Improvement of Irrigation Efficiency in Paddy Fields of the Lower Mekong (IIEPF) Project

Fig 1 Location

The IIEPF project contributes to efficient use of irrigation water by providing institutional, managerial and technical guidance. The project conducted intensive field observation at four selected pilot irrigation schemes (Fig 1) and has identified unique water management practices under tidal irrigation in Viet Nam's Mekong Delta.

The Go Cong irrigation project is located about 100 km south west of Ho Chi Minh city along a branch of the Mekong River. Within this 54,000 ha irrigation project, Long Hai area was selected as a pilot site (Fig 2). Long Hai is bordered by a riverbank and ring dyke and connected with the main canal and the river by two sluice gates. Fig 3 shows a schematic plan of this scheme together with elements of water balance analysis.

Fig 2 Aerial photo of Long Hai pilot site

Fig 3 Schematic plan

Fig 4 Water balance analysis

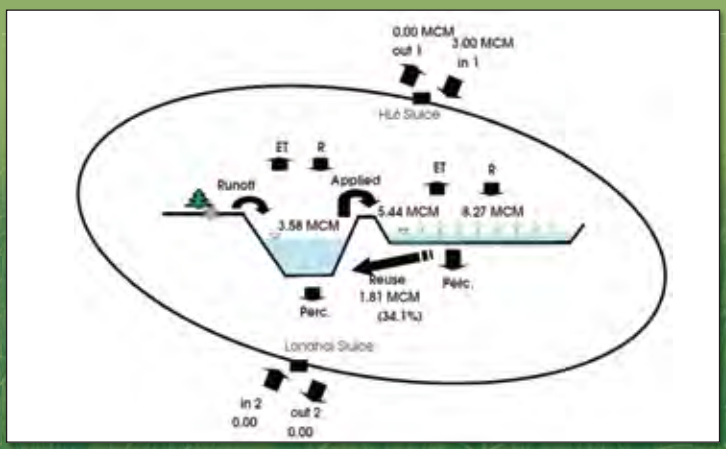

Fig 4 and Table 1 show a brief summary of water balance analysis. Water diverted from the main canal into this closed command area is stored in the inside canals and applied to paddy fields. Part of the applied water returns to the canals and is reused: recycled water accounted for 34% of the water fed to the winter-spring crop in 2006-2007. This practice saves on the amount of water diverted from the main canal. Compared with water diverted to the command area, irrigation efficiency here is estimated at 105%.

Table 1

Water Balance Component	MCM
Crop Water Requirement (CWR)	3.47
Effective Rainfall (ER)	0.29
Irriagtion Water Requirement (IWR)	8.27
Actual Water Applied (AWA)	5.44
Available Water in Canal (AWC)	3.58
Reuse Water (return to canal)	1.81

Gate

Canal

Individual pump

Flow measurement