
The drainage improvement and rural development in the delta with emphasis on the case studies in Rangsit Tai and Bang Ban areas

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Abstract: *Most of the countries in South and Southeast Asia have generally a typical bi-seasonal monsoon climate such as Thailand where a year is divided into two seasons of dry winter season and wet summer season. Low lying lands and delta areas of major rivers become heavily waterlogging and inundation during the monsoon rainy season in every year. In the past, this waterlogging condition on the land during monsoon season was generally not a major constraint as rice is cultivated mostly in wet season using flood by rain-fed irrigation. In dry season, if water is available, farmer wants to plant rice as second crop by river-fed irrigation. Increasing yield, introduction of more sensitive varieties, improvement of workable condition of farm machinery and demands for more crop diversification have changed this situation and made better waterlogging control.*

The need for improvement of drainage condition is most urgent in these areas in the recent days. Agricultural development in these areas has reached the stage at which the present inadequate drainage conditions have become the main constraint.

The Asian monsoon, which is characterized as high temperature and rainfall, provides them favorite condition to grow rice. South, South East and East Asian Region extending from west coast India to Japan covers about 15 % of the world land surface and the population of this region is more than 50 % of the world. The population density is roughly six times that of rest of the world. The population of South and South East is predominately rice farming agriculture. Rice is still staple food crop of 80 % of population in this region.

Water is however the most serious constraint for rural development and agricultural food production today here. Little and too much water for the people living there, to fight against and to abandon water and lands, and flood and drought are continuously repeated every year. Adequate water management by farmers themselves seems to be beyond their capacity.

River taming followed by drainage construction in some areas has been carried out and agricultural drainage projects will be needed in these areas in near future. Drainage project of paddy based farming system in humid tropics is a new challenge of the world, which needs technological and financial assistance from the developed countries.

Full paper not provided

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