

Theme: Scaling up local and community based actions

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Background

While climate change adaptation has drawn significant attention, community based approaches are still lacking. Community based disaster risk management (CBDRM) process is considered as the key to link disaster risk reduction and climate change adaptation at local levels. Three major steps are adopted in this process:

Step I Assessment: developing a scenario

Step II Planning: developing an action plan

Step III Implementation: implementing actions as sub-projects.

A good example is found in the implementation of community based project to cope with the climate change impacts in the coastal areas in Hue, central Vietnam. The project was jointly implemented by the International Environment and Disaster Management (IEDM) laboratory of Kyoto University Graduate School of Global Environmental studies and CECI, a Canadian NGO having its base in Vietnam.

During the assessment step, the key focus was the hazard, vulnerability, and capacity assessments. These are done through historic profiling, mapping, timeline, ranking, focus group discussion, interviews, and questionnaire survey. The purpose is to identify issues and priorities through participatory discussion. Key focus of the hazard assessment is historic profile of disasters (past disaster events), trends of natural disasters for future (based on climate change predictions), and community's perception of disaster events. Vulnerability assessments included geographical location, transport, communication, shelter, water, sanitation, health, and livelihood issues. Capacity assessments identified existing disaster management plans, coping strategies of the communities, role of people in mitigating disaster impacts, and proposed adaptation measures. The institutional mapping was also done to identify the roles of different institutions for disaster reduction. Combining all these, a climate change scenario was prepared.

In the planning step, the main focus was participatory planning. Before planning, structured training programmes were conducted on climate change issues, CBDRM (community-based disaster risk management), building code improvements to cope with flood and cyclone, agriculture improvement, and aquaculture improvement. The target groups of these training programmes were leaders of the mass organizations, commune and district government officers, and selected community members. These training activities were considered as one the major vehicle to disseminate important climate change information to wide range of stakeholders. After the training, the planning process started with the leadership of these change agents. Two types of plans were formulated. One was safer village plan, which outlined specific measures to ensure the safety of the people and infrastructure of the community. The other plan was safer production plan, which was aimed to secure livelihoods, targeting agriculture, aquaculture, and animal husbandry. These plans were developed in close co-operation with the commune and district governments, so that these plans were officially approved by the governments to be part of the development plans. Also, prioritization of actions was made in close cooperation with local governments, and selected items were recommended for implementation as sub-projects with co-financing from the project fund and the fund from the local governments.

In the implementation step, selected sub-projects were implemented. Some of the examples included livelihood adaptation, environmental protection, disaster plan, infrastructures (Boat station, Irrigation canal, Sluice gate, Bio-gas) etc.

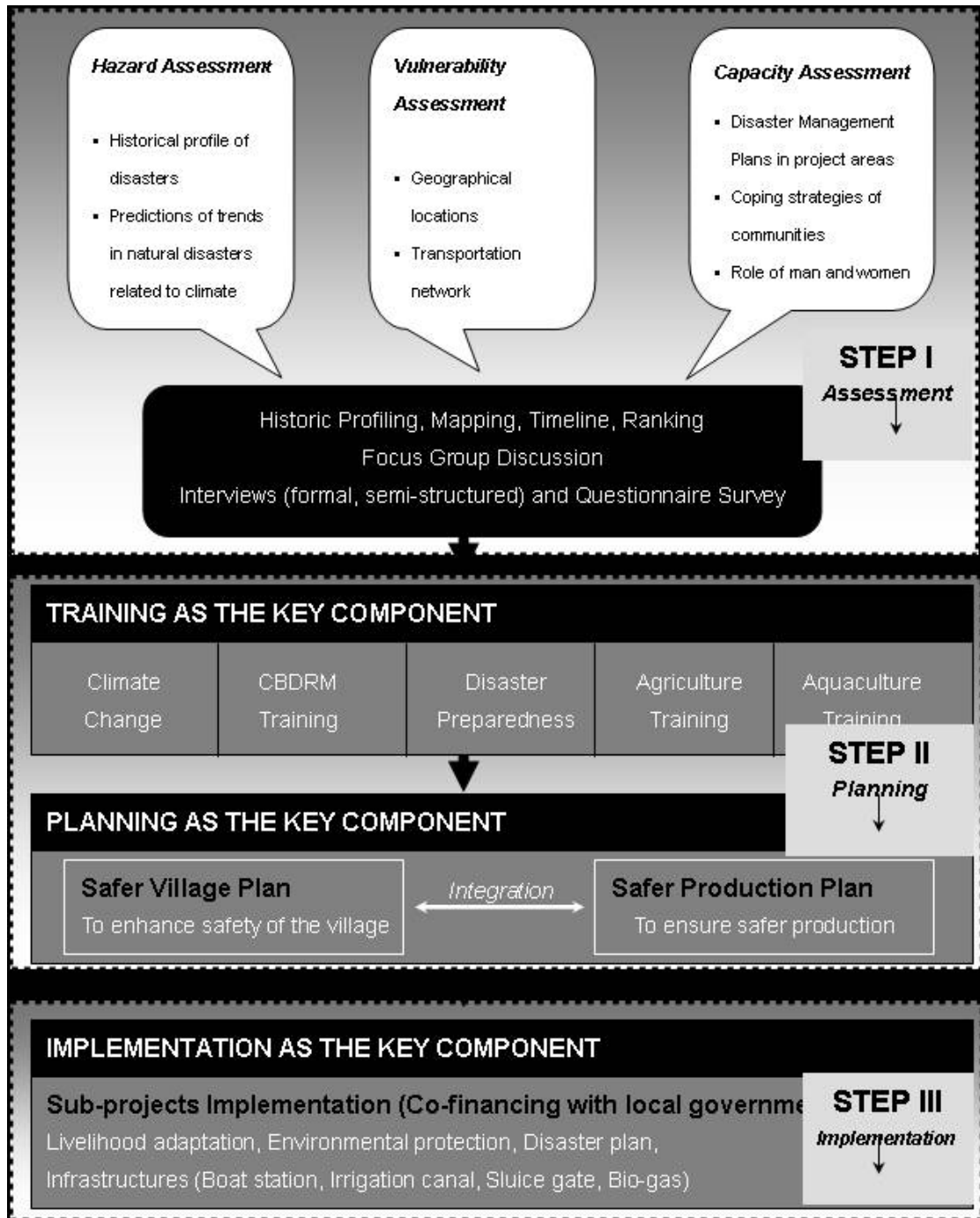


Figure: Step incorporated in local adaptation practices



Figure: Community based interventions: a) school building as the new flood shelter, b) raised latrine as sanitation measure, c) change agent providing training on climate change issues, and d) mass organization leaders discussing common issues.

Outcome and Good Practice

As evident from the above project description, as well as climate and disaster issues of Vietnam, climate change adaptation is required at local level to reach the wider part of the communities. The worst sufferers of the climate change impacts are the communities and people in the rural areas. In most parts of Asia, rural livelihoods depend on agriculture. Vietnam is no exception. Thus, to reduce the climate change impact or to adapt with it, the first and foremost is livelihood security.

The major challenge of the community-based climate change adaptation is sustainability and up-scaling of activities. While it is necessary to sustain the efforts in long-term, it is also required to disseminate the pilot intervention experiences to wider places. It has been a common notion that grassroots initiatives or community initiatives are the responsibilities of the NGOs. NGOs have been the leading actors in this field for several years, and have

contributed to the development of this field. However, many of the NGO activities face the problem of sustainability over a longer period of time, especially once the NGOs withdraw from the field. Continuation of community activities over a longer period of time needs a policy environment at local level, as well as local institutions to continue the activities. Thus, even though the initiatives are started with the NGO interventions, it is important to link them with the local government activities, and incorporate them into policies. Thus, the major challenges of the community based adaptation are: (1) sustainability of the efforts in the community level, and (2) incorporation of the community-based issues in the policy level. To be effective and to create sustainable impact, the application of the community-based adaptation must go beyond the initiatives of the communities, NGOs, and a handful of local governments. As part of an advocacy for more responsive and effective governance, national and state-level governments should look at integrating community-based adaptation in their policy and implementing procedures.

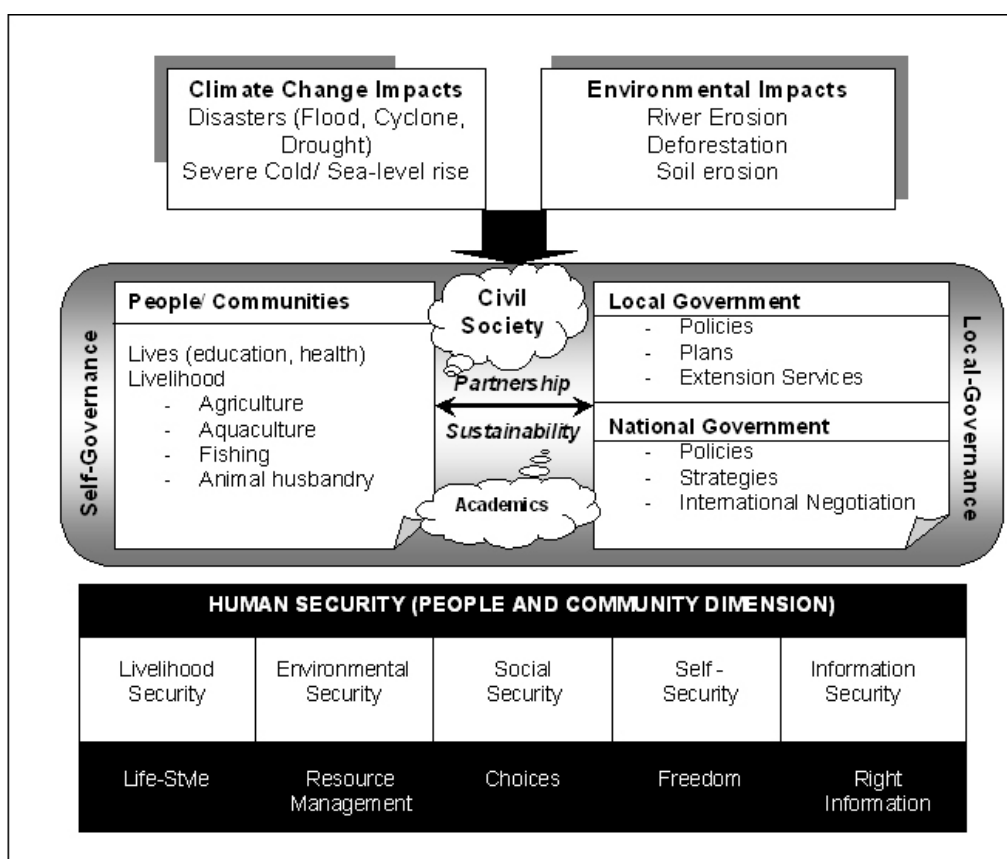


Figure: Local adaptation model and linkages to human security

The above figure shows the key lessons from the field practice, which is to enhance capacities of local people and communities. This can be considered as people and community dimension of human security, which should include livelihood security, environmental security, social security, self-security, and information security. Livelihood security is the first and the foremost priority, where improvement of life-style is desired through income generation in different options: agriculture, aquaculture, fishing, animal husbandry, etc. Environmental security is the second dimension, and is found to be important in many rural areas (including the project site of Central Vietnam), where natural resource management by the community is

the key issue. Social security is the third dimension, which ensures different social benefits to the people, and enhances people's choice for social services like health, education, etc. Self-security is the fourth dimension in which people and communities are engaged in self-help and co-operation, therefore increasing their degree of freedom. Social security and self-security are closely related to each other. The fifth dimension is the information security, in which right to information to people and community is of extreme importance to take the right decision and action.

Taking all these lessons in future, IEDM of Kyoto University is currently implementing similar projects and studies in Ninh Thuan province of south-central Vietnam, Albay province in the Philippines, Tamil Nadu province in India. Ninh Thuan province deals with the drought risk management in coastal communities with focus on livelihood recovery, Albay province emphasizes the land use pattern and changes in local livelihoods, and Tamil Nadu focuses on the mangrove ecosystem and its role as coastal buffer and involvement of local communities. The common elements of the project and research are: close link to the local communities and stakeholders, and linking the implementation activities to the local government capacity building programs.



Figure: **Left:** Ninh Thuan province, **Right (top):** Mangrove and livelihood in Tamil Nadu, and **Right (bottom):** mangrove plantation in Albay as a part of land use planning

Lessons Learned and Future Perspective

With the above lessons, IEDM is planning for future projects on climate change adaptation through GET (Governance – Education – Technology) matrix. Resilience of local communities can be achieved through implementing pro-active CCA measures at different levels of GET framework. The target is to enhance human and institutional capacities to integrate disaster risk considerations into climate resilient human settlements in terms of both institutional and technical aspects, including the criteria for design, approval and implementation, and considerations based on social, economic and environmental impact assessments. A few additional study cites will be selected

based on the coast, mountain, river and arid ecosystems. Both urban and rural local governments will be targeted. Expected outcomes will include:

- Training modules and knowledge products for different target groups (local government practitioners and young professionals targeting higher education)
- Specific governance related actions at local governments (like incorporation of the land use planning)
- Strengthened networks of local governments and professionals (at the city or local government levels, enhanced collaboration between local government and local academic institutions)