

**Decadal Impact of 2004 Tsunami on Agricultural Productivity and Income,  
Tamil Nadu, India**

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Tsunami attacked the Indian coast on 26<sup>th</sup> December 2004 and the worst affected areas along the Indian coast were in Tamil Nadu, Kerala, and Andhra Pradesh states. Tamil Nadu state suffered maximum loss with the damage concentrated in four districts. A study was conducted in Nagapattinam district of Tamil Nadu State, India for the years 2006, 2007, 2008, 2010 and 2014 and interviewed for consecutive cropping seasons after tsunami disaster, i.e., 2004/2005, 2005/2006, 2006/2007, 2007/2008, 2008/09, 2009/10 and 2013/2014 with the sample of 240 households. During the study period, same farmers were contacted to assess the impact of tsunami on agricultural production. In the study area, the dominant production system is rainfed agriculture and farmers produce paddy, pulses, gingerly, groundnuts, cashew nuts, coconuts, mango and others. Year 2004 represents the year of tsunami and the crop pattern during the period will represent before tsunami situation and the subsequent years will represent the after tsunami situation. Results have indicated that about 65 per cent of the households cultivated paddy during 2005 and it was reduced to 44 per cent on next year immediately after Tsunami. After that the percentage was slowly increased and reached 58 per cent during 2014. The overall mean technical efficiency is around 84 percent indicating the scope for increasing the technical efficiency further by 16 percent. The results of the soil and water analysis further indicated that the agricultural environment of the district recovered rapidly after the tsunami. Paddy is the major crop in the region and the cost of cultivation during the year 2005 is Rs.9400/ha to Rs.24,400/ ha during 2014 and the profit was ranging from Rs. 3134/ha in 2006 to Rs 10504/ha in 2014 compared to adjacent non-tsunami regions which was ranging from Rs. 5600 to Rs 13500 /ha confirming the coastal risks in paddy production. Crop management practices and incorporation of crop insurance in agriculture programs are suggested to increase the farm income and minimize the risk in agriculture.