

## **Impact of irrigation development on food security: the case of inland fisheries in Sri Lanka**

Large-scale development of freshwater fisheries in Sri Lanka coincides with the post-indent wave of irrigation development. Reservoirs are direct outcome of irrigation developments and fisheries programs mutually coexist in the environment. This study attempts to analyze the contribution of irrigation developments to inland fisheries by considering trends and pattern of spatial differences of freshwater fish consumption in Sri Lanka and relating them to trends of irrigation developments.

Dada from Consumer Finances and Socioeconomic Survey of the Central Bank of Sri Lanka for 1981/82, 1986/1987 and 1996/1997 were used to construct indicators for different sample zones. Inter-zonal and inter-period comparisons were conducted to identify changing patterns of fish/meat consumption. Estimated population and district irrigation development indicators such as reservoir area, irrigated area and cropping intensity as a proxy to water availability were used to describe the trends in irrigation developments.

Fish consumption in rural areas is higher in 1996/97 than in 1986/87. Freshwater fish contributes to 41% of all fish and 15% of animal based foods consumed by consumers in irrigation districts. They also incur substantially lesser expenses for fish than consumers in other zones indicating freshwater as an affordable and easily available protein source. This abundance and affordability of freshwater fish in irrigations areas coincides with irrigation development activities. There is a positive correlation between per capita fish availability and GDP. This indicates the further potential of increasing fish consumption in the as personal incomes rise. It can be concluded that irrigation developments in Sri Lanka have contributed to national food security by providing the essential infrastructure for freshwater fisheries.