Adaptation to Climate Change in El Salvador
Vulnerability and Capacity Analysis of Communities Amando López and Octavio Ortiz in the Lower Lempa Valley

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Abstract

In the past few years great disasters following climatic extreme events have increased in El Salvador. These events have been triggered by national and local economic growth, affecting the institutional capacity of state authorities to implement national adaptation programs. The most vulnerable are rural areas of El Salvador. This paper investigates how adaptation to climate change in rural areas of El Salvador can be enhanced by resilience of vulnerable communities.

Introduction

Main research objectives:
- gathering information to integrate adaptation in resource management/livelihoods programs in the two communities;
- producing a final document to disseminate results, guiding similar research work in other rural communities in the Lower Lempa Valley and for political advocacy;
- elaborating an adaptation plan for the two communities (to be completed in 2012);
- giving voice to vulnerable communities.

Climate change in Central America: climate variability (increased frequency/intensity of extreme weather events), rising sea levels, rising temperatures.

Methodology

1 year research project (2010/2011)
Levels of analysis: household/community/municipal/national

Quantitative Research Elements

- 206 questionnaires
- Participation of 37 young volunteer researchers, many from the Lower Lempa Valley
- 7 workshops needed to prepare volunteers

Qualitative Research Elements

Climate Vulnerability and Capacity Analysis (CVC)

Ethnographic tools:
- Participant Observation
- 28 informal/semi-structured interviews
- Participatory Rural Appraisal (PRA)

- 7 focal group workshops (hazard mapping, seasonal calendar, historical timeline, vulnerability matrices, Venn diagrams)
- 3 Transect Walks

Main Findings

Unaddressed Anthropogenic Risk Factors

- Breakdown in the Lower Lempa Valley Flood Protection System initiated in 1999 and never completed
- Water discharges by Hydroelectric Power Station

Ineffective Poverty Alleviation

- Poverty/vulnerability nexus unaddressed
- Obsolete Poverty Indicators - Family Shopping Basket
- Poverty Reduction National Programs – Lower Lempa does not qualify

Lack of Institutional Capacities

- Adaptation not considered a national priority but an additional cost – No Climate Change/Adaptation National Programs. Key themes for adaptation (food insecurity, water), not prioritized
- DRR concentrated on emergency assistance – no post-disaster rehabilitation of local economies
- Limited investigation/information sharing

Decision Making Processes Dominated by Private Sector

- Most economic sectors controlled by family oligarchies
- Job creation primary directed to temporary employment and trade free zones (maquilas)

Conclusions

Lower Lempa Valley affected by multiple climate hazards, floods being main threat. Rural poor subsistence farmers/their territories most vulnerable.

Institutional resource use tolerated in the name of national development. It generates/accumulates risks, increasing local exposure and susceptibility. Any climatic phenomena easily transformed into major disaster.

National DRR efforts concentrate on attending emergencies once events transform into disasters. Unaddressed anthropogenic risk factors facilitating/causing overwhelming of the Lempa River. Reactivation of local economies not included in post-disaster rehabilitation.

While development efforts serve national elites/foreign interests, communities’ vulnerabilities continue to be based on unsatisfied basic needs. Poverty/vulnerability nexus ignored.

Food sovereignty at risk by lack of investment in rural producers for local markets. Violation of human, political and civil rights -rights to life, physical integrity, employment, property and food.

Lack of State capacities for adaptation. Main climate change concern: implementing mitigation projects to enter carbon markets.

Community-based adaptation, already effectively implemented by populations at risk and NGOs, is currently most efficient approach to long-term resilience and adaptive capacity in vulnerable communities in El Salvador.

Recommendations for Further Research

El Salvador lacks studies on: urban vulnerability, the effects of rising sea levels, vulnerabilities and capacities of risk at stake, and ongoing CBA experiences Highly recommended to:
- use a multidisciplinary research approach. Social impacts of climate change understudied
- apply a rights-based approach when revising plans/programs of economic development
- reconsider traditional migration push factors to include loss of livelihoods. It will help to identify new territories and sectors at risk

References

5. Ministry of Finance, Government of El Salvador
6. Personal interview (5/2011)