



Tropentag, October 7-9, 2008, Hohenheim

“Competition for Resources in a Changing World:  
New Drive for Rural Development”

## Socio-Economic Changes in Tsunami Affected Villages in the District of Aceh Besar, Indonesia

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### Abstract

An earthquake followed by Tsunami has devastated the coastal regions of Aceh, Indonesia, on the 26<sup>th</sup> of December 2004. The total damage in productive sector was estimated at USD 1.2 billion and 80 % occurred in the agricultural sector, whereas 62 % of Acehnese community worked in agricultural sector. This research aims to assess **(1)** the rehabilitation of infrastructure, **(2)** the rehabilitation of damaged land, and **(3)** the change in employment structure. It helps to identify success and weaknesses of the rehabilitation measures.

A village survey was conducted in 32 randomly selected villages in the district of Aceh Besar between September and December 2007. The village headmen were asked to answer questions concerning village structure, farmland management, infrastructure availability and employment before and after the Tsunami.

In the research area, the rehabilitation focused more on non-agricultural infrastructure. 59 % of the housing area and 62 % of the roads have already been reconstructed, whereas only 12 % of the paddy fields and 17 % of the upland fields have been rehabilitated. Moreover, the number of villages with a functioning irrigation system decreased from 38 % to 9 % after the Tsunami. Employment in the agricultural sector decreased from 69 % before the Tsunami to 55 % after the Tsunami. Within agricultural sector, employment in crop and fishpond farmer decreased significantly after the Tsunami while outside agriculture, employment in services and construction increased significantly. Due to the concentration of employment in agricultural sector, rehabilitation processes should focus on this sector to give a chance for agriculture community to increase their income opportunities.

**Keywords:** Agriculture, rehabilitation, tsunami