Deutscher Tropentag, October 9-11, 2002, Witzenhausen



"Challenges to Organic Farming and Sustainable Land Use in the Tropics and Subtropics"

The Dynamics of Water User Associations in a Large-Scale Irrigation System in Thailand

SABINE HÖYNCK¹, ARMIN RIESER²

¹University of Applied Sciences Cologne, Institute for Technology in the Tropics, Germany ²University of Bonn, Institute for Irrigation, Drainage, and Land Improvement, Germany

Abstract

The management of a large-scale irrigation system requires the co-ordination of activities among various groups and individuals. The establishment of such a system does not only consist of constructing infrastructure and planning optimal water allocation, there are also a range of fundamental socio-economic changes involved which had often not been sufficiently considered during the planning stage. The explanation for this lies partly in the unpredictability of socio-economic development and also in the extended time frame of social organisation which lag behind technological change.

The problem of not knowing how social systems will react to changes and how they will perform in a new setting cannot be eliminated totally due to the uniqueness and complexity of socio-technical systems. However, experiences with irrigation projects are growing and they might be helpful for better planning future changes in irrigation systems.

This paper deals with the evolution of Water User Associations (WUA) in a large-scale gravity irrigation system in Thailand. The WUA have been implemented starting in the late 1980s by the national irrigation agency, to organise farmer governed O&M on tertiary level. Main system O&M has remained under the regime of the national agency.

After having existed for more then a decade, conclusions on the sustainability of farmer associations can be drawn. It could be observed that the adaptation of legally prescribed organisational structures has been only valid for a minority of associations and some general weaknesses of these structures can be observed. On the other hand, a multitude of informal organisations has evolved which show ways for improving participation of water users.

A major assumption underlying this paper is that farmers' motivation for participation is a pre-condition for the sustainability of WUA. The actual participation situation, the motivation factors for participation, and the environmental and dynamic influences on farmers' motivation for participation are analysed.

Keywords: Farmers associations, irrigation organization, Thailand

Contact Address: Sabine Höynck, University of Applied Sciences Cologne, Institute for Technology in the Tropics, Betzdorfer Straße 2, 50679 Köln, Germany, e-mail: sabine.hoeynck@dvz.fh-koeln.de