

PATHWAYS OF ENVIRONMENTAL CHANGE IN A COASTAL RESOURCES SYSTEM

Case Study In Kampong Trach District, Kampot Province

Context and objectives

Climate Change (CC) in conjunction with other drivers of social-ecological change is now impacting and altering patterns and process of livelihood determination for the coastal communities of Cambodia. Cambodia's government has identified national marine and coastal zones, among others, to be particularly at risk (NAPA, 2006), even though the impacts or outcomes of these changes to the coastal resource systems and employment patterns are uncertain.

These changes are causing concern among community members and managers about the implications of these changes for developing long-term sustainable livelihoods and pathways to resilience coastal communities. The role and place of local governance institutions involved in these natural resources management (community fisheries, commune council, etc.) is particularly unclear.

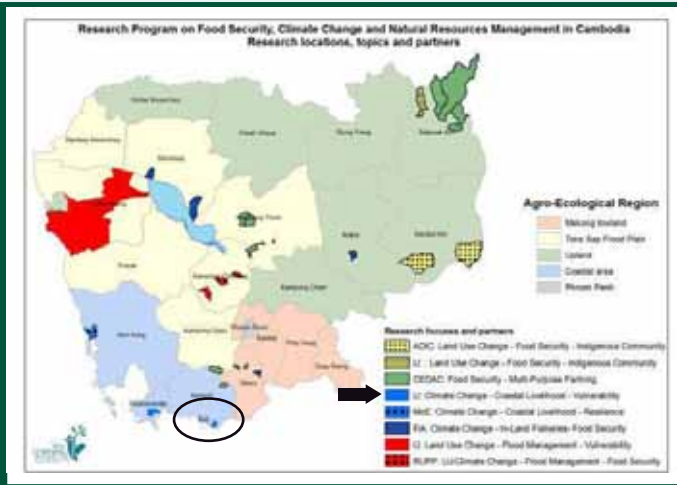
Scientific research has often addressed environmental change from a global, regional and national perspective, but it has yet to capture the local perspective, i.e. where the effects of climate change are first felt (CCCD 2009). These changes in coastal resource quantity and quality have differential impacts on livelihoods decision making according to the actual vulnerability and production rationality of households. Yet, the [diversity of] adaptation practices at local level usually go unnoticed by national governments and should be part of knowledge base to elaborate and plan effective adaptation to environmental change.

The objective of this research is two-fold. We first aim to analyze pathways of change in the coastal resources systems, looking at marine, intertidal and crop farm areas. We then examine the impacts of these changes on livelihoods activities. Our central hypothesis is that the changes in the resource system have induced differential transformations in the production processes at household level. This implies a change in the distribution of means of production (labor, land, farming and fishing equipment, livestock, etc.) as well as in the production activities per se (fishing, on-farm, off-farm, and a large diversity of non-farm jobs).

Methodology

The study site is in Kampong Trach district, Kampot province and in particular, Khaoh Krusna and Lok villages, both located in a coastal environment. One of both villages is closer to urban center of the district.

Environmental change will be discussed and documented in the field through focus group discussion, time series mapping, and by a comprehensive review and analysis of secondary data. Specific discussions will be conducted for each zone (marine, intertidal and farmland) aiming to assess the trends in the resources availability, the drivers of this evolution. The analysis will use a multi-scale framework to differentiate between long versus short term as well as local versus global drivers. In-depth discussion with fishing peasant communities, local government and entrepreneur active in the area will allow a multi-stakeholder institutional analysis of these drivers.



The household pathways of change will be identified against this environmental change analysis. Quantitative and qualitative household survey will be conducted in both villages to document the evolution and status of the production factors endowment. A more specific review of production processes will be undertaken to assess their evolution and status. Of particular importance will be to analysis of processes involving the displacement from land and other productive natural resources and the development of a wage labor (involving or not migration). Household typology showing the diversity of production systems will be established and use as tool to comprehend the different pathways of change at household level.

Contribution to the program

This research acknowledges that livelihood and food security circumstances of different groups of people in local communities are not homogenous. The original

contribution of this research will be to document how environmental changes reinforce or create new process of socio-economic differentiation between households. This research suggests that adaptation practices at local level will depend on how the household are positioned in this differentiation processes.

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