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“Development on the margin”

Historical Development of Farming Systems Facing Increasing Saline Intrusion in Ben Tre Province, Mekong Delta

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Abstract

Agricultural systems depend on different influencing environmental factors and are therefore in a regular need to adapt to changes in these factors. The need to enhance adaptation capacities is particularly important in rural areas facing intense climatic variations.

The delta of the Mekong River in the southern part of Vietnam is strongly characterised by agricultural production: 52 % of the total Vietnamese rice production (19.3 million tons) are produced in this area which is known as one of the most productive and intensively worked agricultural areas in Asia. Being at low elevation, the delta is also highly affected by salinity intrusion influenced by tides, particularly in the dry season when the flow from the Mekong River is at its lowest. While the freshwater supply in the rain season is abundant enough for rice cultivation, salt water intrusion from the sea increases salinity levels in dry seasons and affects the salt sensitive rice crop.

The variation in the salinity levels with increasing distance to the sea makes different adaptation strategies in the farming systems in the coastal and inland areas of the Mekong delta necessary to guarantee a stable and efficient agricultural production. Adaptation strategies include both technical infrastructure like dykes and gates to control saline intrusion, the cultivation of salt resistant rice cultivars or the shift to alternative farming systems such as integrated rice-shrimp farming. The aim of this research is to determine the development of changes and their mechanisms in the farming activities in Thanh Phu district during the past 30 years. The approach consisted in conducting 85 household surveys and two farmers' focus group discussions. Thanh Phu district is divided into three subregions according to the main farming systems: rice farming in the inland, rice-shrimp cultivation near the coast and shrimp in the coastal area. Farmers of all three subregions were interviewed to determine the influence of salinity on historical changes in the farming systems and their adaptation strategies. The importance of information campaigns and trainings provided by governmental institutions as well as by farmer associations and the results of the interviews will be presented.

Keywords: Adaptation strategies, focus group discussion, household interview, rural development