Scaling Out Enhanced Floodplain Productivity by Poor Communities – Aquaculture and Fisheries in Bangladesh

WILLIAM COLLIS, PARVIN SULTANA, BENOY BARMAN AND PAUL THOMPSON
WorldFish Center, Bangladesh
w.collis@cgexchange.org

Session: Basin [Ganges] and Resilience

![Graph showing expansion of aquaculture enclosures (1970-2008) in three study sites]
Key Message
Private lands in floodplains are vital components of inland natural fisheries but they are increasingly converted to culture-based systems. This raises fish productivity but can adversely affect the poor and biodiversity. Poor rural households can work together using innovative technologies to optimize overall seasonal floodplain productivity incorporating culture-based systems and/or by conserving natural fish, but this needs equitable institutions (floodplain committees) set up by the community to balance the interests of landless and landowners.

Summary
The project “Community-based Fish Culture in Seasonal Floodplains” tested this in three sites in Bangladesh. Fish production and average fisher incomes increased and benefits also accrued to landowners. But this depended on forming community organizations involving fishers and landowners. However, further investigation was needed to identify the factors that underpin and could sustain collective action, and also the likely ecosystem consequences of further adoption. Separate studies revealed rapid enclosure of seasonal floodplains for aquaculture (77% of land converted in one area). This spontaneous adoption adversely impacts landless and marginal farmers and wild fish catches. Meanwhile other community organizations have restored wild fish and enhanced returns to scarce dry season water. Whereas earlier we thought successful community-led aquaculture in flood-prone areas just needed to be scaled out, with rapid spontaneous adoption the questions are now: with what consequences, and what policies would foster equitable access and preserve ecosystems services?