

2.6 cm(1 inch)

FISH ASSESMENT IN THE REHABILITATED POLDERS OF PREY NUP (CAMBODIA)P.LIM^{1*}, M.C.VILLANUEVA¹, B.CHHOUK², K.K.CHAY², J.M.BRUN³ and JACQUES MOREAU¹

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Physical restoration of dykes and water gates along the shorelines of the Pre Nup area was done in 1998 to preserve rice filed areas from being washed-off during high tides. The four first polders constructed resulted in the recuperation of about 5,500 ha for rice field cultivation.

Before the rehabilitation, the area was also a common dwelling place for fresh water, brackish water and marine fish species (43 species). Information regarding effects of seasonal variations on species richness and stock assessment were obtained from capture surveys of native fishermen using 11 different kinds of fishing gears from 1998 to 2001.

The influence of rehabilitating the area on the fish community species richness, stock recruitment and dynamics were investigated. Surveys showed that the marine fish species (11) were completely wiped-out from this area leaving only about 31 brackish and fresh water species. These remaining species, coming from the upstream catchments areas, colonized these rice fields especially during the rainy season (June to October) when annual water level elevates to an average of 2m. Annual catch is estimated to 3,467 tons for the whole area where 92% is captured using 6 main gears (gill nets, individual and line hooks, cast nets, traps and scoop nets) . Catch during the rainy season is estimated at about 79% of total annual catch. The four main commercial fish species captured are *channa striata*, *Claris spp*, *anabas testudines* and *Notopterus*.

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