

## Terminal Evaluation Summary Sheet

<b>1 Outline of the Project</b>	
<b>Country:</b> 6 countries of Central America (Guatemala, Honduras, El Salvador, Nicaragua, Costa Rica, Panama)	<b>Project Title :</b> Project on Capacity Development for Disaster Risk Management in Central America “BOSAI”
	<b>Cooperation Scheme :</b> Technical Cooperation Project
	<b>Total Cost :</b> 496 Million JPY
<b>Thematic Area :</b> Disaster Management	<b>Counterpart Agency :</b> Executive Secretary of The Centre of Coordination for the Prevention of Natural Disasters in Central America (SE-CEPREDENAC), Guatemala’s National Coordinating Commission for Disaster Reduction(CONRED), Honduras’s Permanent Commission for Contingencies(COPECO), El Salvador’s Directorate General of Civil Protection, Nicaragua’s National System for Disaster Prevention, Mitigation and Attention(SINAPRED), Costa Rica’s National Commission for Risk Prevention and Emergency Attention.(CNE), Panama’s National System of Civil Protection(SINAPROC)
<b>Division in Charge :</b> Disaster Management Division II, Global Environment Dept.	
<b>Project Period :</b> May 2007～May 2012	
<b>Related Cooperation :</b> Training Course “Disaster Control in Central America”, Third Country Training “Civil Protection and Disaster Prevention” in Mexico, Japan Overseas Cooperation Volunteers(JOCV)	
<b>Supporting Organization in Japan :</b>	
<b>1.1 Background of the Project</b>	
<p>Central America is a disaster prone region, and the countries in the region have been making concerted efforts to reduce disaster risks through a regional cooperation mechanism of the Center of Coordination for the Prevention of Natural Disaster in Central America (CEPREDENAC). After the Hurricane “Mitch” caused disastrous damages in Central America in 1998, presidents of the six countries (Guatemala, El Salvador, Panama, Costa Rica, Nicaragua and Honduras) announced the “Guatemala Declaration” to renew a commitment for promoting disaster risk management. Based on the declaration, with the initiative of CEPREDENAC, “the Regional Plan for the Disaster Risk Reduction (2000-2004)” and then “the Regional Plan for the Disaster Risk Reduction (2006-2015)” were prepared. The regional plan emphasizes the capacity strengthening for disaster management at the community level, the human resource development in disaster management and the preparation of local development plan encompassing disaster management.</p> <p>In 2006, five Governments of Central American countries, namely, Guatemala, Honduras, El Salvador, Costa Rica and Panama, submitted official requests to the Government of Japan for technical cooperation with regard to local disaster risk management. With the preparatory study mission and the following signing of the R/D in April and May 2007 based on these requests, Japan International Cooperation Agency (JICA) launched the Project on Capacity Development for Disaster Risk Management in Central America “BOSAI” jointly with the Executive Secretariat of CEPREDENAC (SE-CEPREDENAC) and the disaster risk management authorities of the five countries. In 2007, the Government of Nicaragua submitted a request for cooperation in this field to the Government of Japan, and joined the Project in December 2008.</p>	

Counterpart agencies of the project are SE-CEPREDENAC and national institutions for disaster management in the six countries. Three Japanese experts are based in El Salvador to facilitate the implementation of the Project by regularly visiting these six countries. This five-year Project is scheduled to be terminated in May 2012. As such, in accordance with the Article V of the R/D signed in 2007, the terminal evaluation is conducted by the JICA evaluation mission from 17 January to 20 February 2012.

## 1.2 Project Overview

### 1) Overall Goal

Information, knowledge, and methodologies on local disaster risk management in Central America are commonly utilized in different areas in the region.

### 2) Project Purpose

Communities' and municipal authorities' capacity for disaster risk management is strengthened in the target areas, and the capacity of CEPREDENAC members for promoting local disaster risk management is strengthened.

### 3) Outputs

1. The mechanism for disaster risk management is strengthened in target communities in collaboration with inhabitants, community organizations, and municipal authorities.
2. Knowledge of disaster risk management is promoted in target communities.
3. Disaster response and risk reduction goals, tools, and activities are included in municipal plans in the target areas.
4. Capacity for promoting local disaster risk management is enhanced in national disaster management institutions in each country and SE-CEPREDENAC.
5. Mechanism for disseminating information, experience and methodologies about local disaster risk management is established.

### 4) Inputs

(Japanese Side): Total 24 Japanese experts dispatched (three long-term experts and some short-term experts dispatched every year) . 4 participants in the counterpart training, 56 participants in the training course "Disaster Control in Central America", 30 participants in the third country training "Civil Protection and Disaster Prevention" in Mexico. Total costs of the project is 470 Million JPY (5 years including provision of machinery and equipment)

(Central American Side): Assignment of project counterparts (total 106 staff) , share of local costs, in-kind contribution such as the office space for the Japanese experts.

## 2 Evaluation Team

<b>Member the of Evaluation Team</b>	<ol style="list-style-type: none"> <li>1. Mr. Shigeyuki MATSUMOTO (Leader) Director, Disaster Management Division II, Global Environment Department JICA</li> <li>2. Mr. Jun MURAKAMI (Evaluation Planning) Disaster Management Division II</li> <li>3. Mr. Hiroyuki OKUDA (Evaluation and Data Analysis) Tekizaitekisho, LLC</li> <li>4. Mr. Yoshimi SUGANO (Interpreter) Japan International Cooperation Center</li> </ol>
<b>Evaluation Period</b>	17 January 2012~20 February 2012
	<b>Type of Evaluation</b> : Terminal

## 3 Project Performance

### 3.1 Achievements of Outputs

Prior to the terminal evaluation, Mr. Yasumasa Ito, an international consultant in Mexico contracted by JICA, visited six national disaster management institutions and 21 municipalities and 50 communities out of 23 target municipalities and 62 target communities, respectively, in the six countries. He conducted interview, on 17 October through 12 December 2011, based on the “Evaluation Sheet” attached to PDM in order to collect data and information on results and achievements at the national/municipal/communal level. The achievements of BOSAI project are mainly analyzed based on the data and information collected in the preliminary survey which was conducted by Mr. Ito.

(Output 1)

Major activities in Output 1 are the establishment of disaster risk management organization, the preparation of a risk map, the set-up of the communication systems of disaster alert, and the development of a disaster response plan, in each target communities. As for the disaster risk management organization, 96% of communities (i.e. 48 communities out of surveyed 50 communities) have already established or are establishing the organization at present. Likewise, as for the preparation of a risk map, the set-up of the communication systems of disaster alert, and the development of a disaster response plan, the levels of attainments (i.e. the number of communities that have produced or are producing the outputs divided by the number of surveyed communities) are 88%, 66%, and 88%, respectively.

(Output 2)

Major activities in Outputs 2 are the preparation of manuals/guidelines of disaster risk management, the execution of the workshops/events in communities, holding events/activity at school, and the execution of evacuation drill, in each target community. During the project period of five years, 19 manuals/guidelines are produced. As for the execution of the workshops/events, 66% of communities (i.e. 33 communities out of surveyed 50 communities) have conducted some kinds of disaster-related events. Likewise, as for the execution of events/activity at school and the evacuation drill, the levels of attainments are 71% and 60%, respectively.

(Output 3)

Major activities in Output 3 are promotion of ex-trainees’ activities on disaster risk management, and the incorporation of disaster risk management into the municipal plan. 10 municipalities out of the target 23 municipalities have ex-trainees, who are active in promoting disaster-related activities. As for the development of municipal plans including disaster risk management, 86% of municipalities (i.e. 18 municipalities out of surveyed 21 municipalities) have already prepared or are preparing such plans.

(Output 4)

Activities in Output 4 include the development of methodologies/tools applicable in the Central America, holding a workshop using the developed methodologies/tools, and the establishment of database. During the project period of five years, 12 methodologies/tools are produced to be adopted regionally. Workshops for these methodologies/tools are being conducted but the database to store these materials - a portal site of BOSAI project on the internet – is currently under construction and will be completed by the end of the project.

(Output 5)

Activities in Output 5 includes the preparation of network meetings of ex-trainees at national/regional level, the development of database of ex-trainees, holding regional forum on disaster risk management, and the distribution of printed materials on good practices. These activities are conducted as planned in general, but

pamphlets of good practices are yet to be developed and distributed.

### **3.2 Achievements of Project Purpose**

The project purpose is the strengthening of the capacities of target municipalities/communities as well as national institutions for implementing and supporting the disaster risk management. There are three evaluation sheets attached to the PDM – sheet 1 for communities, sheet 2 for municipalities and sheet 3 for national institutions – and three indicators are defined based on these evaluation sheets – indicator 1 for communities, indicator 2 for municipalities and indicator 3 for national institutions. As for the indicator 1, 68% of communities (i.e. 34 communities out of surveyed 50 communities) achieved the indicator 1. As for the indicator 2, 90% of municipalities (i.e. 19 municipalities out of surveyed 21 municipalities) achieved the indicator 2. As for the indicator 3, three national institutions and SE-CEPREDENAC achieved the indicator 3.

## **4 Evaluation Results**

### **4.1 Relevance**

The relevance of the project is high.

- Central America is a region vulnerable to natural disasters, and targeting natural disaster prevention, mitigation and response is one of the urgent needs for the sustainable development of Central American societies. The 35th meeting of heads of SICA countries on 30 June 2010 approved PCGIR, which mentions the capacity development for disaster risk management at the local level in its Axis D “Land management and Governance” in measure 1: “Strengthening Local Capacities”. BOSAI project has constituted an important pillar in the implementation of the PCGIR, in particular on the Axis D through project activities.
- The regional progress report on the implementation of the HFA (2009-2011) in April 2011 refers to community disaster management in its regional indicator 4, “Sub/regional early warning systems exist”, and regional indicator 5, “Sub/regional information and knowledge sharing mechanism available”. BOSAI project is contributing to the progress towards achieving these regional indicators by developing capacities at municipal/communal level.
- At the national level, policies and legal framework are also being adjusted for the implementation of the integrated disaster risk management, e.g., El Salvador’ National Plan of Civil Protection (2009), Panama’s National Policy on Integrated Disaster Risk Management (PNGIRD), Costa Rica’s the National Plan for Risk Management (2010-2015).
- National disaster management institutions are also undertaking organizational adjustment/development to strengthen their capacities and to address the needs for improving local disaster risk management, e.g., El Salvador’s “delegado en municipio”, Panama’s “Punto Focal Nacional” and “Punto Focal Provincial”, Honduras’ establishment of CODEL and CODEM. BOSAI project is contributing to the institutional strengthening of these agencies through such activities which are particularly targeting municipalities and communities.
- It is widely recognized by the counterpart institutions that BOSAI project is appropriately aligned with the needs and expectation of their policies and mandates. The promotion of their mandate has been facilitated by BOSAI Project through its approach to raise awareness of villagers for autonomous/voluntary actions as well as its activities to produce tangible outputs such as risk maps and used-tire dykes.

### **4.2 Effectiveness**

The effectiveness of the project is high.

- There are three indicators set in PDM to be used to evaluate the level of attainment at the project purpose level. As is summarized in the section 3.2 above, the project is making a good progress towards achieving its purpose and is likely to complete most of its activities before the termination of May 2012.
- The attainment level of indicator 1 is 68%, which means that 34 communities out of surveyed 50 reach 6 points or above on the evaluation sheet 1. Most of communities that stop short of 6 points, however, also come close to 6 points and have potentials to achieve this indicator during the remaining period of the project. Some communities in Panama, Costa Rica, Honduras and El Salvador constructed small mitigation works such as used-tire dyke and retaining walls with remarkable involvement and commitment in voluntary labor.
- The attainment level of Indicator 2 is 90%, which means that 19 municipalities out of surveyed 21 municipalities reach 6 points or above on the evaluation sheet 2. Over the five years of project period, 22 officials from municipalities participated in the training course in Japan “Disaster Control in Central America”. These ex-trainees, when they are back in the office, have played significant roles to promote project activities.
- As for the indicator 3, three national institutions and SE-CEPREDENAC have attained the indicator, which means that they reach 4 points or above on the evaluation sheet 3. Over the 5 years, 31 officials from national disaster management institutions and 3 from SE-CEPREDENAC participated in the training course in Japan “Disaster Control in Central America”. Furthermore, 25 officials attended the third country training in Mexico “International Multi-disciplinary Course on Civil Protection and Disaster Prevention Program”. The capacity of the staff, through these training together with workshop/seminor conducted by the project, has been increased enough to produce and revise tools/materials for disaster management.
- Overall, the project so far has accomplished a high level of achievement on project purpose and outputs. There are, however, some activities that are outstanding and need to be expedited such as the establishment of the portal site of BOSAI project and the preparation of pamphlets of good disaster management practices. At the community level, it is also important to increase awareness and ownership of the people in communities on the materials generated such as risk map, evacuation routes and emergency response plan.

#### **4.3 Efficiency**

The efficiency of the project is medium.

- The overall plan and the structure of PDM are clear. The inputs of Japanese experts are appropriate in terms of their assignments, expertise, duration and timing. As for the short-term experts, it was pointed out that their durations were too short and didn’t respond to all needed cases of the countries. Project coordinators in SE-CEPREDENAC and in national disaster management agencies (Guatemala placed by own budget) have effectively facilitated the project implementation.
- The group training in Japan is highly appreciated as good learning opportunities for not only increasing the knowledge but also for understanding the philosophy of BOSAI. The initiatives and motivations of the ex-trainees with the experience of developing action plans, when they are back in their office, are one of major promoting factors for implementing project activities in each country. It was indicated, however, that there was a case where the selection of the participants was not fully coordinated at a national level.
- Inputs from Central American side are also appropriate in general. SE-CEPREDENAC has coordinated regional workshops/forums and the participation of trainees. National disaster management agencies have

assigned project directors, project managers and counterpart personnel. The communication between Japanese experts and counterparts are generally good as the Japanese experts speak Spanish, having frequent visiting/meeting to maintain constant consultation and the flow of information.

- On the other hand, there are some issues raised during the evaluation as to the implementation process of the project: e.g., there are many processes to communicate, coordinate and make decisions among the project participants and the operation of the project could have been improved by streamlining these processes or making clear the role and responsibility of each participant.

#### **4.4 Impact**

The impact of the project is high.

- The overall goal is still very relevant and aligned with national priorities. The progress toward achieving the overall goal is modest at present. Some examples are already observed such as the installation of rain gauges extended beyond the target communities in El Salvador and a plan to set up warning sirens in more than 150 communities in Tegucigalpa, Honduras.
- The progress towards the overall goal largely depends on continued commitments and empowerments of regional, national and municipal officials. They are, however, subject to constant rotation/transfer and their positions are also affected by the change of the government, which thereby is widely regarded as a challenge towards achieving the overall goal.
- Beyond the PDM, the framework of project, BOSAI project conducted several presentations and counseling on disaster risk management in forums organized by other donor agencies.
- The Frog Caravan is one of successful activities of the project in that the practice is widely extended beyond the target municipalities/communities.
- There are some cases where community inhabitants who had relied on external supports in dealing with disaster became aware of self-help – becoming conscious of what they could do for themselves in disaster risk management – and led to an actual reduction of disaster damage. During the tropical depression 12E in October 2011, there were no casualties in project target areas in El Salvador. At the time of the preliminary survey in December 2011 in San Pedro Masahuat, where a big damage incurred during the 12E, inhabitants expressed their gratitude to the project that there were no casualties due to an early evacuation which they had practiced in project activities.
- In all the 8 communities visited during the terminal evaluation, it was observed that the inhabitants have developed a strong awareness on BOSAI and are taking voluntary actions such as the cleaning of the river and the extension work of used-tire dyke.
- The overall goal is set as the extension/dissemination of information, knowledge and methodologies on local disaster risk management in different areas of the regions. There are some examples to this effect such as the installation of rain gauges, the set-up of warning sirens, the extension of BOSAI activities, and the execution of Frog Caravan.

#### **4.5 Sustainability**

The prospect of sustainability of the project is medium.

- The sustainability from an institutional point of view is high. Policy framework at the regional/national level is appropriate and instrumental in promoting the local disaster risk management as summarized in Section 4.1

above. For the institutional system to function effectively, technical, human resources and financial capacity at the national/municipal level needs to be reinforced.

- The prospect of sustainability from the technical point of view is medium, but it requires strengthening appropriate training opportunities in the region. It is important to upgrade, on a regular basis, the tools/materials and technologies developed in the project to sustain their usefulness and relevance in the region. The continuity of participating in the training course “Disaster Control in Central America” will be of great help to the adoption of latest methodologies and new technologies/tools that are suitable for the region.
- In national disaster management institutions, the staffing of technical officers is being promoted appropriately in general, but the human resources need to be strengthened as in some countries the number of staff is still limited who is assigned to outreach municipalities and communities. Materials and tools for disaster risk management are produced in the project, but it is necessary to validate them at the regional level to distribute appropriately, and utilize these tangible outputs for the capacity development of officials in charge and communities.
- The sustainability of funding is generally regarded low, though national policies set force the role of local authorities in disaster risk management, including the preparation of their necessary budget. Addressing local disaster risk requires more investment from governments and other development partners such as NGO, private sector and civil society.
- At the community level where the project activities have been mainly focused, the BOSAI activities are likely to be sustained with heightened awareness and demonstrated eagerness of inhabitants. The sustenance of interests and motivation, however, requires continued intervention and interaction with others and mainly with officials in charge of disaster risk management at municipal/national level. As such, the sustainability at community activities largely depends on the extent to which the national/municipal authorizes and their staff will be able to sustain their BOSAI activities.

#### **4.6 Factors that have promoted or hindered the implementation of project**

##### **(1) Promoting factors**

- The cooperation with other JICA schemes such as the training course “Disaster Control in Central America”, third country training “Civil Protection and Disaster Prevention” and JOCV has produced a synergistic effect to achieve the project purpose.
- The initiatives and motivations of the ex-trainees with the experience of developing action plans, when they are back in their office, are one of major promoting factors to implement project activities in each country.
- Project coordinators placed by JICA in SE-CEPREDENAC and in national disaster management agencies have effectively facilitated the project implementation.

##### **(2) Hindering factors**

- There many counterparts and stakeholders involved in BOSAI Project, which a regional technical cooperation project covering six countries. As such, there are many processes to communicate, coordinate and make decisions among the project participants and sometimes the role and responsibility of each participant become unclear.

#### **4.7 Conclusion**

The relevance of the project is high as addressing the disaster risk continues to be one of the priority areas for

the sustainable development of the Central America. The effectiveness of the project is also high as the project is properly constructed to achieve its intended purpose, and the level of achievement at present indicates that the project has a good potential to achieve its purpose by completing its planned activities. The efficiency of the project is medium due to the lack of adequate coordination sometimes and limited clarity of operational rules, which is likely to be attributed to the size of the project that needs to cover six countries and communicate with not only counterparts but also many stakeholders. The impact of the project is high mainly in that there are many communities where the inhabitants have developed a strong awareness on disaster risk management and demonstrated voluntary actions to that effect. The sustainability of the project is medium as the technical, human resource and financial capacity of national institutions/municipalities are still limited to maintain the current level of activities and further to expand BOSAI initiatives to other areas and communities.

## **5 Recommendations and Lessons Learned**

### **5.1 Recommendations**

#### (1) Recommendations at the policy level

- 1) SE-CEPREDENAC and national and regional institutions needs to set up the target to achieve in local disaster risk management and conduct continuous monitoring towards achieving that target.
- 2) The group trainings in Japan are very useful for the capacity development of national and municipal officers that the training course should sustain.
- 3) In the future, third country trainings should be proposed, coordinated and administrated by CEPREDENAC and JICA.

#### (2) Recommendations at the administrative and technical level

- 1) The project needs to make particular efforts to complete outstanding activities such as the establishment of the portal website for BOSAI (which will be operational from March 2012 according to the work plan), and strengthening of a strategy to raise awareness; for example the pamphlet of good practices in local disaster risk management.
- 2) The project should disseminate the materials of disaster risk management tools/methodologies, which are prepared through project activities, so that they can be widely utilized by other organization and agencies (for example, the portal site of the BOSAI project can be used in the future).
- 3) 88% of surveyed communities have developed or are developing risk maps and disaster response plan. But it is necessary to socialize them in the communities of the project.
- 4) The risk map and disaster response plan developed in communities require periodical update and revision as necessary to sustain their relevance and effectiveness, therefore the national and municipal authorities should provide necessary follow-up and continued support to the communities of the project.
- 5) There are some changes in consciousness/behavior among community inhabitants on disaster risk management observed, and it is necessary to monitor these changes through appropriate methods (for example, panel survey in order to have a better understanding of the level of capacity development).
- 6) In relation to the recommendation above, the indicator to measure the level of capacity of the community in local disaster risk management should be further elaborated and continued to be developed based on the experience of BOSAI project.
- 7) Project coordinators have been provided by the project (except for Guatemala) to implement activities, but they



are to be provided by national institutions so that their coordinating roles can become more permanent.

- 8) It is necessary to include follow-up and implementation of action plans by ex-trainees in the annual plan of the BOSAI project.

## **5.2 Lessons Learned**

- (1) In order to strengthen the capacity of communities to address local disaster risk, the project is not only focusing on communities but also targeting national institutions and municipalities to establish institutional arrangements in support of the communities. This two-fold approach has been effective.
- (2) Participants in the group training in Japan and third country training, as they are properly selected and properly positioned in their office, have been a major driving force to implement project activities. For this, it is necessary to strengthen coordination in the process of selection and follow-up of the participants.
- (3) The introduction of participatory construction work for communities help nurture the change of consciousness/behavior by providing proper opportunities to work for the local disaster risk reduction.
- (4) Good communication is particularly important for a regional project where many counterparts and stakeholders are involved, therefore it is desirable to discuss and agree on the working protocol of proper communication in advance among those who participate in a regional project.
- (5) Conducting a baseline survey in the beginning of the project, particularly in such a case where the change of consciousness/behavior is monitored, can be of great benefit to measure the impact of project implementation over time.
- (6) From the beginning of the project, JICA side should share planning and implementation of the budget execution of the project.



