Impact of and Recovery from Tsunami 2004- Focus on Agricultural Productivity and Income, Tamilnadu, India

K.Palanisami[1], M.Shanthasheela[2] and Chieko Umetsu[3]

1. Director, IWMI-TATA Policy Research Program, International Water Management Institute (IWMI), South Asia Regional office, Hyderabad, India
2. Assistant Professor, Tamil Nadu Agricultural University(TNAU) , India
3. Agricultural Economist, Research Institute for Humanity and Nature (RIHN), Japan

Abstract

This papers analysed the impact of tsunami on agricultural productivity and income due to 2004 tsunami. A 240 sample household survey in Nagapattinam district of Tamil Nadu State, India was under taken to study its impact of tsunami on agricultural productivity and income of the households using data from 2005-2008. Comparing the pre-tsunami situation, the tsunami related problems on family, soil, water and crop were analysed. The results indicated that both soil and water were affected immediately after tsunami resulting in changes in crop pattern, crop yield and income. Even though, number of farmers cultivating paddy crop has declined after tsunami, the technical efficiency of the paddy farms remained more or less same (around 80%) during the last 3 years of tsunami. The average paddy yield was 1.7 t/ha one year after tsunami and increased to 2.7 t/ha within 3 years. The net income has also increased from crop loss immediately after tsunami to Rs 21900 after 3 years. The Gini-coefficient of income equality was around 0.25 indicating that the income inequity has minimized over years indicating a tsunami impact recovery period of about 3 years. The recommendations include transfer of improved crop production technologies, validating the traditional knowledge in crop production and enhancing the allied income generation activities such as livestock, fishing etc., to stabilize the household income. Weather based crop insurance program and convergence of various government programs are also important.