

## Potentials and Challenges in Expanding Inland Fishery in Dambe-ara, Wellawaya, Sri Lanka

P.S.S.L. Wickrama\* and D.N. Koralagama

Department of Agricultural Economics, Faculty of Agriculture, University of Ruhuna, Sri Lanka

\*shalikalaksan@gmail.com

Overexploitation of marine resources claims extensive attention on inland fisheries. Monaragala is one of the districts with copious inland water bodies with a greater potential for employment opportunities, fisheries products, and food security of rural households. Dambe-ara is 80 ha in extent and located in Wallawaya Divisional secretariat division (DSD) with a substantial potential to aquaculture fisheries production. However, its contribution and potential are inadequately researched. This paper attempts to unravel potentials and challenges to expand Dambe-ara inland fisheries while exploring its contribution to the region. Qualitative data collection methods were employed. Five key-informant discussions and ten in-depth interviews were administered through a time randomization sampling technique. Respondents, who were operating at the landing site from 9.00 am to 11.00 am were interviewed. Secondary data were obtained through National Aquaculture Development Authority, National Aquatic Resources Research and Development Agency, Ministry of Fisheries and Aquatic Resources Development and other relevant articles. Results revealed that the harvest comprises with 40% *Entroplus suratensis* (Green chromide), 28% *Catla catla* (Catla), 24% *Channa striata* (Mural) and 4% *Hypophthalmichthys molitrix* (Silver carp) and *Cyprinus carpio* (Common carp), 01% *Cirrhinus mrigala* (Mirigal), 02% *Macrobrachium rosenbergii* (Fresh water prawns), and 01% *Labeo rohita* (Rohu). Fishing in Dambe-ara is seasonal where the peak harvest extends from February to July with an average annual yield of 62.5 -150 kg/ha. Harvest fluctuates from 9-15 kg/ha during the season and 6.25-12.5 kg/ha in rest of the year. Dried fish processing had been practiced before 2016 but declined due to lack of motivation and incentives. A permanent feeding water source is lacking, whereas, the inactive fisheries association hinder the progression. Despite the higher productivity of the tank, the present situation is woefully affected with poor attention paid by the government. The tank management can obtain 50% contribution from the government out of annual total cost for fish breeding, training, financing and equipment as craft and gill net, yet its operation is dormant. In conclusion, proper attention and patronage from the government, especially through robust institutions is suggested to increase the production that would enhance livelihoods of more than 250 households and animal protein requirement of over 54, 911 people in Wellawaya DSD while contributing to uplift the GDP of the country.

**Keywords:** Development, Fish resources, Fresh water, Inland fishery