual and potential fish species for both fishery and fish culture are marked with the aim to provide a detailed picture about the fish fauna and to support finetuning research with focus on present and potential species for diverse, sustainable fishery and fish culture. In the fields of fishery in natural waters, fish stock conservation, and the different fishery enhancement measures, including introduction of exotic species and culture-based fishery (CBF) are discussed. In the field of fish culture development, the three basic fish culture systems (CBF, pond culture and intensive culture systems), as well as feasible fish seed and table fish production options are also



Figure 1. Traditional fishing in the 1960's.



Figure 2. Typical village pond in the 1960's.

discussed. The technical education and extension are the preconditions and guaranty of success in research and practical work, hence these are also reviewed against international trends.

The recommendations in this paper explicitly suggest continuing the work by finetuning the already achieved progress with (1) Research work for advanced fishery enhancement in rivers, (2) Piloting fishery management techniques under controlled conditions, (3) Strict implementation of aquatic biodiversity conservation related acts, (4) Promotion of household fish nurseries, (5) Enhancing vocational and higher fishery education, (6) Training of fish farmers, (7) Collaboration and coordination among education, research and extension institutions and (8) Cooperation and coordination among three levels of government for fishery and aquaculture development. It can be concluded that in the light of international trends the development of inland fishery and fish culture in Nepal were successful, but can and should be further tuned as recommended, including a more consistent, traditional-fishers-friendly enforcement of fisheries controlling acts and regulations. In this case the subsector could be one of the good examples of professionally matched traditions and exceptional fishery resources, which is properly prospering within a magnificent natural and cultural environment that Nepal offers.