



Introduction

The present manual was produced by the "Local Management of Risks in the Yucatan Peninsula" project team in order to be used by our own local experts. Such experts have been trained by this SGP-GEF – UNDP project in the areas of risk prevention and - disaster response. Such experts integrate the so called "Micro regional Crisis Recovery Unit" (UMAC by its' Spanish acronym) in every micro region with SGP-GEF presence, being responsible, among others, of leading participatory activities to analyse risks and design strategies of mitigation within the SGP-GEF GEF community based projects. That is to be done with the assistance of the

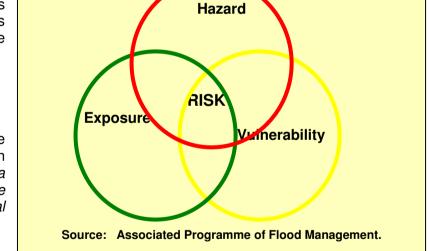
present manual.

The "Vulnerability reduction method for community based projects" seeks improving project design in order to mitigate its' weaknesses towards environmental, social and economic crisis. The method has been used on more than 40 Mexican SGP-GEF projects along in 2004 and 2005.

Brief theoretical remarks on risk management.

Risk is a function of the magnitude of the hazard, the degree of exposure to the hazard and the vulnerability of society against damage due to the hazard. An *"integrated risk management approach provides measures for preventing a hazard, turning into a natural disaster.....with major focus on reducing the vulnerability that has to be addressed through local actions to overcome global challenges"*¹.

A disaster, on the other hand, is an event where damage exceeds the capacity



of the affected society to recover by its own means. That is why, one of the most important risk management measures is to increase the coping capacity, and it illustrates the fact that the weaker are usually the most severely affected by natural disasters.

This method was created in order to enhance local actions, privileging local knowledge and organisational practices. The tools include both risk analysis and participatory planning, following six simple steps, fulfilling in total two data tables, that we call:

¹ <u>Risk Management</u> Baseline Document for thematic area no 5, 4th Water Forum (2005).

- The "Risk Table", that identifies the most important hazards for every community, the vulnerability factors within the group project and the actions to overcome such factors.
- The "Potential Costs Table", that helps the group to account the potential losses in which the group would incur in case a hazard arrives with the current level or vulnerability.

Both were created after the systems analysis approach.

Methodological steps:

The progressive steps show the way to collectively construct the "risk table", row by row, and start on:

1. Motivation through costing potential looses:

A good risk analysis needs highly motivated members. A way to achieve that, is being aware of what they could loose in case a hazard turns into a real disaster. We recommend an exercise to calculate the costs of potential loses, using the table 3. "Disaster's potential costs".

Hazard 1:	Harms due to hazard exposure	Total budget:
Harm elements of the local system:	1	\$
	2	\$
	3	\$
	4	\$
	5	\$
	Costo Tota	al: \$

Table 1. Total potential loses in case of crisis.

2. Identifying hazards and vulnerability for each part of the local system.

In order for the community based organisation members to fully participate in the risk management of their project, they must start by a common understanding of the related hazards and vulnerability factors of the local system. People may fulfil the "risk table" using either the system's elements (example 1.1.) or the system's processes (example 1.2.). For many rural cultures we have identified that the notion of vulnerability is locally better known as the "weakness of the system", while this last concept is widely used at least within the Mayans in México. A question that we may use to involve local people into discussion, is: Which of the hazards is threatening the system?

Starting point of the risk tables:

Table 2. Risk analysis using the system's "elements".

System's element	System's element Hazard(s) that could harm each element Vulnerability factors. Why is it so exposed to that has	

Table 3. Risk analysis using the system's "processes":

System processes' steps.	Hazard(s) that could harm such step of the system processes.	Vulnerability factors. Why is it so exposed to that hazard?

Using these tables may not be easy for community based organisations, so we recommend that facilitators (such as UMACs in our project) fulfil the tables in boards or equivalent in front of the whole group. A full copy of one or both tables should be attached to the project proposal.

3. Identifying vulnerability reduction activities:

Using the same table 2 or/and 3, we will add at this moment a new column ("Risk mitigation actions") to the table, and that group members will start now to specify one or more mitigation activities for each one of the vulnerability factors. A question that can be posed to the group is: What can we do to this particular element of our local system?

Elements	Hazard that may affect it	Vulnerability factors. Why is it so exposed to that hazard?	Mitigation actions. What can be done to prevent harm?

Table 2.b. Adding the mitigation actions.

In case the group choose to analyse the system through the systems' steps, we may use the same table but introduce de word "steps" instead of "elements".

4. Timing and costing mitigation actions:

Two new columns should be added to the "risk table" allowing the group to fix the time and the cost of the mitigation actions to be carried out. Some local groups innovated adding an extra column to appoint who is responsible of each action.

Elements	Hazard that may affect it	Vulnerability factors. Why is it so exposed to the hazard?	Mitigation action. What can be done to prevent harm?	When will be done?	How much does it cost?

Table 2.c. Adding timing and budget of it mitigation action.

Again, if the group chose to analyse the system through its' steps, we may use the same table but introduce de word "steps" instead of "elements".

Empirical experience tells us that vulnerability reduction costs in a community based project, either a productive or a nature conservation one, should not exceed 20% of its' total budget. On the other hand, training and research projects require less than the 5% of total budget for mitigation actions (given that such projects do not involve the acquisition of infrastructure or equipment). In case the mitigation costs are extremely high, the group should consider better to search for an alternative project, for the original one happens to be too risky.

5. Issuing an official report from the Micro regional Crisis Recovery Unit:

In case this analyse is done with the participation of our "Local Management of Risk" project units it is necessary to deliver a written report of the main results and recommendations on risks both to the community based organisation and to the National Coordinator of SGP-GEF, or equivalent (COMPACT local coordinator, for instance), before de project appraisal phase starts. This report summarises the vulnerability factors of the project, the recommended actions to overcome them and the total budget increase due to risk mitigation, using the following form:

Report of Risk Analysis in Community Based Projects			
Micro regiona	I Unit:		
	esponsible of the analysis:		
Name of com	munity based organisation:		
Name of proje	ect proposal:		
	pility factors of the proposal:		
a.			
b.			
С.			
d.			
Main mitigatio	on actions recommended:		
0			
0			
0			
0	•		
0	•		
Total costs of			
SGP-GEF: \$		Community Based Organization: \$.00	
Name and signature of local expert and Organisation's chairman:			
Local Expert responsible of the analysis C.B.O. Chairman			

Once the local experts fulfil this report, and before delivering it, both the report and the "risk tables" are normally reviewed by the Coordinator of the "Local Management of Risk" project; in doing so, he asks technical experts about the accuracy and relevance of the mitigation actions recommended, and finally endorses the final report.

6. Collecting the information of the "Risk Table" into the project proposal:

A final step is still necessary after the "risk tables" and their respective report is finished. The organisation members must integrate such information into their SGP-GEF project proposal. Otherwise, the mitigation actions will not get proper funding and may loose feasibility. Information from three "risk table" columns has to be collected into the proposal, as follows (based on the Mexican SGP-GEF application form):

- > Information about hazards and vulnerability should be added to the section 4 of the project proposal ("Information about the community and the micro region").
- > Mitigation actions should be integrated into the section 8 of the proposal "activities list".
- > The timing of such actions (fifth column of our "risk table") is to be included into the timetable of the proposal.
- > The costs of the recommended mitigation actions should be added to the budget of the project proposal, identifying it with the name "risk mitigation costs".

It is important that the whole local group participate in these procedures, because their commitment is essential for the success of any risk management task.