

Fisheries Enhancement Decision Support Tool and Toolkit



Fisheries enhancement through the release of hatchery fish is widely used in inland and increasingly, coastal fisheries. FMSP research has demonstrated the potential for enhancement to generate significant benefits for the poor, but the approach is often used ineffectively. The reasons for this include institutional issues associated with regulating harvest and sustaining investment in stocking, as well as the technical problem of optimizing stocking and harvesting regimes for local natural, institutional socio-economic conditions.

Recent FMSP research (R8469) has developed the *EnhanceFish* toolkit, which includes the first quantitative assessment tool for aquaculture-based fisheries, as well as the most integrated interdisciplinary framework for analysis and development. As such the research has made a major contribution to the tools and approaches available to fisheries scientists and managers in the developing world.

In Laos, community-based enhancements spread rapidly (from 4 lakes in 1996 to over 40 in 2000) once effective management practices were developed and benefits established; thus illustrating that very rapid adoption is possible where conditions are conducive.

Enhancements typically account for about 20% of fisheries production and a greater share in value in regions where the approach is well developed. Even a modest and realistic increase in inland and coastal fisheries production by 10% would yield an additional 2 million t and support around 180,000 fishers in the SE Asian region. Whilst the toolkit as such is not sufficient to bring about such an expansion, it provides key stakeholders with the means to identify and manage promising initiatives

- In 2005/06 research products have directly increased the capacity of 20 management and applied research staff in Asian government institutions to develop and improve fisheries enhancements. Public release of the toolkit is imminent which should continue impacts more widely (R8469).
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