



# Promoting Local Innovations (PLI) for Community-Based Climate Change Adaptation in Coastal Areas

*A Facilitator's Guide to the PLI Workshop*



Building Resilience to Climate Change Impacts-Coastal Southeast Asia-No. 5





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By Andrea Roth and Stephan Rist



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# Introduction

People living in coastal ecosystems are highly exposed to the impacts of climate change. They already have to deal with more frequent and more intensive extreme weather events, coastal erosion, and changing conditions of the ocean (temperature, acidity). These changes can have serious consequences for coastal ecosystem and people as their livelihoods are highly dependent on natural resources. In particular poor and marginalised people are very vulnerable to climate change.

Responding to changing conditions is nothing new. Throughout their history coastal communities had to adapt to changes- not only changes in the ecosystem, but also socio-cultural, political and economic changes. In response, these communities developed strategies to improve their livelihoods, develop their own visions, and negotiate their own priorities. This endogenous potential for innovations can also be used to strengthen the resilience of coastal communities.

The significance of local innovation potential for climate change adaptation is increasingly acknowledged, but projects and development plans rarely attempt to develop this potential, nor do they try to disseminate local innovations within and among communities. Tools that encourage a participative and interactive support of local innovation potential are therefore invaluable for climate change adaptation.

This facilitator's guide for the PLI workshop has been developed to provide conservation and development practitioners working with coastal communities with an interactive and participatory tool that they can use to promote local innovations for climate change adaptation. The main objective of such a PLI workshop is to facilitate a social learning process between different stakeholder groups (local community, governmental agencies, and academia, NGO's) in order to identify and promote local innovations for climate change adaptation in form of community driven action plans.

The concept and methodologies of the PLI workshop has been elaborated by the Centre of Development and Environment (CDE), University of Bern and is supported through the Swiss Agency for Development and Cooperation (SDC). Whilst the original PLI workshop<sup>1</sup> was designed for natural resource management in South America, this version has been adapted to the context coastal communities in Southeast Asia and puts a special focus on climate change adaptation. It has been successfully tested in a first pilot workshop in Thailand.

Some definitions and key concepts are provided in the box on the next page.

## Examples where PLI can be used

- Identifying alternative livelihoods
- Finding solutions against coastal erosion, saltwater intrusion
- Designing a locally adapted early warning system
- Establishment of community-based ecosystem restoration and management
- etc.

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<sup>1</sup> Brueschweiler, Rist & Mathez-Stiefel (April, 2007). *Ayoyando Innovaciones Locales (AIL)*, Guía del taller. Centre for Development and Environment, Bern.

# 1. The conceptual framework

## 1.1 Climate change adaptation

There is a growing understanding that vulnerability to climate change is not only driven by climate factors but also by non-climate factors that may have beneficial and/or adverse effects on the exposure, sensitivity and adaptive capacity of coastal communities. Such external factors can be environmental, social, demographic, technological and political. People living in coastal communities are also highly dependent on healthy ecosystem. Its therefore crucial not only consider the vulnerability of livelihoods but also the vulnerability of coastal ecosystems. Local innovations for climate change adaptation should therefore seek to find synergies between local potential to climate change adaptation of local communities and strengthening the resilience of coastal ecosystems.

### Characteristics of PLI

- Based on social learning
- Empowers communities
- Develops stakeholder engagement
- Creates new knowledge by combining local knowledge with academic knowledge
- Gender sensitive

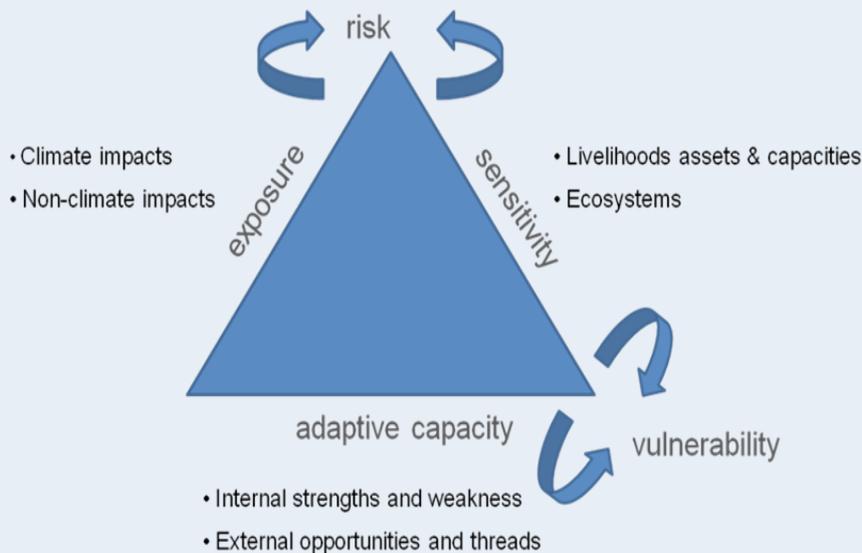


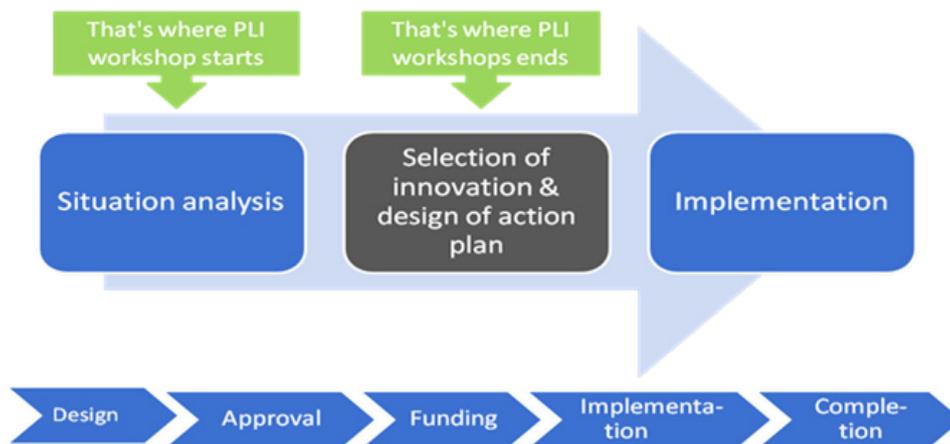
Figure 1: Conceptual framework for climate change adaptation (Adapted from IPCC).

## 1.2 Local innovations

Local innovations are more than just new technologies. Local innovations require a multidimensional thinking to consider all facets of social, political, institutional, technological or ecological interactions that come with new innovations. The design of a local innovation is a social and interactive process that requires cooperation between actors that contributes to the generation and transformation of knowledge and its integration into a viable innovation. Therefore the design of an innovation is a process of creating social networks, social learning and negotiation.

### 1.3 Open the black box of participation

Participative techniques and tools are being used in any modern development programme or project. Nonetheless, the participation of local actors is being used more in the initial phase-using participative tools in order to make a situation analysis – and in the final phase for the validation of project that are designed by external experts. The critical phase of the selection and designing of an innovation is often a black box from the perspectives of the local actors. The agenda setting for development is still dominated by experts, politicians, or donors and neglects the potential of local knowledge.



**Figure 2: PLI promotes an interactive participation of local communities over the whole project cycle.**

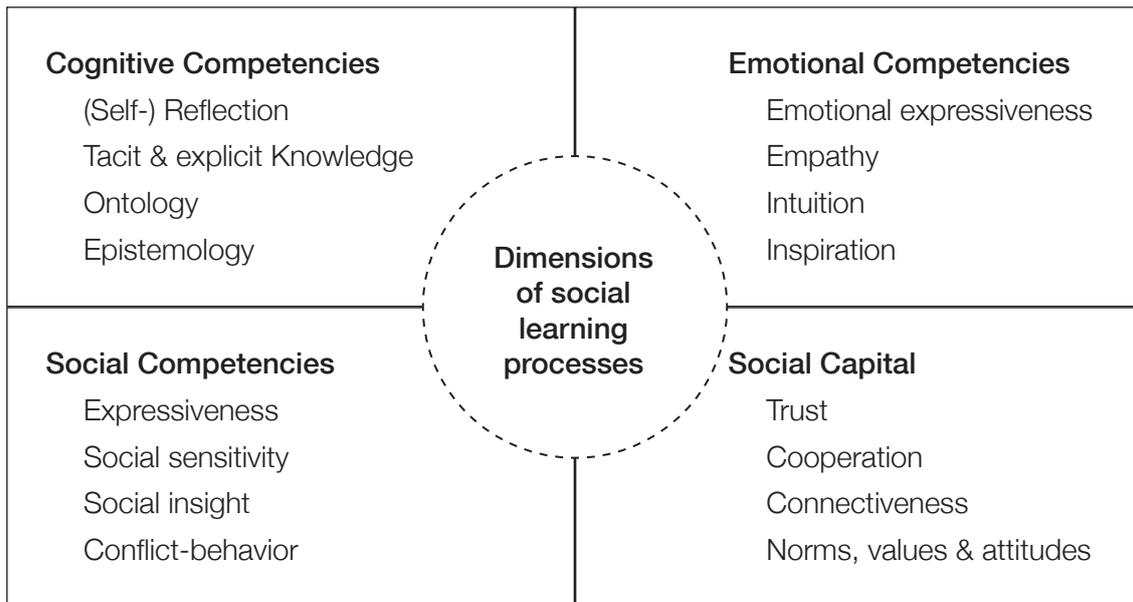
The focus on social learning used in the PLI workshops tries to open this black box through integration of the local actors throughout the whole project design: from the situation analysis and visioning to the identification and selection of the innovation to the designing of an actions plan that the communities themselves can implement. This initiates a process of social and reciprocal learning that leads to a mobilisation and amplification of local and scientific knowledge.

### 1.4 Social learning processes

Putting climate change adaptation in practice is always part of a larger 'multi-stakeholder' setting. Therefore, the translation of adaptation into concrete social practice must be the result of a joint effort, involving all relevant actors. This translation of adaptation concepts into concrete action can be understood as a social or collective learning process involving all actors related to a certain issue.

The concept of social learning focuses on creating learning situations in which different social actors seek dialogue to identify problems and seek alternatives. It is a space where they can reflect and critically evaluate. If actors perceive the interdependence between them and manage to establish a shared understanding of the situation, you can adjust the decisions and possible actions.

Rist et al. (2006: 130-131) describes four dimensions of learning that influence the actions and at the same time are changed through them. The dimensions are interrelated and their learning is distorted.



**Figure 3: The four dimensions of social learning processes (Rist, S. 2006).**

Social capital includes trust, cooperation, solidarity as well as the norms, values and attitude. Trust can be established through positive experience with others. A strengthening of trust can lead to changing attitudes towards other actors group and through joint dialogue mutually shared values and norms can be established. Social competence is the power to act in social situations so that long-term negative and positive consequences of the actions come to a favourable relationship (Hinsch, Pfingsten 2002: 5). It implies that a person can express wishes, criticism and emotions. It also means that a person has the ability to have a conversation and resolve conflicts, to treat others with respect and listen to them. Emotional competence is directed at everything that has to do with the psyche. It includes emotional expressiveness, empathy, intuition and inspiration. Identity and self-esteem are also part of emotional competence. Self-esteem influences social behaviour, cognitive competence and the perception of others. Cognitive competences comprise everything that has to do with consciousness: reflection, explicit and tacit knowledge, ontology and epistemology.

### 1.5 Gender sensitivity

There is a wide consensus that women suffer disproportionately from the impact of climate change as a result, among others, of their comparatively weaker set of livelihood assets (IPCC 2007b; UNFPA 2009). The interactive participatory approach of the PLI workshop allows the integration of the perception, needs, capacities and knowledge of men and women.

## 2. Workshop design

The PLI workshop is based on interactive pedagogy and joint learning among different actors groups in the local context. It is a tool to facilitate communication and exchange of experience between actors with different perceptions about innovations. The local actors have the potential, the knowledge, the social structure and the experience to develop local innovations. The external actors have the knowledge about new technologies, the experience of support and the nexus with other regions and institutions. Merging this knowledge, ideas, and competencies allows discussions about potentials and problems beyond hierarchies and establish a climate of mutual trust, of cooperation, and of understanding of the others and their respective context.

### 2.1 Objective of the workshop

#### The main objective:

- Improve the capacities to communicate, reflect and interact deliberately between members of the local communities, local administration authorities, local government agencies and other relevant stakeholders in order to strengthen the resilience of coastal communities by identifying and defining concrete action for the establishment of the innovation at the local level.

#### The specific objectives:

- Raise awareness on present and future climate and non climate change risks
- Raise awareness of existing knowledge of local innovations that can be used for climate change adaptation
- Increase participants' capacities to communicate, reflect and interact freely between the local community, administration, authorities, government agencies and other relevant stakeholders.
- Open a new space for cooperation that allows a critical revision of current practices of working together and the contributions for climate change adaptation, from every actors group

### 2.2 Output of the workshop

- Action plan with clearly defined activities, responsibilities, timelines and resources needed
- Strengthened capacities of communication and reflection and deliberative interaction between local and external participants

#### Fast facts

*How to use:* It is used to design practical actions plans for climate change adaptation

*Target users:* Development and/or conservation practitioners

*Target beneficiaries:* Coastal communities

*Approach:* Facilitating and strengthen social learning processes between different stakeholders groups, research institutes and conservation and/or development agencies

*Methods:* Group exercises role play, strategic games, observations, interviews, visualization etc.

*Participants:* 20-30 local participants (incl. fishermen and –women, CBOs, local government authorities and agencies etc.) research institutes and conservation and/or development agencies

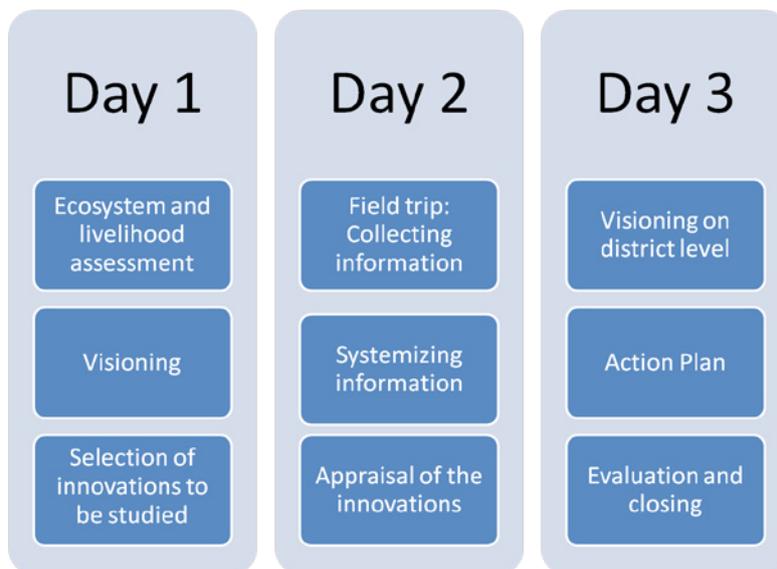
*Scope:* District or sub district level

*Duration:* 3-6 days

## 2.3 Components of the workshop

The workshop is comprised of the following components:

- Ecosystem and livelihood assessment
- Visioning
- Identification and selection of innovations
- Field trip and market place to collect information
- Action plan
- Fair



**Figure 4: Possible schedule for a three days PLI workshop.**

It is important to bear in mind that the PLI is a very flexible tool that need to be adapted individually for every workshop. A PLI workshop always includes the identification and selection of innovation, the collection and discussion of information about the different aspects of the innovation as well as the elaboration of the action plan. Depending on the specific needs and time available you than can add further elements of the PLI. It may takes less time for the situation analysis when there was a preliminary vulnerability and capacity assessment (VCA). Also, when the available time is very restricted the fair at the last day can be postponed and become an activity in the action plan.

## 2.4 Scope of the workshop

The actions plans are designed at district or sub district level. Once successfully implemented they can be used as a case model for an up scaling on provincial level. If you plan a shortened three day version, you may start on a lower level and scale it up on the district level and then on the provincial level.

## 2.5 Participants

The workshop aims to bring together a diversity of participants who represent different actors groups that are relevant for the climate change adaptation in the area. This includes representatives of private and public actors from the local area as well from outside. The following representatives may be invited:

- Man and woman from the local communities (craftspeople, fisherman etc.)
- Local government agencies and municipalities
- Community based organisations (CBOs) and local networks
- Development agencies
- Research institutes

The optimal numbers of participants are between 15 and 20 (without facilitator) ideally composed by half internal and half external actors. The number of participants shouldn't exceed 30 (including facilitators).

## 2.6 Place

It is recommended to conduct the workshop in the local context where the local innovations will be promoted. This allows the active participations of the local people and local representatives, inspires the valuation of local knowledge, helps integrating the local context, and enables external actors to better understand the reality on the ground. Nevertheless, it can be difficult to get the full attention from the local participants when they are still involved in their daily activities. Based on the experience of the PLI pilot in Thailand it can be a good compromise to have the analysis in the local village itself, but having the rest of the workshop outside of the village to allow focusing more on the workshop.

## 2.7 Duration

For establishing an atmosphere of intensive interactions between all actors and initiate a process of mutual learning a workshop of 6 days is highly recommended (including the innovations fair at the last day). Nevertheless one should bear in mind that the people from the community can't follow their daily activities during the workshop and eventually won't be able to participate in the workshop for 6 days. In this case an adopted and shortened version needs to be taken in consideration.

## 2.8 Exercises

The exercises are designed for 6 days (6 unities), including the opening at the first day and the fair at the last day of the workshop. You can find a detailed step by step guide for each of the exercises in the next pages.

Before you start the exercises, it is important to introduce the workshop and inform the participants about the following points :

- Objective of the workshop
- Programme of the workshop
- Timetables (to be established in a participatory way)
- Rules (to be established in a participatory way)
- Focus and methodology
- Etc.

Every day starts with the conclusion of the day before (exercise 0-2) and ends with a daily evaluation (exercise 0-1)

It is necessary to point out that PLI is a flexible tool that allows an adaptation to the dynamic of each learning group. The team of the facilitators comes together each evening for a daily evaluation regarding the participation, the understanding of the topic and the learning dynamics. This allows adapting the exercises for the next day when needed.

### 3. Preparation for the workshop

The host institution should be familiar with the local context and know some innovations that are worth to be analysed during the workshop. They also should have established relations with the majority of actors groups they want to invite.

It should be assured that the majority of the representatives have the capacities to contribute experiences related to the innovations and to have some participants should be the innovators themselves

The participants should be nominated by the different stakeholder groups themselves. This means that previous to the invitation the host institution needs to inform the groups regarding the objectives, place, duration and type of work that will be undertaken during the workshop and ask them to nominate an adequate representative.

The workshop should be carried out in the context where the innovations are situated.

The host institution should take provision for organizing the transport to visit the innovations on the third day of the workshop and identify and call the innovator at the second day of the workshop in order to assure the visit.

The host institution also organizes the opening of the workshop: the welcoming of important people, rituals, art performances, lunch etc.

One could also organize an activity night during the workshop (sport, cultural event etc.)

The fair and the closure at the last day of the workshop should be organized at a time when the people from the communities really can attend it. In case that this not possible an arrangement with the school could be arranged so that the pupils and some of their parents visit the fair.

For the facilitation it needs someone with experience with the methods of interactive education and technical knowledge of the innovation to be analysed. It is also important to define the roles of each facilitator before the workshop starts: moderation, logistical arrangements, documentation and photos, workshop report, methodological and technical support etc.

## 4. Follow up

After the workshop, the facilitation team will meet with the sponsoring organization to make an assessment of various aspects of the event: approach and methodology, dynamic of the group of participants (local and external), thematic, logistics, integration into a local process, etc. That allows making specific recommendations for monitoring the initiated process at the local level and for future applications of PLI tool.

To promote the identified and analyzed innovations, it is important to make a detailed report documenting the results and process of the workshop, which will be distributed among participants, institutions and local authorities.

The experience of the PLI-pilot workshops in Peru and Bolivia has shown that the integration into a local development process is paramount-which requires the participation of local authorities and institutions-for the maximum enhancement of the identified innovations. In addition, the organization sponsoring the PLI workshop needs to play a central role in the local monitoring.

As part of a monitoring of the PLI tool, it is interesting to do an evaluation after the workshop (in a period of one year, for example) to analyze their impacts on the local context and at the individual level of the participants (individually and as representatives of institutions/ associations).

# 5. FAQ

## 1. How can I prevent the participation of too many leaders?

The selection of the participants is crucial for the dynamic and thus the output of the workshop and needs to be planned carefully. Often innovative man or woman are perceived to be «foolish» and are not considered as the right persons to represent the communities, whereas formal and informal leaders may be seen as the right representation of the community, but they may don't have the innovative ideas. It's important to assure that nobody feelings get hurt during the invitation process. A good way to resolve conflicts or tensions is to offer each one a special role for the PLI. For example local leaders can take a crucial role in the promotion and implementation of the action plan and be invited to open the workshop and for the closing event.

## 2. How to deal with intellectual property rights and benefit sharing?

In most of the cases intellectual property rights is not an issue, but depending on the innovation the facilitators should be mindful about it. Eventually a common property regimes need to be established in the innovation design. The following aspects should be considered:

- Agree upon clearly defined limits and effective exclusion of external not authorized people
- Rules of access are adapted to the local circumstances
- The resource users can participate in the agreement on new rules, control, and sanction mechanism
- Create a platform to resolve existing problems
- The self-determination of the communities is acknowledged by the government

## 3. What's the difference between the PLI for climate change adaptation and the MFF Climate Proof Guide?

The PLI tool is for designing action plan for specific climate change adaptation measures whereas the MFF Climate Proof Guide is to reduce climate risks in every conservation or development project. The PLI tool may be used within the step 3 of the MFF Climate Proof Guide to identify adaptation measures based on local knowledge.

## 4. Why is another tool for climate change adaptation necessary?

PLI is a unique tool that manages the process of interactive participation throughout the whole project cycle. PLI has been successfully tested for in the context of natural resource management in the Altiplano in Peru and Bolivia as also in the Peruvian Amazon. This guide is a slightly adapted version that puts a focuses on climate change adaptation in coastal areas of Southeast Asia.

## 5. What is the best language for the PLI?

The workshop should always be held in the local language in order to assure the participation of the people from the local communities. Working with a translator may hinder a smooth dynamic of the workshop. In case you have participants who don't understand the local language a simultaneous translation over headphones is the most convenient.

## 6. Timetable for the workshop

Day 1 Communication & Concerted action	Day 2 Introduction on local innovations	Day 3 Observation in the local context
30 min. Opening	0-2: 10 min. Summary of the day before	0-2: 10 min. Summary of the day before
1-1: 90 min. Presentation of the participants through interviews	2-2: 210 min. Visualization of the local context: model of the territory	3-1: 60 min. The local context: prepare the field trip/ market place
1-2: 45 min. What is concerted action: the story of the goats	2-3: 60 min. Define a vision and identify innovations	3-2: 300 min. Recognize the innovations: field trip/ market place
1-3: 70 min. Contextualize: presentation of a true story	2-4: 60 min. Define the innovation to be explored	
1-4: 180 min. Identify the major changes: historical map		3-3: 60 min. Exchange experience from the field trip/ market place
0-1: 20 min. Evaluation of the day	0-1: 20 min. Evaluation of the day	0-1: 20 min. Evaluation of the day

Day 4 Systemizing & valorising	Day 5 Action plan	Day 6 Present results & proposals
0-2: 10 min. Summary of the day before	0-2: 10 min. Summary of the day before	0-2: 10 min. Summary of the day before
4-1: 220 min. Systemize the collected information	5-1: 180 min. Steps to support and promote local innovations	6-1: Minimum half a day Local Innovation Exhibition
4-2: 90 min. Assess and prioritize innovations	5-2: 90 min. Develop an action plan to support innovations	
4-3: 100min. Develop a district vision	5-3: 240 min. Preparing the Local Innovations Exhibition	
4-4: 60 min. Agree on a single district vision		0-1: 30 min. Final evaluation
0-1: 20 min. Evaluation of the day	0-1: 20 min. Evaluation of the day	30 min. Closure

## Exercise 0-1: Daily evaluation

<b>Outcome</b>	Evaluate the activities, methodologies, atmosphere and development of the workshop.		
<b>Objective</b>	To give a daily appraisal of the activities and development of the workshop		
<b>Methodology</b>	Group discussions and presentation in plenary		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare the materials	Flip chart paper, markers, tape, pin or magnets to fix it	5 min. group work 3 min./ group presentation in plenary
			Total: 20 min.

### Development of the exercise

#### Group work

The groups make a daily evaluation. They define at least one aspect of this day's activities that is positive and one aspect that could be improved

#### Plenary session

Each group presents its positive aspects of the activities of the day and one aspect that could be improved and explain the reasons for their appraisal.

## Exercise 0-2: Wrap-up of the day before

<b>Outcome</b>	Recall the activities of the day before		
<b>Objective</b>	Summarize and synthesis the activities and the important aspects of the day before in a creative manner.		
<b>Methodology</b>	Group work and plenary presentation		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Define with the groups the available material they need	Flip chart paper, markers other materials according to the ideas of the group	The preparation is up to the group 10 min. presentation
			Total: 10 min.

### Development of the exercise

#### Group work

Every day one group is responsible for the wrap-up of the day before in a creative manner (theatre, broadcast, painting etc.)

The passing order of the groups will be defined at the beginning of the workshop together with the facilitators and the participants

#### Plenary session

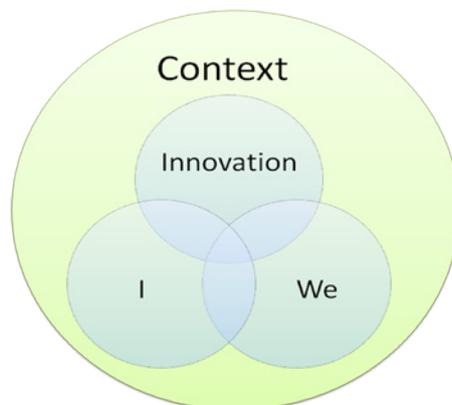
Before the workshop starts with the activities, the accordant group presents the wrap-up of the day before

Opening			
Outcome	Prepare the participants for the workshop.		
Objective	Before you start the exercises, it is important to introduce the workshop and inform the participants about the following points: objective of the workshop, programme of the workshop, focus and methodology, timetables (establish in a participatory way), rules (establish in a participatory way), etc		
Methodology	Presentation and discussion in plenary		
Organization of the exercise	Preparations	Material	Time
	Prepare the materials	Flip chart paper, markers	30 min. Plenary session
			Total: 30 min.

**Development of the exercise**

**Plenary session**

The facilitator welcomes the participants and explains the programme and objectives of the workshop and what is understood by the term “innovation”. For a better understanding of the term add some examples from the region and may you even find local word for innovation that is more comprehensive for the local people (for example “new ideas”, “novelty”, “improvement” etc.). Present the methodology of social learning processes emphasizing the importance of learning together from each other and therefore the importance of everyone’s participation. Throughout the workshop you should always seek a balance between the group, the individual and the subject. Then discuss the daily schedule and establish the rules in a participatory way. You can do a brainstorming and then add what is missing (respect the schedule, turn cell phone off or silent, integration of every participant, mutual respect, etc). Write it down on flipchart paper.



**Figure 5: The equilibrium of learning together from each other in a given context.**

## Exercise 1-1: Presentation of the participants: Interviews in groups of two

<b>Outcome</b>	Demonstrate the importance of learning to listen carefully. Allow making errors, omissions or misrepresentations helps the participants to relax at the beginning of the workshop.		
<b>Objective</b>	The participants get to know each other.		
<b>Methodology</b>	Forming groups of two that represent different groups (for example persons from the government with fisherman or scientist)		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare an example with the points to be mentioned in the presentation that should be very short.	Flip chart paper, markers (maybe symbols)	10 min. interview (5 min per person)  80 min. (2 min per person) for the presentation
			Total: 90 min.

### Development of the exercise

#### Plenary – Introduction

The facilitator explains the exercise pointing out that in every presentation they have to mention at least their expectations and motivations they have related to the workshop. (This will be valuable for the final evaluation of the workshop and to helps to clarify possible expectations that may are not related to the workshop)

The participants form groups of two.

Each participant interviews his counterpart that should tell the most important about himself and takes note of it.

Vice versa the person that was informant changes his role and listens to his partner.

Afterwards, all the participants come together and each of them presents the story of his partner.

### Option

The topic of the interview can be free, but needs to include at least the following aspects:

- What is the context of his/her work/life the interviewee is coming from?
- Why is he/she attending the workshop?
- What are the expectations related to the workshop?
- What symbol characterizes his personality the best way?
- Etc.

## Exercise 1-2: What is joint action? The story of the goat different from the others

<b>Outcome</b>	The participants get to know the basics patterns of methods to deal with and to solve conflicts. Point out the importance of joint action.		
<b>Objective</b>	Listen to the story of the goat different from the others. Point out the conclusions about it.		
<b>Methodology</b>	<p>Telling the story of the goat and plenary discussion</p> <p>The facilitators give a little introduction to the exercise. May they mention that it is difficult to theoretically define concerted action and that it's varying from context to context, but there are some common principles to consider as they will see in the story.</p>		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Choose a person that tells the story. Make sure that one of the facilitators takes note of the discussions on a flip chart (only key words)	Text and images of the story (Annex 1 – “Story: A goat different from the others”) or power point presentation	<p>15 min. story telling</p> <p>30 min. reflection in plenary</p> <p>(depending on the motivation of the participant can be longer)</p>
			Total: 45 min.

### Development of the exercise

#### Plenary session

All the participants gather around the person that tells the story.

Initiate a plenary reflection and discussion about the story. Ask the participants to share some lessons learnt. It's important to facilitate the participation of every group of actors.

Write the lessons learnt on a flip chart or cards and let the facilitator make a final comment on it.

#### Option

Instead of telling the story, you can play it as a theatre.

### Exercise 1-3: Contextualize concerted action: Present a real story

<b>Outcome</b>	Get an understanding about the diverse mechanism for concerted action. Consolidate and contextualize the activity 1-2: The story of the goat different from the others.		
<b>Objective</b>	Present a concrete experience of concerted action by the different working groups.		
<b>Methodology</b>	Work in mixed groups of 5 and presentations in plenary		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Define how to build groups of 5 mixed with local and external actors.	Flip chart paper, markers, cards with animals	30 min. preparation 25 min. (5 min. per group) to present the story 15 min for comments
			Total: 70 min.

#### Development of the exercise

#### Plenary Introduction

The facilitators explain the exercise indicating that the presentation to be elaborated in groups is reflecting a real life situation of the participants. The participants decide what part of the story they want to choose. Point out that the story can be presented through paintings, role-playing or narratives.

#### Group work

The participants form working groups of 5 persons composed by different internal and external actor groups. Each group has 30 min. to choose and elaborate a presentation.

#### Plenary

Each group presents their selected experience in plenary in a creative way. Before the presentations starts, the facilitator asks another working group to observe the presentation and to take notes of their comments and interpretations of the presentation and present it shortly in plenary. The facilitators make a round of comments and synthesis pointing out the main aspects:

- The different options of joint action
- The encountered difficulties
- The different forms of communication
- The expression of social roles

#### Comments

This exercise illustrates the diverse modes of negotiation, collaboration and communication between people with different backgrounds. It demonstrates that a concerted action is not a fixed process but there are a variety of possibilities to find a solution that satisfies all actors involved. It also shows that collaboration brings new ideas and implies compromises.

## Exercise 2-1: Identify the main changes: The historical map

<b>Outcome</b>	Coastal communities experience fast changes. The people need to adapt to these changing conditions. The historical maps visualize the changes that occurred in the past, the problems that rose and the solutions – that are seen as innovations – they have found to face it. Therefore it offers an entry point to define local innovations. It is important to point out that innovations are more than only technological changes.		
<b>Objective</b>	Elaborate a historical map about the local context. This can be technical, social, ecological or economical topics referring to the community as a whole. Make sure that one group describes the climate variability and the main climate drivers causing changes in the community and its ecosystem.		
<b>Methodology</b>	Work in mixed groups and presentations in plenary. Make sure that you have an expert for climate change in the climate change group who is familiar with the climate variability main climate drivers in the area.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare a sample on a flip chart with the timeline with the dates of key events; it can consider different aspects like history, technology, ecology, political organization, economy etc.	Flip chart paper, markers, paints and paintbrushes	10 min. introduction 10 min. plenary 100 min. group work 50 min. (10 min. per group) for the presentation 10 min. for comments
			Total: 180 min.

### Development of the exercise

#### Plenary – Introduction

The facilitator explains the exercise to be carried out by mixed groups of 5 by using an example as for example a short story of a family (to visualize the importance of the dynamics of the changes). The groups can choose the topic for the history from a wide context like landscape and environment/ political organization/ education/ cultural changes/ roles of men and women/ fishing techniques and aquaculture/ infrastructure / land rights/ economical organization/ roles of institutional support etc. Make sure that one group describes the climate variability (temperature, precipitation, wind, shoreline ocean) and the main climate drivers causing changes in the community and its ecosystem.

Pointed out that not only the changes needs to be shown but also the way the local people responded to these changes and show what capacities, resources, knowledge and strategies they have used

## Group work

The exercise can be done in the same groups as defined for exercise 1-3. One option could be that each group discuss and select an historical period that brought important changes. Another option is that the groups are free to choose a historical period and the topic of change.

Each group has 100 min. to visualize the important changes of their selected topic from the past to the present.

The facilitator guides the participants of every group in order to have a complete map including: fishing activities, changes of natural resources and environmental changes, political; changes, governmental systems (national and local), social systems (school, health), social and technical problems, etc.

## Plenary

Each group presents its historical map in plenary. After the presentation the facilitators ask the participants to mention the main lessons learned from the presentations. Discuss the innovations and ask to put a special focus on the role and the dimensions of the innovations identified in the historical maps.

## Wrap up by the facilitators

To wrap up the lessons learnt the facilitators point out that innovations can't be seen like something purely technical, but that the technical is only an entry point to analyze the occurring changes. This situation can be visualized by referring to the presented changes that are not related to technical changes (as for example the relation between man and women, education etc.) with the illustration below.



**Figure 6: The technical aspect of an innovation always brings ecological, social, economical, cultural and political changes that need to be considerate.**

## Exercise 2-2: Visualize the local context: Model of the landscape

This exercise is carried out simultaneously with exercise 2-3

<b>Outcome</b>	Demonstrate how important it is to have a vision for the future. Elaborate a joint vision of the future that reflects different perspectives of represented by the participants. The vision should be related as far as possible to the principles of sustainable development of the community and the region. Identify the innovations related to the vision for the future.		
<b>Objective</b>	Formulate and represent a vision for the future and identify the innovations required for it in the model and discuss it.		
<b>Methodology</b>	Introduction with a story  Work in 4 groups formed for exercise 1-3 do. The fifth group does exercise 2-2.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare material	Paper, cords, glue, scissors to form the objects to illustrate the innovation	10 min. introduction  100 min. group work  40 min (10 min./group) presentation in plenary  60 min. discussion in plenary
			Total: 210 min.

### Development of the exercise

#### Plenary Introduction

The introduction for exercise 2-2 and 2-3 is in plenary with all groups. Mention that the model will not only be used for this exercise, but it will be used as a point of reference during the rest of the workshop and it will be presented to the community during the fair.

#### Group work

The group that builds the model should be set together by two or three persons of the community who have a very good knowledge of the regions and two or three external participants. The model they construct should reflect the actual situation: Territory, mountains, villages, streets, rivers, lakes, and forests, the location of the school, municipality, hospitals, aquacultures and plantations etc.

Whilst this group elaborates the model of the local situation the others do exercise 2-3

## Plenary

The whole groups gathers around the model and the construction group presents it. Afterwards the other groups present the results of the exercise 2-3.

## Conclusion

The three dimensional model helps to get a global vision that helps to create a dynamic setting for discussions. Furthermore it is a fun exercise which activates the imagination of the participants. The future model also shows the possible improvements and the different roles that everyone needs to assume in order to achieve them. Furthermore it is an entry point to tackle the topic of innovations. The model will be kept over the duration of the workshop and will be a good representation for the fair at the last day.

A critical point could be for example the concentration of innovations in an area where the local participants live. It could be that the only thinking of innovations in one particular village and forget that in reality there are various villages forming a municipality. It would be good if these observations are expressed by the participants themselves. If this is not the case, it is the responsibility of the facilitator to mention it. Other critical aspects could be the effects over the ecosystem and the local society (socioeconomically differentiation or exclusion) of an innovation



Figure 7: Model of the landscape.

## Exercise 2-3: Define the horizon and identify innovations

This exercise is carried out simultaneously with exercise 2-2

<b>Outcome</b>	Demonstrate the importance of having a vision for the future. Elaborate a joint vision for the future that reflects different perspectives represented by the participants. The vision should be related to the principles of a sustainable development of the community and the region. Identify the innovations related to the vision for the future.		
<b>Objective</b>	Formulate and present a vision for the future and identify the innovations you need for it. Visualize the innovation in the model and discuss it in the plenary.		
<b>Methodology</b>	Introduction with a story.  Work with 4 mixed groups as already defined in exercise 1-3. The other group makes exercise 2-2.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare the materials.	Flip chart paper, colour paper, play-oh, markers, scissors, glue, paints and paintbrushes	10 min. introduction 100 min. group work 40 min. (10 min. per group) presentation in plenary 60 min. Discussion in plenary
			Total: 210 min.

### Development of the exercise

#### Plenary-Introduction

The introduction is carried out in plenary with all the 5 groups including exercises 2-2 and 2-3.

In order to explain the importance of having a vision for the future the facilitators tell the story of the boy who wanted to become a doctor: Since he was a child he decided that he wanted to become a doctor. Therefore he gave big effort to study at school, and university. He restrained from many pleasures and distractions with his friends to realize his dream.

The facilitators explain the objective and the procedure of the exercise. Point out that in addition to create a vision for the future one should also think about the types of innovation required to put it into action. Repeat that the changes are not only are of technological nature but always associated with the social organization, with the economy, ecosystems, culture and values (see figure in exercise 2-2)

## Group work

While one group is building the three dimensional model of the actual situation (see exercise 2-2), the other four groups do as follows:

- 1) Each group elaborates a vision for the future (this may reflect the topics discussed in exercise 2-1-the historical map). They write their vision on a flip chart paper or represent it in any other way (painting, handicraft etc.). These visions will be presented and the groups will work on it more detailed during the exercise 4-2.
- 2) Afterward they define 3 innovations that contribute to the realization of their vision for the future. These innovations can already exist and well functioning or they can be improved or they have to be developed. For example: ecotourism, waste management, reforestation, learning centre, provisioning of drinking water or electricity, land rights, health, relations with the government etc. The defined innovations can be formulated on paper or-even more entertaining and better to visualize – represented by objectives constructed with material they find around the place. The objectives than can be put on the model for the presentation.

## Plenary

The whole groups gathers around the model and the construction group presents it (see exercise 2-2).

Afterwards the other groups present their visions and put their innovations on the model giving the required explanations to the entire group.

If necessary the model can be complimented according to the contributions during the discussion. In case of contradictions between different visions for the future the facilitators visualize it in the model with a red card with a flash that indicates “tension” or “conflict”.

## Conclusion

This exercise helps to discover situations and problems that may not have been raised during the discussions for the historical map.

The three dimensional model helps to get a global vision that helps to create a dynamic setting for discussions. Furthermore it is a fun exercise which activates the imagination of the participants. The future model also shows the possible improvements and the different roles that everyone needs to assume in order to achieve them. Furthermore it is an entry point to tackle the topic of innovations. The model will be kept over the duration of the workshop and will be a good representation for the fair at the last day.

A critical point could be for example the concentration of innovations in an area where the local participants live. It could be that the only thinking of innovations in one particular village and forget that in reality there are various villages forming a municipality. It would be good if these observations are expressed by the participants themselves. If this is not the case, it is the responsibility of the facilitator to mention it. Other critical aspects could be the effects over the ecosystem and the local society (socioeconomically differentiation or exclusion) of an innovation.

## Exercise 2-4: Define the innovations to be studied

<b>Outcome</b>	Each community has its own development related to the state of and the evolution of its natural, economical and socio-cultural environment. Within this system, the communities innovate to adapt to the changing conditions. These innovations constitute the engine of the development in the community.		
<b>Objective</b>	Define 5 innovations that will be studied during the workshop.		
<b>Methodology</b>	Work in plenary. Priority setting with pebbles with different colours for men and women.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Position the model and the historical map in a way that all the participants can see it.  Make a list with all the innovation proposed in 2-4.	Pebbles in two different colours or two different types of shells etc (5 per person)	30 min. Discussion and priority setting
			Total: 30 min.

### Development of the exercise

#### Plenary-Introduction

The facilitator explains that from the innovations the participants can select five innovations that can be visited and studied more detailed during the next days of the workshop.

#### Plenary

- 1) First, the group removes the innovations that cannot be visited for any reason (distance, lack of innovation, innovation is not yet developed, etc.). These innovations are in the model but are hidden in some way.
- 2) Each participant receives 5 pebbles-one pebble for each innovation each participant wants to study in this workshop. Make sure that men and women get different coloured pebbles so that you can see any gender based priority setting. Each participant puts his pebbles next to the 5 innovations in the model which it wishes to emphasize.
- 3) The facilitator defines the five innovations that have received most of the pebbles.
- 4) In case of a tie, the group negotiates the best solution.
- 5) Form new balanced mixed groups, a group for innovation, composed of technicians and local people who know innovation.

### Exercise 3-1: The local context: Prepare the field visit

<b>Outcome</b>	Prepare a field visit to assure an optimal data collection.		
<b>Objective</b>	Design a guide for the interviews and organize the field visit that takes into account the different dimensions of innovation.		
<b>Methodology</b>	Work in the groups formed for exercise 2-4 do. Field visit: observation and interviews with different actors.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Inform the persons to be visited and check the possibilities for the visit.	Flip chart paper, cards, markers	10 min. introduction 50 min. group work
			Total: 60 min.

#### Development of the exercise

#### Group work

The groups agree on the different roles required for the field visit like secretary, translator, interviewer etc. (Hint: The external participants assume the role of the secretary and the local participants the role of the interviewer).

Each group designs a guide for the interview, considering that following information is needed:

- The social, geographical; and ecological context
- The development of innovations (like history in exercise 1-3)
- The innovators and the groups involved, the actors and social networks involved in the development and the diffusion of the innovation
- The detailed description of the technical, economical and social aspects of the innovation
- The positive and negative effects of the innovation considering the technical, economical, ecological, social and cultural aspects.
- Limitations regarding climate change adaptation

#### Plenary

Each group presents its guide. The facilitator need to make sure that each group considers the multi dimensions of the innovation process.

#### Option

It is also possible to present and discuss the questionnaire in the group with the help of a facilitator in each group.

## Exercise 3-2: Recognize the innovations: Field visit/ market place

<b>Outcome</b>	Study and understand the development, characteristics and dynamics of the innovations.		
<b>Objective</b>	Do the interviews according to the guide prepared in the morning.		
<b>Methodology</b>	Work in mixed groups defined in exercise 2-4 do.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Ensure the logistic	Notebooks, voice recorder, cameras, flip chart paper, cards, markers	300 min. visit and interview  (depending on the distance, this exercise may need much more time)
			Total: 300 min.

### Development of the exercise

#### Group work/ visits

The groups for the visits remain the same as for the previous exercises. The interviews are conducted according to the guide prepared in the morning.

The facilitators who accompany the work group should take special care to ensure the following aspects:

- Only interfere the interview with the innovators when the group deviate from the guide
- Ensure the participation of all members of the group
- Assure that all the information required for the assessment of the innovation is collected no matter whether it is considered in the guide or not (adapt to the dynamic of the interview without losing track of its objectives)
- Avoid delays in time in order to facilitate the systematization of the collected information.

### Option

#### Market place

If you can't arrange a fieldtrip during the PLI, have a market place instead. You still can go on a field trip afterwards and make it to an activity in the action plan. Try to find resource persons for the market place that have knowledge about the local context. If you can't find resource person in time, try to find out as much as possible on the topics you suppose to be relevant for the innovations.

Assign a resource person for each aspect of the innovation (technological, ecological, economic, climate change/disaster risk, socio-political, cultural/ethical/health). Each group can spend 10-20 minutes with each of resource persons and ask the corresponding questions.

### Exercise 3-3: Share the conclusion from the field visits/market place

<b>Outcome</b>	Share the important outcomes of the field to keep it in memory.		
<b>Objective</b>	Narrative report of the seen and discussed, highlighting the most important aspects and possible limitations.		
<b>Methodology</b>	Work in 4 groups formed for exercise 1-3 do. Presentation in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare material	Flip chart paper, markers	10 min. group work  50 min (10 min./group) presentation in plenary
			Total: 60 min.

#### Development of the exercise

##### Group work

The groups meet to discuss the impressions and discussions held during the field visit that they want to present in plenary.

##### Plenary

Ask a representative of each group to share the most important impressions and discussions held during the field visit. Try to keep a relaxed atmosphere to facilitate a free exchange of experience.

## Exercise 4-1: Systemize the collected information

<b>Outcome</b>	Systematize and evaluate the innovations studied the previous day, emphasizing the positive and negative roles of the actors involved.		
<b>Objective</b>	Design a systematic matrix (see example below)		
<b>Methodology</b>	Work in the same groups as defined in exercise 2-4 and presentation in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Structured flip chart (see graphic below)  Make sure that every group is supported by a facilitator.	Flip chart paper, markers	30 min. Introduction  100 min. Group work  90 min. Presentation and discussion in plenary
			Total: 120 min.

### Development of the exercise

#### Plenary-Introduction

The facilitator explains the exercise in the plenary. The groups remain the same as during the field visit.

The facilitator points out that innovation cannot be seen as something purely technical, but they are always associated with the social organization, economy, cultures and values, and natural resources. The facilitator shows again the tree of innovation from exercise 2-1.

It is also important to note that the development of an innovation is not a linear process but a circular process including possible feedbacks...

#### Group work

Each group systemize the studied innovations according to these five point:

- 1) Context of the innovation (through a drawing, description etc.)
- 2) History of the innovation (through a timeline – see exercise 2-1)
- 3) Characteristics of the innovation

Characteristics of the innovation	
Technical	...
Social	...
Cultural	...
Ethical	...
Ecological (incl. Climate Change)	...
Economical	...
Others	...

4) Actors involved in the innovation

Actors involved in the innovation	
A1	...
A2	...
...	...
Ax	...

5) Positive and negative impacts of the innovation

Negative impacts of the innovation	Positive impacts of the innovation
...	...
...	...

**Plenary**

Each group presents its results.

After the presentation of each group the facilitators asks the other groups to comment or complement it. If necessary the facilitator summarizes the discussion to clarify the most important points of the presented innovation.

**Optional**

The circular process can be explained by using prepared cards according to the illustration below. Specify that the groups are free to modify or optimize the model according to their own opinion.

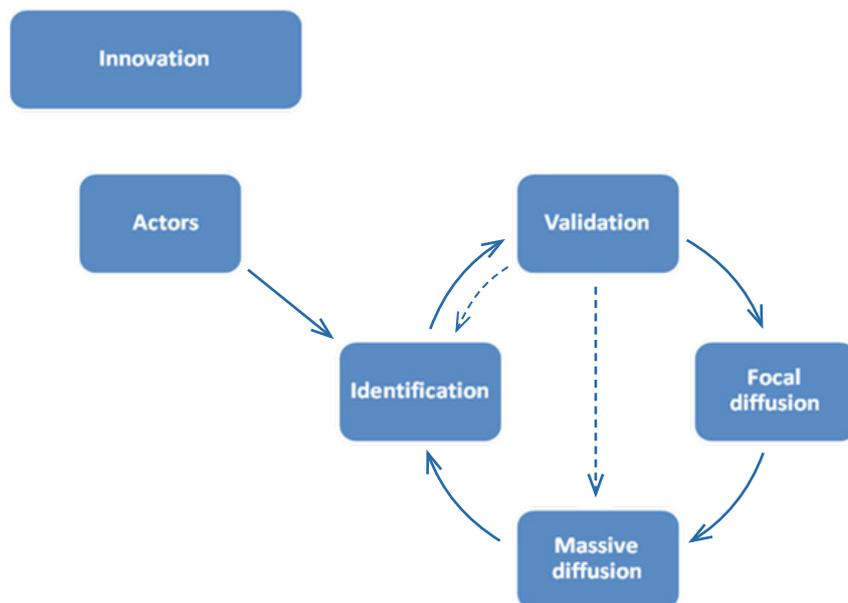


Figure 8: Circular innovation process.

## Exercise 4-2: Assess and prioritize innovation

<b>Outcome</b>	Show that the assessment of the innovations depends on the people who make it and that the definition of support for local innovation requires a dialog between different actors.		
<b>Objective</b>	Determine the value and priority of innovations for different stakeholder groups		
<b>Methodology</b>	Work in new groups composed of participants of the same stakeholder group (fisherman, women, youth, technicians etc.) and return to the plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare a card for every innovation  Define the composition of the groups.	Flip chart paper, cards, marker	10 min. Introduction  30 min. Group work  50 min Plenary
			Total: 90 min.

### Development of the exercise

#### Plenary – Introduction

The facilitator explains the objective and the procedure of the exercise. Explain that you form groups of no more than 5 people belonging to the same group of actors (fisherman, women, youth, technicians etc.).

Each group gets twice as many points as there are innovations. Each group chooses a symbol that counts as one point (stone, seed, shell, plant etc.) and puts them on the flip chart that represents their favorite innovation.

#### Group work

The groups make the prioritization of the innovations according to the following procedure:

- 1) Each group prioritizes the innovations spontaneously by putting the point on the flip chart with their preferred innovation. The amount of point assigned to each innovation is free.
- 2) Afterwards each group formulates the reasons which led to their prioritization. They also think about how to present it in plenary. If there are any contradictions within the group, they should also share it with the plenary.

## Plenary session

Then opened a discussion on the interests that should be considered primarily a program to support local innovation. Each group presents its own prioritization explaining also the reasons behind it. The facilitator comments the differences between the prioritization, taking into account the principles of sustainable development:

- Point out that the valuation depends on the specific interests and knowledge of the each individual or actor group
- The interests of the different groups have to be communicated (what has been achieved through sharing their reason for the prioritization)
- The prioritization within a framework of cooperation between different groups requires a consultation process that starts by finding for a common ground.

Open a discussion on the interests that should be considered primarily in a promotion programme to support local innovations. A consensus on the prioritization can be established through a deliberative process.

## Exercise 4-3: Develop a district vision

<b>Outcome</b>	Show that for the development of innovations one also has to consider the larger context (district, municipality, provincial etc.) from where they could get support to optimize the local ideas.		
<b>Objective</b>	Generate a district vision for development based on all the information collected until this moment.		
<b>Methodology</b>	Working in the same groups as in exercise 4-2 and discussion in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare 3 copies of each vision elaborated in exercise 2-3, so that every group has the 4 versions.	Flip chart paper, markers	10 min. introduction 60 min. group work 30 min. presentation in plenary
			Total: 100 min.

### Development of the exercise

#### Plenary – Introduction

In order to visualize the importance of changing the perspective the facilitator asks a participant to have a seat in front of the plenary. The facilitator explains him that he has to simulate driving a car/motorbike of his choice. After asking him where he wants to go, he pushes off. First he is on a bad dirt road with many curves and he need to drive very slowly. The facilitator asks him how many meters he can look ahead (very few meters). Then they come to a very good, paved road. The facilitator asks him to speed up and when he is driving very fast he asks him how many meters he can see ahead (much further than before).

This is emphasizes that the perspective used so far for the innovations are like the first part on the bad road and the elaboration of a district vision needs to look much further.

#### Group work

- Each group receives the 4 visions elaborated in exercise 2-3.
- Based on these visions, each group makes a single district vision.

#### Plenary session

The groups present their vision on district level. The facilitator comments the similarities and differences between the visions.

## Exercise 4-4: Agree on a single district vision

<b>Outcome</b>	Remember and reinforce the importance of consultation from the first day. View the difficulties and potentials arising from a specific agreement.		
<b>Objective</b>	Initiate a process of consultation based on the different versions made the exerciser 4-3.		
<b>Methodology</b>	2 mixed groups with equal number of participants: One group is acting in plenary and the other group observes. Discuss the observations in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Define the composition of the two groups: actors and observers.  Define the issues for the observers. Inform the observers about their role.	Visions developed district in the exercise 4-3, flip chart paper, cards, markers	30 min. Discussion/ consultation meeting  30 min. comments from observers.
			Total: 60 min.

### Development of the exercise

#### Plenary – Introduction

Without speaking of consensus, the facilitator explains the purpose and procedure of the exercise and forms groups: one group (half of the participants), consisting of technicians, farmers and representatives of the municipality, simulate an assembly. The task of this assembly is to reformulate a unique view from the views developed in exercise 4-3.

The group's other half is invited to see what happens. They are instructed to observe (by subgroups) the following (the assembly's group mustn't know): power management, degree of participation, openness, conflict, language, respect in relation to the ideas of others, and so on. Each observer receives a focus issue and writes down his comments on cards.

#### Plenary session

The actors who are part of the assembly have 30 minutes to formulate a vision for the district. The observers report their observations to the group of the assembly and start a discussion.

### **Final comments from the facilitators**

Highlights the achievements and shortcomings of the consultation process based on the observations made by the observers and the corresponding defenses and clarification made by the assembly. It is very likely that the technicians take the initiative and dominate the communication process displacing local actors in a way that re-emerge as the traditional roles and hierarchies between technicians and local actors. All this observations help to realize that they still need to incorporate elements of communication that has been practiced during the workshop. You can highlight very clearly that working in non-mixed group has the great disadvantage that easily loose the context of communication. For this reason the following work sessions will be in mixed groups again.

## Exercise 5-1: Steps to support and promote local innovations

<b>Outcome</b>	Visualize ideas, strategies, challenges and factors that can be found in supporting and promoting local innovations.		
<b>Objective</b>	Define the factors, strategies and actors needed to support innovation.		
<b>Methodology</b>	Working in the same mixed groups as defined in exercise 2-4. Discussion in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Structured flip[ chart paper (see below)	Flip chart paper, cards, markers	30 min. Introduction: dynamics of the wall  60 min. group work  90 min. plenary presentation
			Total: 180 min.

### Development of the exercise

#### Plenary-Introduction

The moderator explains the purpose and procedure of the exercise. A way to visualize the importance of having a strategy is the game of the wall. Form two groups; one will be the wall, the other the attackers who want to break the wall. Each group defines a strategy (the wall to resist the attackers to pass) without revealing it to the other. With the command of the facilitator the game starts.

#### Group work

According to the scheme given by the facilitators (see below), each group elaborates a flip chart paper with the factors, strategies and actors needed for the innovation they have studied.

What do we need? (technical, cultural, social, ecological and economical etc, factors)	How can we do it? (strategies)	Who will do it? (actors)
...	...	...
...	...	...
...	...	...

#### Plenary

Each group presents its results. After each presentation the facilitators give the floor to members of other groups to discuss and/ or supplement the material presented.

## Exercise 5-2: Develop an action plan to support innovations

<b>Outcome</b>	Realize and finalize the inter-learning process to define an action plan to support local innovation.		
<b>Objective</b>	Develop and discuss an action plan to support the local innovations taking into account roles, resources and responsibilities of each actor involved.		
<b>Methodology</b>	Work in the same groups as in exercises 2-4 and discussion in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Structured flip[ chart paper (see below)	Flip chart paper, cards, markers	20 min. introduction 70 min. group work
			Total: 90 min.

### Development of the exercise

#### Group work

After an explanation of the facilitators, each group prepares a detailed plan of the innovation they have studied on the basis of the structure established in the following table:

Innovation...			
Who? (actors and roles)	What? (activities)	How? (required means)	Why? (expected changes)
Municipality			
Communities			
Families			
Committees			
Innovators			
NGO			
School			
Governmental institutions			
Others			

Attention: The moderators of the groups should ensure that the plan is as detailed as possible and that it is a result of discussion and consensus among participants representing different stakeholder groups.

#### Plenary session

The work of the groups will be briefly discussed and commented by moderators.

### Exercise 5-3: Preparing the local innovations exhibition

<b>Outcome</b>	Outline the main activities and outcomes of the workshop to disseminate information to a larger audience of the region and share the experiences with others in the community and municipality.		
<b>Objective</b>	Prepare an attractive exhibition to socialize with other people, institutions and local authorities who did not participate in the workshop.		
<b>Methodology</b>	Work in the same groups as in exercise 4-2 and discussion in plenary.		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Organization of the next day: invitations, place, food, artistic performances (music, theater) etc.  Preparation of the material required for the exhibition	Flip chart paper, photographs, paintings, scissors other materials	240 min. Preparation of the exhibition
			Total: 240 min.

#### Development of the exercise

The rest of the day is dedicated to preparing and mounting the exhibition on local innovations, activities and results that came out of the 4-day workshop. Results are presented attractively. This exhibition will be open for the entire community of the region.

#### Group work

Each group agrees on the most attractive way to present their innovation studied: charts, pictures, model of the future, other models, the account of the visits, the story of the goat, theatre, songs, field trip, etc.

## Exercise 6-1: Exhibition

<b>Outcome</b>	Opening the workshop activities to the community. Present and share experiences and the results so that a broad public can understand.		
<b>Objective</b>	Share experiences and outcomes of the workshop with the community		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	<p>Check the installation of the exhibition.</p> <p>Check that everything is ready to welcome the community and authorities</p>	Material prepared during exercise 5-3	Half a day or more, depending on the program developed
			Total: Half a day

### Option

If you don't have enough time to have a fair, postpone it and declare it as one of the activities in the action plan.

## Exercise 6-2: Final evaluation

<b>Outcome</b>	Evaluate the activities, methodology, atmosphere, and development of the workshop.		
<b>Objective</b>	Give your final assessment of the activities and the workshop.		
<b>Methodology</b>	Final assessments on specific aspects with fun meter		
<b>Organization of the exercise</b>	<b>Preparations</b>	<b>Material</b>	<b>Time</b>
	Prepare the fun meter and flip chart paper for the final evaluation	Flip chart paper, stickers	30 min final evaluation
			Total: 30 min.

### Development of the exercise

#### Plenary

Each participant receives one point for each issue to be evaluated. The participants stick the point in the respective sector on the fun meter. The issues to evaluate may include:

				
Was the workshop useful?				
Did you like the style of the workshop?				
Did you get the opportunity to participate and decide?				
Are you satisfied with the action plan?				
Did you understand the terms that have been used?				
Did you like the venue?				
Was the duration of the workshop ok?				
Etc.				

In addition, participants express at least one positive aspect of the activities or development of the workshop and one aspect that could be improved (in groups or individually). Finish with a plenary discussion etc.

#### Option

You can also adapt exercise 1-1 for the final evaluation of the workshop. For this purpose you can change the questions from exercise 1-1:

- To what extent were your expectations met?
- What was most/ least useful?
- What would you do differently?

# Annex

## A. Story: “A goat different from the others...”

Once upon a time the village suffered a very severe drought. As the villagers had not enough food for their goats, their flock decimated. The last six goats were dying of hunger when they escaped from the village. Tightened together in couples, each couple was taking a different path in search of food.

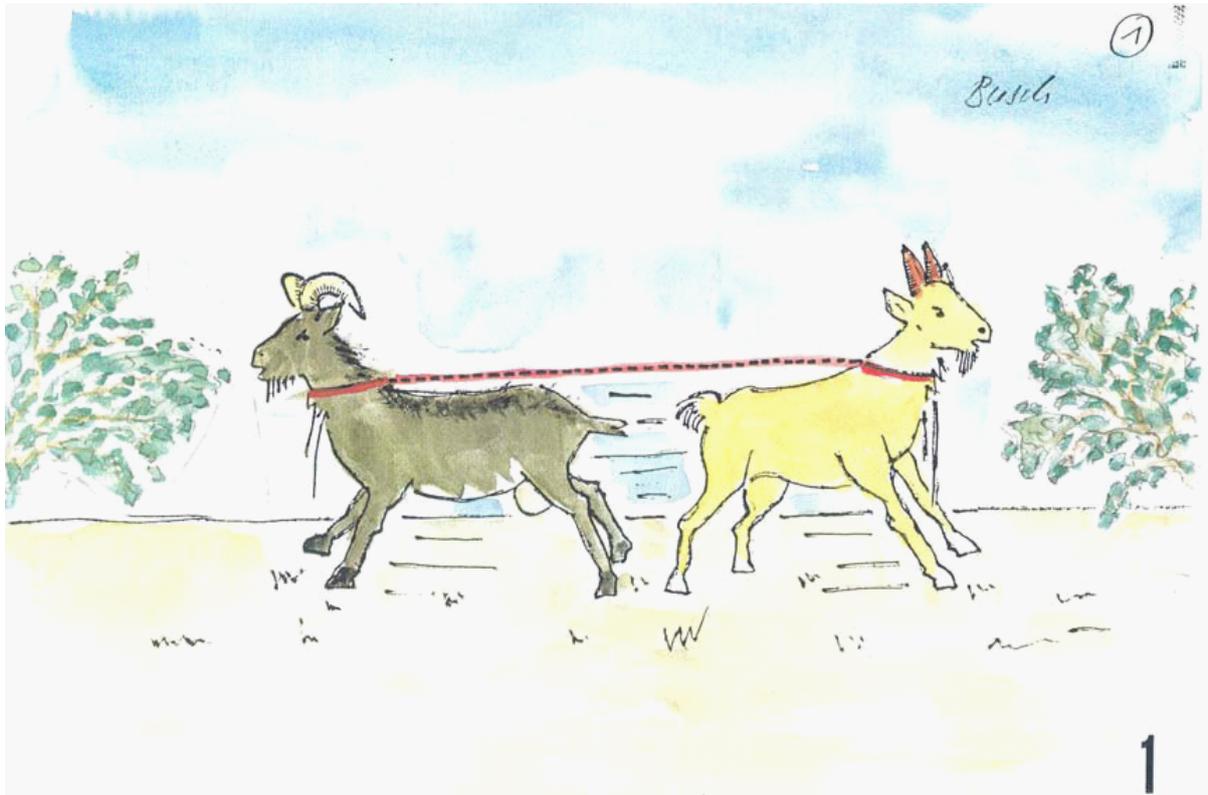
After several hours of searching, the first couple of goats pass by bushes on both sides of the road. The bushes are with soft and juicy leaves. Each goat tries to approach the bush that is closest, but the rope is not long enough that both goats could reach the bush they are heading to. Whilst each one is pulling on its side, they stop each other mutually. They are just a few steps from the bushes and each tries to by pull on his side with all his strength to reach her bush. As they are equally strong, they are pulling long hours until both of them die of exhaustion without being able to eat even a leaf.

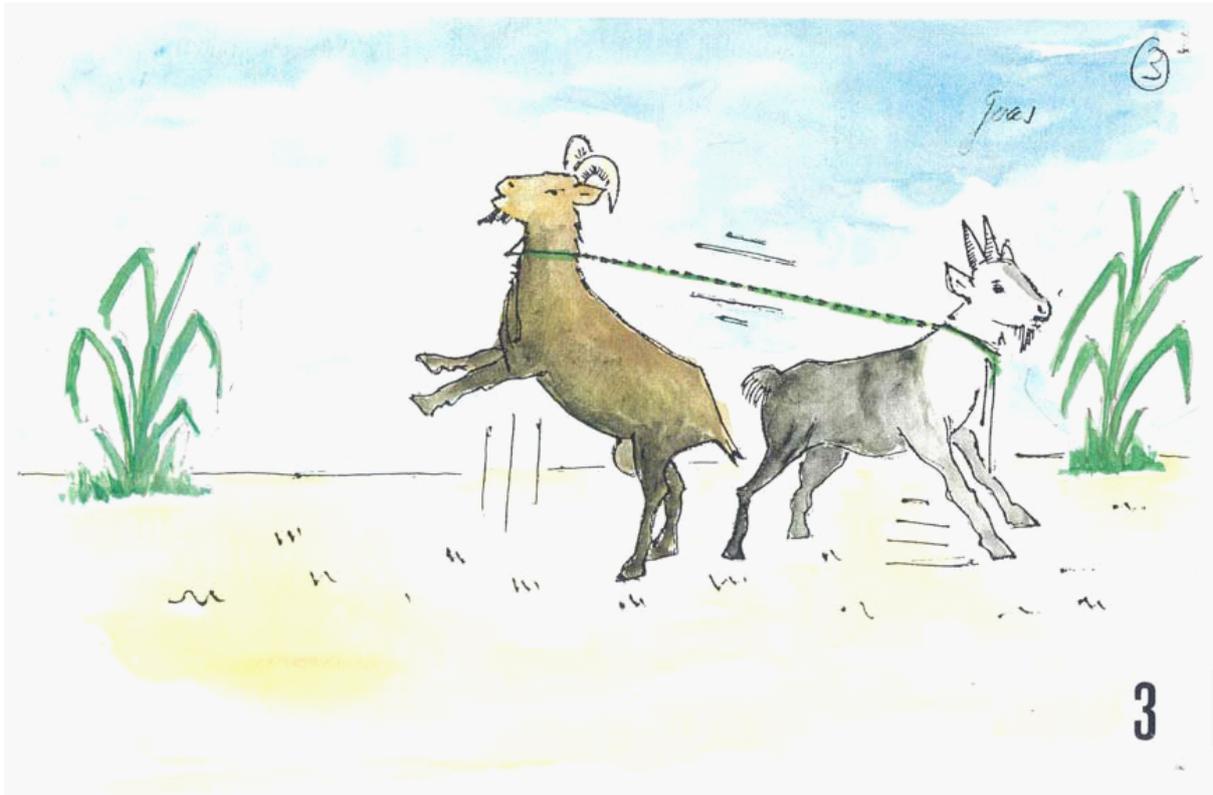
After a long walk in the bush, the second pair of goats finds a clump of grass on both sides of the road. Without hesitating, the goats run, each on its side to the tasty food. Just a few steps separate them from the grasses. But as they are pulling in opposite directions, and the rope is too short, therefore they cannot reach the grass. They are pulling with all their power for several hours until the weaker goat dies of exhaustion. Still exhausted from the effort the stronger goat is savouring the grass. Fully satisfied, the goat continues his way pulling his dead partner behind him. While the body of the dead goat became more and more fetid, and became always heavier, the goat died of exhaustion.

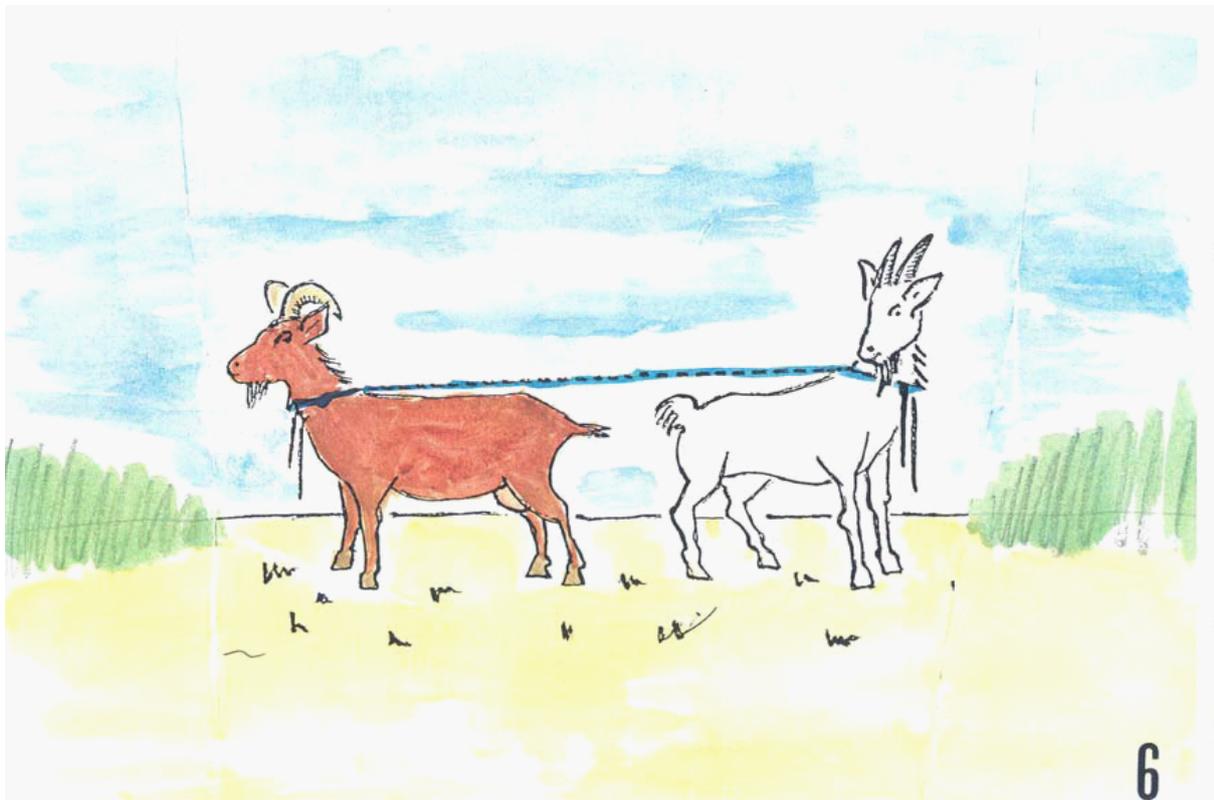
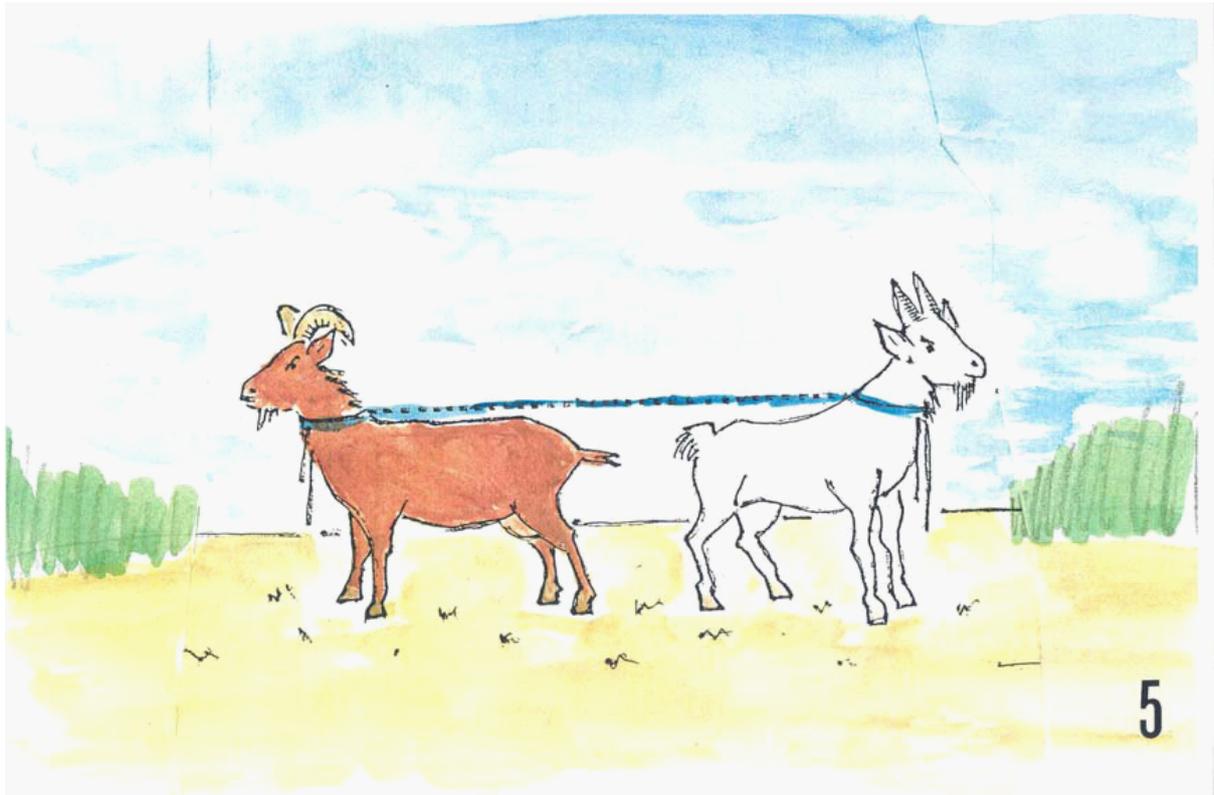
Meanwhile, the third pair of goats had discovered a small patch of green grass that stretched on both sides of the road. Each goat run to the grass that is closest. But the rope that bound the two goats, again, prevented them from reaching the grass. They were also pulling on each side until one of the two goats turned to see his partner and saw the grass on the other side of the road. Then he went with the other goat to graze peacefully first on the right side, then the grass on the left of the road.

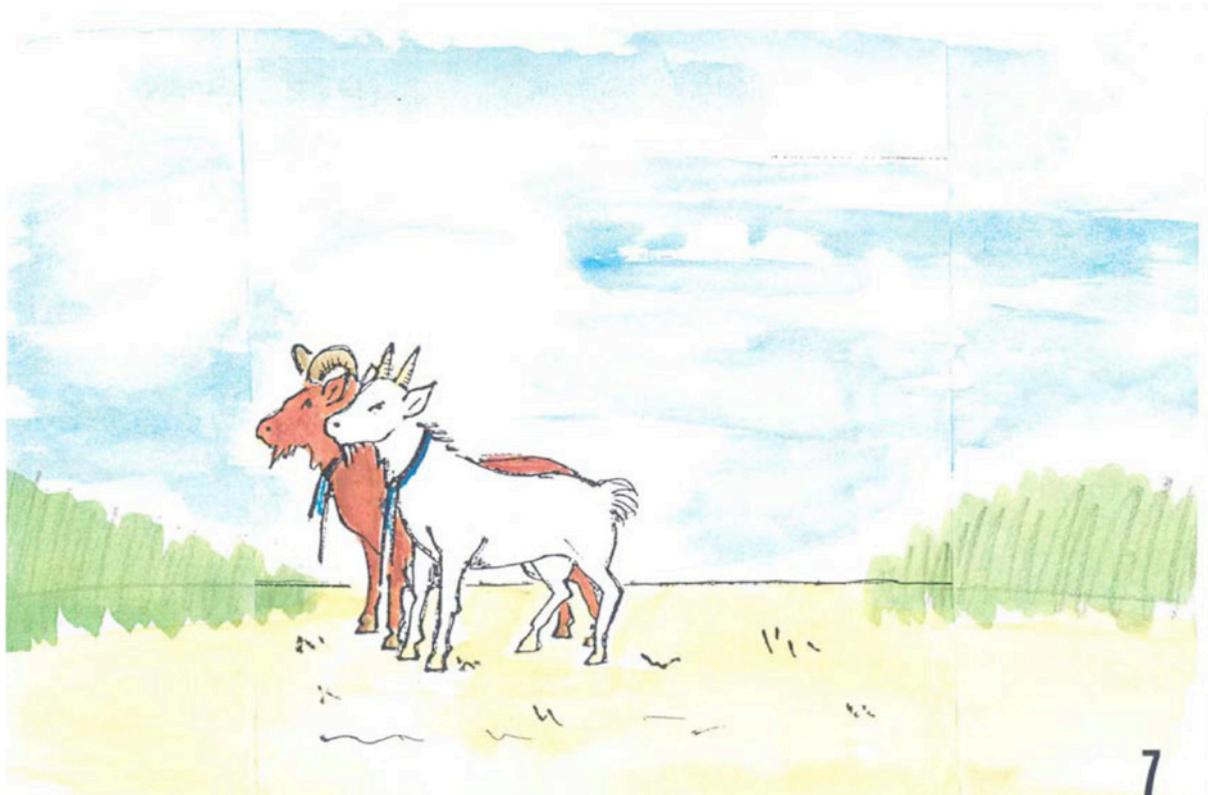
That is where the people of the community who were seeking their animals found the two goats. Thanks to a goat less stubborn than others, the community X now is envied by their neighbours for their large cattle.

B. Pictures of the story: "A goat different from the others..."









## C. Climate change projections

Projections for climate change can be obtained from the website of the Intergovernmental Panel for Climate Change (IPCC) ([www.ipcc.ch](http://www.ipcc.ch)) or from your respective UNFCCC National Communication (NC) coordinators.

## D. Glossary

**Adaptation to climate change (IPCC 2007b):** Adjustment in practices, processes or structures to take into account changing climate conditions, to moderate potential damages, or to benefit from the opportunities associated with climate change.

**Adapting:** (in relation to climate change impacts) (IPCC 2007b): The ability of a system to adjust to climate change (including climate variability and extremes) to moderate potential damages, to take advantage of opportunities, or to cope with the consequences.

**Climate (IPCC 2007b):** Climate in a narrow sense is usually defined as the ‘average weather’, or more rigorously, as the statistical description in terms of the mean and variability of relevant quantities over a period of time ranging from months to thousands or millions of years. These quantities are most often surface variables such as temperature, precipitation, and wind. Climate in a wider sense is the state, including a statistical description, of the climate system. The classical period of time is 30 years, as defined by the World Meteorological Organization (WMO).

**Climate change (IPCC 2007b):** The Framework Convention on Climate Change (UNFCCC), in its Article 1, defines climate change as: ‘a change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods’. The UNFCCC thus makes a distinction between climate change attributable to human activities altering the atmospheric composition, and climate variability attributable to natural causes.

**Climate drivers:** Climate drivers refer to the element of climate that causes the most change in the coastal zone. While the coast may respond to a number of climate variables, climate drivers are the climate elements that dominate coastal response. For example, climate drivers may include storms, strong wind, or water level (tides).

**Climate change impacts (MFF 2008):** The effects of climate change on natural and human systems. Depending on the consideration of adaptation, one can distinguish between potential impacts and residual impacts: Potential impacts: all impacts that may occur given a projected change in climate, without considering adaptation. Residual impacts: the impacts of climate change that would occur after adaptation.

**Climate change projections (IPCC 200a):** A projection of the responses of the climate system to emission or concentration scenarios of greenhouse gases and aerosols, or radiative forcing scenarios, often based upon simulations by climate models. Climate projections are distinguished from climate predictions in order to emphasize that climate projections depend upon the emission/concentration radiative forcing scenarios used, which are based on assumptions concerning, for example, future socio-economic and technological development that may more may not be realised and are therefore subject to substantial uncertainty.

**Climate system (IPCC 2007c):** The climate system is the highly complex system consisting of five major components: the atmosphere, the hydrosphere, the cryosphere, the land surface and the biosphere, and the interactions between them. The climate system evolves in time under the influence of its own internal dynamics and because of external forcing such as volcanic eruptions, solar variations and anthropogenic forcing such as the changing composition of the atmosphere and land use change.

**Coastal system behaviour:** This term is used to describe the way the natural coastal system changes in response to changes in weather and ocean conditions. For example, in area of coastline may erode during storm events, or may become flooded during extreme high tides. Sediment may move alongshore under certain wind directions. Patterns of coastal behaviour under changed climatic conditions. Coastal behaviour can also referred to as “process-response relationship”, where weather or ocean conditions (process) result in change (response) in coastal form.

**Climate variability (IPCC 2007b):** Climate variability refers to variations in the mean state and other statistics (such as standard deviations, the occurrence of extremes, etc.) of the climate on all spatial and temporal scales beyond that of individual weather events. Variability may be due to natural internal processes within the climate system (internal variability), or to variations in natural or anthropogenic external forcing (external variability). See also Climate change.

**Coping:** is a reactive, short-term action in response to observed climate changes and variability and alleviating impacts.

**Hazard:** A potentially damaging physical event, phenomenon, or human activity that may cause loss of life or injury, property damage, social and economic disruption, or environmental degradation.

**Livelihoods<sup>2</sup>:** Livelihood comprises the capabilities, assets and activities required for a means of living. It includes people’s values and aspirations as well as their immediate material needs for living. A livelihood is sustainable when it can cope with and recover from stress and shock, and maintain or enhance its capabilities and assets, without undermining the natural resource base and the sustainability of economic, socio-cultural and political development. Livelihoods can be appraised by five sets of indicators: human capital, social capital, physical capital, financial capital, and natural capital. The livelihood concept is applied mainly at the level of households and local communities.

**Maladaptation:** An action or process that increases vulnerability to climate change-related hazards. Maladaptive actions and processes often include planned development policies and measures that deliver short-term gains or economic benefits but lead to exacerbated vulnerability in the medium to long-term (UNDP 2011)

**Mitigation:** In the context of climate change, mitigation is a human intervention to reduce the source or enhance the sink of greenhouse gases (UNFCCC 2011).

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<sup>2</sup> Source: adapted from Department for International Development (DFID) and Institute for Development Studies (IDS) ([www.livelihoods.org](http://www.livelihoods.org)), and Wiesmann U. 1998. *Sustainable Regional Development in Rural Africa: Conceptual Framework and Case Studies from Kenya*. African Studies Series 14. Berne: Geographica Bernensia.

**Resilience:** The ability of a social or ecological system to absorb disturbances while retaining the same basic structure and ways of functioning, the capacity for self-organisation, and the capacity to adapt to stress and climate change

**Sea-level rise (IPCC 2007b):** An increase in the mean level of the ocean. Relative sea-level rise occurs where there is a local increase in the level of the ocean relative to the land, which might be due to ocean rise and/or land level subsidence. Eustatic sea-level rise is a change in global average sea level brought about by an increase in the volume of the world ocean. In areas subject to rapid land-level uplift, relative sea level can fall.

**Social learning processes:** According to recent progress in development research, social learning processes can be understood as the simultaneous transformation of cognitive, social and emotional competences as well as of attitudes and values related to collective or individual social actors, emerging from the joint search for more sustainable management of natural resources at the interface between the world of rural actors, development professionals and local public administration.

**Sustainable development:** The concept of sustainable development includes three dimensions: the economic, socio-cultural/policy, and ecological dimensions. Sustainable development is achieved if development in all three dimensions is sustainable. These dimensions form a triangle that defines how inter-and intra-generational equity can be achieved. Sustainable development has two distinct aspects: the aspect of interactions and relations, and the aspect of value setting and hence of perception. A focus on the first implies examining the processes that occur within and between the three dimensions of sustainability, while a focus on the second aspect entails dealing with the values assigned to these processes; it is thus normative. As norms differ between societies (and over time), sustainable development can only be meaningfully understood and negotiated in a concrete social context.

**Vulnerability:** The conditions determined by physical, social, economic and environmental factors or processes, which increase the susceptibility of a community to the impact of hazards (IPCC 2007c). Further, vulnerability is the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including climate variability and extremes. Vulnerability is a function of the character, magnitude, and rate of climate change and variation to which a system is exposed, its sensitivity, and its adaptive capacity (IPCC 2007b).

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# About

## Building Resilience to Impacts of Climate Change-Coastal Southeast Asia (BCR)

Climate change is a global challenge but a lot can be done at the local level to minimize impacts and capture opportunities. IUCN's Building Resilience to Climate Change Impacts-Coastal Southeast Asia Project, funded by European Union, aims to increase adaptive capacity of people and the ecosystems on which they depend to cope with the anticipated impacts of climate change and plan for Disaster and Risks Reduction, through sound governance and planning.

The project will strengthen the ability of local government and local people to plan for, and adapt to, future climate risks in eight coastal provinces between Ho Chi Minh City and Bangkok: Can Gio, Ben Tre, Soc Trang, and Kien Giang in Vietnam; Kampot and Koh Kong in Cambodia; and Trat and Chanthaburi in Thailand.

More on BCR: [www.iucn.org/building-coastal-resilience](http://www.iucn.org/building-coastal-resilience)

## Mangroves for the Future

Mangroves for the Future (MFF) is a unique partner-led initiative to promote investment in coastal ecosystem conservation for sustainable development. It provides a collaborative platform among the many different agencies, sectors and countries who are addressing challenges to coastal ecosystem and livelihood issues, to work towards a common goal. The initiative uses mangroves as a flagship ecosystem in recognition of the destruction caused to mangroves by the tsunami, but MFF is inclusive of all coastal ecosystems. It initially focused on the countries worst-affected by the tsunami; India, Indonesia, Maldives, Seychelles, Sri Lanka, and Thailand. MFF has recently expanded to include Pakistan and Viet Nam. Its long-term management strategy is based on identified needs and priorities for long-term sustainable coastal ecosystem management.

MFF seeks to achieve demonstrable results in influencing regional cooperation, national programme support, private sector engagement and community action. This will be achieved using a strategy of generating knowledge, empowering institutions and individuals to promote good governance in coastal ecosystem management.

Learn more at: [www.mangrovesforthefuture.org](http://www.mangrovesforthefuture.org)

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