

## AQUACULTURE AND FISHERIES

In-land fisheries is growing rapidly and offer high-income opportunity on marginal lands and water resources. Inland aquaculture is currently characterized by low productivity in the country. The challenge can be met by introducing fishes with higher genetic growth potential, provision of necessary nutrition, effective disease control, and improving post-harvest operations.

- Big-head carp grown under mono-culture with and without supplementary feeding for one year achieved 902g & 1090g weight, respectively.
- Significantly higher growth in major and Chinese carp was achieved with floating feed compared with sinking feed.
- Channel catfish, from imported fisheries was successfully cultured in ponds under mono and poly-culture systems.
- Different sites at river Kabul (NWFP), Korang River, Nalla Lai and Soan River (Islamabad, Rawalpindi) were found polluted with heavy metals like Cadmium, Arsenic, Copper, Lead, Nickle and Zinc.

The levels of heavy metals in the waters of Rivers/Nalla

	<b>Nalla Lai</b>	<b>Korang River</b>	<b>Soan River</b>	<b>Kabul River</b>
Arsenic	0.011-0.851 mg/l	0.321-1.71 mg/l	0.102-0.258 mg/l	0.001-0.470 mg/l
Copper	0.065-1.54 mg/l	0.124-1.95 mg/l	0.002-1.45 mg/l	0.170-2.17 mg/l
Cadmium	0.001-1.715 mg/l	0.021-0.110 mg/l	0.001-0.325 mg/l	0.001-0.410 mg/l
Lead	0.015-2.451 mg/l	0.210-1.710 mg/l	0.658-1.326 mg/l	0.150-3.170 mg/l
Nickel	0.001-0.965 mg/l	0.120-0.541 mg/l	0.254-0.447 mg/l	0.001-0.310 mg/l
Zinc	0.891-2.631 mg/l	0.011-3.412 mg/l	0.004-2.52 mg/l	0.007-2.54 mg/l



Big-head carp being studied for its behavior in poly-culture system



American Channel Catfish successfully reared in Pakistan