



Deutscher Tropentag, October 8-10, 2003, Göttingen

“Technological and Institutional Innovations
for Sustainable Rural Development”

Towards Agricultural Diversification and Rural Poverty Alleviation — Development of Integrated Agri-Aquaculture Farming in the Mekong Delta, Vietnam

NHAN DANG KIEU¹, THANH DUONG NGOC¹, MARC VERDEGEM², LE THANH DUONG¹

¹*Can Tho University, Mekong Delta Farming Systems Research and Development Institute, Vietnam*

²*Wageningen University, Department of Animal Science, The Netherlands*

Abstract

There is considerable potential to integrate aquaculture with existing agriculture practices in the Mekong Delta. Development of integrated agriculture-aquaculture (IAA) farming systems will diversify agriculture and alleviate rural poverty that are considered as one of crucial strategic directions for rural development in the region. This review will describe agricultural status in general and factors from which agricultural diversification and rural poverty alleviation is required in the context of the Delta. Agricultural diversification would crucially contribute to sustainable livelihoods of poor farm households and rural poverty reduction through diversified agricultural activities and best use of local labour force, increased and diversified farm income, improved food production, and minimized environmental degradation.

The paper will describe existing small-scale IAA farming systems in the Mekong delta. Factors such as physical conditions, available nutrient sources, farm household's resources and livelihood strategies, influencing the integration and roles of aquaculture within the systems will be analyzed. Both scientific results and farmers' perception have shown economical, social and environmental benefits of IAA farming systems. Nutrient recycling of otherwise unused waste materials is an important benefit of this integrated farming. Integration of an aquaculture component into existing agriculture systems improves the overall nutrient retention of the system. In consequence, both the aquatic and terrestrial crops are benefited in the integrated farming system.

Although the IAA farming has been advocated, poor farmers still need to solve numerous constraints. Researchers and extensionists have to provide farmers context-specific holistic information packages of different production options rather than technology only. Moreover, the classical top-down transfer of technology should be replaced by farming system research and extension approach.

Keywords: Agricultural diversification, integrated agriculture-aquaculture farming, Vietnam