



Deutscher Tropentag, October 11-13, 2005, Hohenheim

“The Global Food & Product Chain—
Dynamics, Innovations, Conflicts, Strategies”

Socio-Economic Study on Wastewater Management and Ecosanitation in Integrated Farming Systems of the Mekong Delta, Viet Nam

FLORIAN WIENEKE, THOMAS KUTSCH

University of Bonn, Institute for Agricultural Policy, Market Research and Economic Sociology, Germany

Abstract

In the developing world the growing population faces a broad range of problems in providing water supply, food security as well as waste management. Viet Nam's recent development in agricultural and industrial production leads to increasing pollution of surface, ground and coastal waters. Generally, animal manure is discharged uncontrolled into fields and rivers. The reuse of waste/wastewater for agriculture may be a low cost solution in water treatment and at the same time a significant contribution to food production. This study was born during the course of the SANSED-Project, an interdisciplinary cooperation between the Universities of Can Tho, Bonn and Bochum. The SANSED's objective was to identify criteria for a sustainable wastewater treatment system in the Mekong Delta that allows using animal and human faeces for agriculture production in a hygienic, economic and ecological appropriate way. Within this scope a socio-economic study analysed and evaluated the acceptance of new technologies applied in the field of biogas technology and ecological sanitation on the operating farm household level (OFH). By means of a detailed questionnaire, the survey aimed to achieve information about the OFHs' environment and interactions in three selected communities. The key objective was to analyse the OFHs' attitudes and acceptance behaviour of biogas plants (BGP), modern latrines (ML) and biogas sludge (BGS) as principal components of an ecological wastewater management system. Referring to the latter, particularly the use of human faeces in the biogas technology was a major point of interest. Within the stratified, disproportional sample 218 OFHs as well as representatives of the local government, universities and other institutions were interviewed.

The study's results present detailed information about the OFHs socio-economic environment, information flows, attitudes towards and acceptance determinants for investment and use regarding each innovation. Therefore, recommendations on implementation strategies are formulated to improve the innovations' acceptance and dissemination rates in a consecutive project.

Keywords: Biogas, extension service, microfinance, sanitation, Viet Nam, water management