

Different ways in decreasing vulnerability to increased climate variability and extremes

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Abstract

The article builds on quantitative and qualitative data collected as part of the joint research project on 'Impacts of Climate Changes in Mid-Central Vietnam'¹, where this article analyses the approaches to decreasing vulnerability to impacts of increased climate variability and extremes (CC) through investments in infrastructure to protect the environment vis-à-vis the approaches of decreasing vulnerability through development projects and strengthening of social capital and institutions. The two approaches are analysed within the framework of sustainable adaptation which emphasizes targeting the risks and vulnerability stemming from the root causes of impacts of CC and the capacity to cope with the inevitable impacts of CC. The article describes how the rapid economic growth and socio-economic differentiation in Vietnam during the past 25 years have diversified the social resilience and ability to adapt to the impacts of CC among the socio-economic groups in the three different agro-ecological zones in Quang Nam Province. While the rich households have decreased their vulnerability to impacts of CC in terms of life and health through higher social resilience and better concrete, multi-storey houses, they have at the same time increased their vulnerability in terms of income generation. The reason for this is major investments in high income earning activities like acacia plantations in the highlands and midlands and shrimp- and fish ponds in the coastal zone. These activities are highly sensitive to typhoons, salt water intrusion and flooding and the rich households that can afford the investments are prone to economic losses. The poorer households are due to poor housing and low social resilience more vulnerable to CC in terms of life and health, while they see climate drivers of less importance for income generation than poverty and lack of development, including access to land and employment. The article proposes a sustainable adaptation approach to CC in terms of targeting ecological vulnerability through 'no regret' investments in infrastructure to protect the environments but target especially the causes for vulnerability in terms of analysing how human activities in deforestation and water reservoir construction and management may exacerbate impacts of CC.

¹ For project description see: www.ecoenvi.com