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Farmers’ and academia’s views”

Assessment the impact of dikes on economic efficiency of models for rice farming in Dongthap, Vietnam

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Abstract

The study was carried out in four districts Hongngu, Tamnong and Thanhbinh, which locate in the north area of Tiengiang river of Dongthap. This is a provinces in South-Vietnam, with strong flooding by the Mekong River. Because the large influence on the farms and food production the, the policy tried already long time to find solutions to solve this problem. One solution is to set up a branched canal system and a high-density dyke system, in this region important for rice and many other crops. Two main types of dike has been researched, are: (1) the mezzanine dike, a short low dike system, can receive floods to build up alluvium for fields; and (2) the thorough embankment, a high dike system which can completely protect the cultivated crops and farmers from floods. In this region, diking is a good possibility to exploit fully the arable land, for example rice could be grown 3–4 crops/year, vegetables could be grown 6–7 crops/year. However, in a long term it cause the land to be exhausted. However, in a long term it can cause the land to be exhausted. The area inside the embankment is often over-exploited, the concentration of chemical fertilisers in the soil is high and the soil fertility is reducing because floods were reduced for many years and the field cannot receive fertile alluvium soil. This is the main reason for the significant reduction in crop yield and impact to the economic efficiency. The aim of study was to determine the positive and negative aspects of dike system in order to propose a reasonable and profitable agricultural production complex model, which consider the valuable crops, the season and the consumer market. It has to consider, the influence on productivity and cultivated effect depend on the operation of the dike, floods and the environmental quality inner area of dikes. The economic efficiency of production models was evaluated by several parameters, include: Production value GO (Gross Output); Basic investment; Intermediate expenditure (IE); Value Added (VA); Mixed Income (MI) and Profit (Pr). The estimation based on the questionnaires and model monitoring datum.

Keywords: Dike systems, farming system, flooding, mekong delta, multi factorial models