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Status and Prospects of Cage Fish Farming in Nepal

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Cage fish farming was first started in Lakes of Pokhara Valley in 1975 and later adopted in Indrasarobar Reservoir which was formed by the impoundment of Kulekhani River in 1984. Cage fish culture in Nepal is primarily focused to traditional communities living nearby lakes of Pokhara valley and displaced community by Hydroelectricity dam in Kulekhani for sustaining their livelihood. Cage culture of planktivorous carp is considered one of the key steps to the utilization of natural waters for increased fish production. At present local fisher and indigenous community are engaged in cage fish culture activities in Lake Phewa (523 ha), Begnas (328 ha) and Indrasarobar Reservoir (175-220 ha).

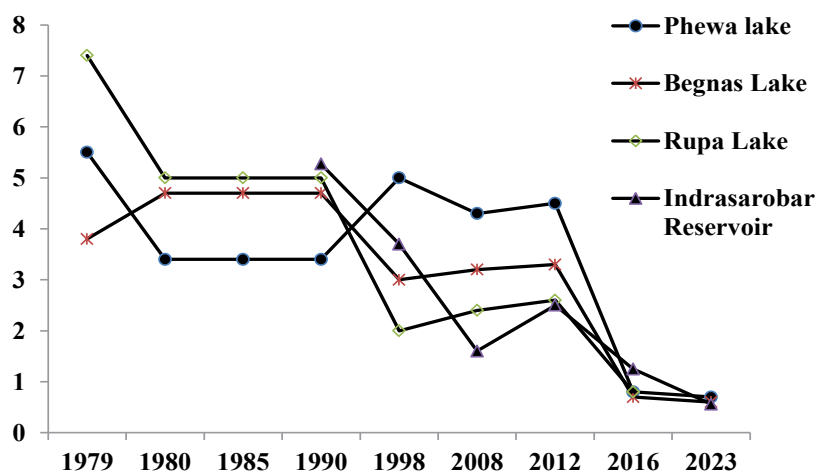


Figure: Productivity (kg/m³/year) trend of cage fish culture in different lakes and reservoir

Trend analysis revealed that the fish productivity from the cage fish culture of the planktivorous carp has declined continuously in lakes and reservoir. Besides the planktivorous carp, the grass carp is also cultured in lake Phewa on a small scale which has higher productivity (6-8 kg/m³/y). Researches have shown promising results of cage culture of rainbow trout in stagnant waters of lakes and reservoir during winter season when water temperature remains below 22 °C.

Nepal's abundant water resources can be utilized for cage fish farming as it has potential to engage local and indigenous community, affected by the impoundment, hydroelectricity and irrigation dams for their sustainable livelihoods. Incoming Budi Gandaki water reserve of 1800 ha and 65 km long water storage of Pancheswar are the future assets for expansion of cage farming. The extensive (no feeding) approach of cage farming is no longer profitable and sustainable. Technological intervention should be made on selection of fish species, feeding strategy and operating mechanism for the sustainability and future of cage fish culture.