**Ministry of Tourism and Environment, Albania**

**Project Reference No: 5386**

**ALBANIA: "BUILDING THE RESILIENCE OF KUNE-VAINI LAGOON THROUGH ECOSYSTEM-BASED ADAPTATION (EbA)"**

**(SPECIAL CLIMATE CHANGE FUND)**

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**Ecosystem-Based Adaptation Training Manual for Albania**

**November 2018**



**Ecosystem Based Adaptation**

**Training Manual for Albania**

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# Objective of the Training

## Overview and Purpose

The overall objective of the consultancy is to develop an Ecosystem Based Adaptation (EbA) support training course which is delivered to help train and inform the staff of The Ministry of Tourism and Environment (MoTE)and the Regional Agency for Protected Areas (RAPA) in EbA and coastal risk management(CRM) and how this needs to be embraced within current EIAprocedures.

## Outcome of the Training Task

The expected outcome of the EIA/SEA Training Task is to provide institutional support to help them understand and embrace the procedure and use of various coastal risk “tools” and how they apply for coastal areas which may be used to support developmental planning in the future (and where EIA shall be required). The key outcome of the training consultancy is to contribute towards strengthening the institutional capacity of Albanian stakeholders within the context of meeting the objectives of the project with regards towards formulating and appraising climate resilient development on the coast that embraces EbA.

## Format of the Training Manual

This Handbook is structured into the following sections.

* Section 2: EbATraining “Toolkit” Approach;
* Section 3: EbATraining Manual “Guidebook for Facilitators”
* Section 4: EbA“Handbook” for Participants *(the “Sourcebook” and “Knowledge Packages”);*

# EbA Training Toolkit Approach

## The Training Approach Outline

### Strategic Approach

The approach to the training shall introduce specific “tools” that could be used to help with coastal riskand EbA related understanding to help improve future coastaldecision making to bettercoordinate, facilitate, integrate and cooperate on key matters with private developers etc. The types of “tools” to be introduced and focused on include the following:

* Knowledge Packages to improve Coordination and Good Governance for EbA planning in Albania;
* Knowledge Packages to increase Community Awareness on EbA and coastal adaptation (how to conduct Community-based Vulnerability and Risk Assessments and how to initiate interesting education tools for schools etc);
* Knowledge Packages to address project Risk Reduction and Impact Screening (adapted from World Bank *“Climate and Disaster Risk Screening Tools – 2014)*;

The above approach is designed to help MoTEto develop their own “Train the Trainer” package on EbAs, whereby the eventual outcome of the Coastal EbA Toolkit shall be for identified staff members to deliver training programmes to identified stakeholder groups (e.g.: private developers) thus improving national capacity and awareness on EbA, coastal resilience and adaptation issues and practical approaches” that are:

* easy to follow and understand (non-technical),
* easy to use and introduced different techniques for learning and finally,
* effective and long term in outlook.

The EbATraining Handbook and its subsequent delivery shall aim to support MoTEto help provide guidance on a range of information, tools and resources needed to integrate EbA principles into current approaches and from this, to help other organisations /agencies in Albania on how to better design and produce EbA interventionson the coast in a more strategic manner. It is, however, NOT the intention of the Handbook to re-invent or replicate the existing Albanian practices. The exercises will, however, invite all participants to consider current and future developments in Albaniaand what may need to be addressed /communicated/actioned in the future.

**(*NB: the Training Manual produced represents a first edition that will need to be regularly updated and reviewed during 2019 to accommodate new information produced in the country).***

### Training Modules

The training modules are designed to mirror the four (4) Climate Change and EbA related “screening” stages. These are listed below and presented in Figure 2.1:

* Module 1: Introduction to Climate Change and Coastal Risk Management
* Module 2: “Potential Impact” (Day 1: afternoon session);
* Module 3: “Adaptive Capacity” (Day 2:morning session and field trip to Kune-Vaini);

The approach to the training shall incorporate (if possible) a series of actual, proposed or conceptual examples from around Albania (Kune-Vaini lagoon in particular).The proposed exercises shall provide training ideas on how to communicate coastal risk and EbA approaches and required capacity techniques to help *“replicate the message”* to a wide range of stakeholders (i.e.: similar to a “train the trainer” concept).

## The Training Handbook Content and Format

### Handbook Format

The Training Handbook is divided into two main parts (see Sections 3 and 4). The first is the **PART A: the “Guidebook”)** which is a facilitators’ guide to use in the future. This contains a number of modules, each comprising of a number of sessions. The Handbook represents a step-by-step instruction on how to facilitate sessions and modules. Each module contains an overall summary plus session titles. Each session descriptor contains learning objectives, key points to remember, methods to be used, a step-by-step process on how to deliver the session, materials needed in delivering the session, duration (how long will it take to effectively deliver the session), tips to facilitators and required readings. The scope and depth of the approach can be adapted to reflect specific needs and constraints of Albanian stakeholders over time. The modular approach provides for an initial basic analysis of the relevance of EbA in coastal areas (i.e.: the “Coastal EbA Toolkit”).

**PART B: the “Guidebook”)** which is a facilitators’ guide for staff to use in the future.

### Training Delivery

The training delivery shall incorporate a series of actual, proposed or conceptual coastal EbAexamples from Albania where possible. Trainees shall then learn to appreciate what policy response plus coastal adaptation techniques are available to mitigate or adapt the proposed project case example outcome to better instill CCA/EbA into EIA design and Environmental Management Plan (EMP) details.

The three stages highlighted in Figure 2.1 shall represent the key Modules for the training event. These consist of carefully sequenced EbA steps. An Overview to the proposed training sessions is set out below in Table 2.2 as follows (with description text). Table 2.3 presents the detailed agenda timings for the 3 day training event.

|  |  |  |  |
| --- | --- | --- | --- |
| **Module Title** | **Training Session Title** | **Step Description** | **Time of delivery** |
| **Module 1: Introduction to Climate Change, Coastal Risk Management and EbA**  **Day 1** | Session 1.1: Understanding Coastal Risk Management | This starter session is designed to outline the key principles of CCA, EbA and how these should be considered within the context of EIAs and ICZM forAlbania. This “grounding day” is important to ensure that participants all have a consistent and general level of understanding of these topic areas.  Session 1.1 therefore provides a common starting point for understanding and discussing climate change adaptation (CCA) and EbA. This session is targeted at all trainees especially those who have general responsibilities for ICZM, CCA or EbA related planning and/or assessment. Non-technical personnel interested in acquiring a better understanding of CCA/EbA and the strategies and measures that may be implemented as part of any adaptation plan can also benefit from attending and reading the literature linked to this session.  An introduction to “climate change and coastal risks” shall be introduced during this session to set the scene for the remaining sessions and modules (in particular the pending exercises which are planned for the remaining day). Specific Albanian issues to be addressed include: extreme temperature, precipitation and riverine flooding; sea level rise; storm surge; strong winds; Earthquakes; Tsunamis; Landslides.  *Training Activity - (Concept reinforcement exercise)* | Day 1: (morning) |
| Session 1.2: Coastal Risk Reduction | This session identifies how best to reduce coastal risk within a project design (and hence what to ensure is included within an EIA). This session shall consist of two parts. In the first part, participants will learn about draw maps of coastal hazards, vulnerabilities, capacities and resources. In the second part, they will identify possible risk reduction measures for specific coastal hazards and analyse how these impact on different organisations and members of a particular coastal community. Participants will gain a greater awareness of what kinds of risk reduction strategies they might employ in their own work and programmes.   * *Training Activity - Vulnerability exercise* * *Training Activity - Vulnerability prioritizing* | Day 1: (morning) |
| Session 1.3: Lessons from Overseas (EbA, CCA and ICZM delivery) | This session brings together a range of coastal EbA intervention experiences from around the world. Its aim shall be to set the context for what Albanianeeds to consider with regards to the delivery of future projects, future updates to ICZM Plans. Examples from Sri Lanka, Maldives, Albania and Pacific Island States shall be presented. A series of activities shall be undertaken to help trainees understand the basic principles that have been identified during the day. The focus shall be on outlining different types of coastal EbA protection measures including soft measures and hard measures, their effectiveness and their impacts on the environment. | Day 1: (morning) |
| **Module 2: EbA Impacts and Benefits on Built Defences** | Session 2.1: Ecosystem based Adaption (General techniques and approaches 1) | In this step, presentations shall be made on how to measure the impact each hazard could have on a project’s built (structural) flood defenses, that is, man-made defenses designed to keep water from entering and flooding an area. Two examples of hazards that can have serious impact:   * Storm winds, which can increase wave height and strength, resulting in scour of defense structures; * Storm surges, either of which can damage sea walls and other barriers.   Coastal risk assessment training shall be undertaken here with more detailed procedures for hazard, vulnerability and risk assessment will be presented with conceptual and actual examples, including maps (if available). Trainees shall start to consider more site specific information based on coastal EbA examples). | Day 1: (afternoon) |
| Session 2.2: Ecosystem based Adaption (Protocol techniques and approaches 2) | Coastal ecosystems are a natural form of flood defense. Ecosystems and habitats, for example, can attenuate storm waves and protect inland areas from flooding and erosion. Some coastal flood protection projects therefore include investments in protecting, reinforcing or mimicking these natural defenses. In this step, trainees shall learn more about EbA Protocols designed for Albania and from this, how to evaluate the impact each protocol could have on coastal ecosystem features and their project’s investments in them. For example:  This Session will introduce some key terms including ecosystem adaptation and “Living Shorelines”. It will describe the main ecosystems found in Albania including the open ocean, wetland lagoons and terrestrial vegetation. It describes the possible future of these ecosystems under climate change and the consequences for the Albanianenvironment, society and economy if this projected future is realized. It will then describe whether EbA can help provide adaptation for climate change. It will describe the responsibilities of MoTE and other stakeholders to ensure that ecosystems are in the best possible position to provide adaptation services for climate change, what to do and how to do it. | Day 1: (afternoon) |
| **Module 1.3: Adaptive Capacity – non-physical components** | Session 3.1: Applying a Climate Risk Assessment Lens | In this step, trainees shall assess how well Kune-Vaini’s proposed*non-physical components*will apply through a “climate lens”. This shall include discussion on non-physical components are project investments that do not include physical construction or work with the physical environment. They include zoning regulations, emergency planning, technical training and long-term monitoring and research. Practical examples and guidelines for incorporating risk assessment in local, national and international examples of coastal EbAsshall be introduced plus how to mainstream CCAwithin the national planning process.  This Session shall allow staff to systematically integrate climate change adaptation thinking into the ToR for future coastal development EIAs. This shall (for this training exercise) be at a conceptual level as it would only be applied when possible significant disaster risks have been identified and a more thorough assessment is considered necessary. At the strategic and programmatic level, the approach is called “Planning and EIA Risk Assessment Lens”.  *Training Activity – Applying the Climate Lens exercise* | Day 2: (morning) |
| Session 3.2: Selecting Suitable Coastal Approaches and Interventions | This Session is intended to introduce participants how to select an intervention, which involves a series of questions such as how to set the baseline, how to understand the coastal process impacts of options, how to identify a series of preferred options, how to understand the coastal risk associated with the short listed options andhow to communicate widely the preferred coastal option. | Day 2: (afternoon) |
| Session 3.3: Assessment of EbA Techniques in the field | Weather permitting it is proposed that a short field visit (max 2 hrs during lunch break) to Kune-Vaini is carried out. This is important to two reasons; firstly it enables trainees to see (or at least conceptualize) in the field the likely | Day 3: |

**Table 2.2: Overview to each COASTAL EbA TOOLKIT Module and Session (November 2018)**

| **Module 1 - Introduction to Climate Change, Coastal Risk Management and EbA** | | |
| --- | --- | --- |
| **Time** | **Session and content** | **Presenter/Convener** |
| 09.00am – 09.30am | Registration of Participants | Project Management Team |
| 09.30am – 09.35am | Welcome Address and Opening Remarks  Ministry of Environment and/or UN Environment. | Viola Agassi /Nick Tye |
| 9.45am – 10.30am | Introduction on Climate change | Mr.Sulce and Mr.Brahushi |
| 10.30 – 10.45 | **Simple Group Exercise and Coffee Break** | |
| 11.00 – 11.30 | Why and How – Ecosystem based Adaptation | Mr.Sulce and Mr.Brahushi |
| 11.30-11.45 | **Simple Group Exercise** | |
| 11.45 – 12.30 | Principles and benefits of ecosystem-based approaches for adaptation to climate change | Mr.Sulce and Mr.Brahushi |
| 12.30 – 13.00 | Integration of ecosystem-based approaches into adaptation policies and programs | Mr.Sulce and Mr.Brahushi |
| 13.00-14.00 | Methodological, technical and scientific aspects of ecosystem-based approaches for adaptation – practical exercise | |
| 14.00 | **Lunch and Training Close** | |

To develop other modules and exact timings prior to the Training event

## Facilitator Approach

### Team-based Training

The training is designed to allow the facilitator flexibility in time management. There may be more information included than can be covered in the time allotted. It is up to the facilitator to tailor relevant information in the presentations to the needs of the participants.

Given the limited timeframe and ambitious agenda of the training event (circa 3 days), careful thought and planning is necessary to ensure that key tasks are delegated and fulfilled successfully.

Key tasks included in the overall coordination and facilitation of the training process:

* Identification of potential “partner agencies” to co-host future trainings/workshops (if desired);
* Review of the agenda with the goal of ensuring relevance to all participants at key agencies;
* Logistics and liaison with participants and resource persons (travel planning; arrangements for venue, accommodations, and food; ensuring reimbursement for approved expenses if required etc.)
* Distribution of documentation to participants and collection of feedback from participants (including notes of each session, transcription of flip-chart notes, and participant comments and questions).

If staffsare available to support the key facilitator, these functions can be divided amongst a proposed workshop team. It is advisable for the team to meet the evening after Day 1 to review progress and plans for the following day, and make adjustments to the agenda and/or materials if necessary.

Course participants will be encouraged to reflect on their progress and provide comments within the final session of the course. In additional all attendees will be asked to complete a Training Evaluation Form (see Figure 2.3). Completed forms will then be compiled, analyzed and subsequently presented within the Training Reports generated at the end of the consultancy.

|  |  |  |
| --- | --- | --- |
| **Evaluation Form (Please answer the evaluation honestly to help improve the training** | **Score** | **Remarks** |
| **RATING: 1=Poor 2=Needs Improvement 3=Average 4=Good 5=Excellent** | | |
| **Meeting Objectives and Expectations** |  |  |
| **Contents ( Usefulness and Relevance)** |  |  |
| **Contents (Adequacy)** |  |  |
| **Content (Topic most relevant)** |  |  |
| **Content (Topics not relevant)** |  |  |
| **Content (Topics that should have been covered)** |  |  |
| **Content (new things learned/insights)** |  |  |
| **Methodology/Process: Appropriateness and Effectiveness** |  |  |
| **Facilitation/Resource Persons** |  |  |
| **Participation** |  |  |
| **Host team performance** |  |  |
| **Time allocation and management** |  |  |
| **Venue/food/accommodation** |  |  |

**Figure 2.3: Sample Course Evaluation Form**

Figure 2.3 shall be used in conjunction with a re-dispatch of the pre-training questionnaire (see below) to help determine how participants feel their knowledge and understanding of various coastal EbA related aspectshas improved. It is intended that each participant can demonstrate some advancement in understanding in certain technical areas (i.e.: moving from Group 1 to Group 2, or from Group 2 to Group 3 etc – see below).

### Module Evaluations

An alternative to the above approach is to evaluate training based on each Module delivered. To help with future update and design of the Coastal EbA Toolkit approach (and hence the second edition of this Training Handbook into 2020), at the end of each day, participants will be given a simple evaluation form that will ask them to rank each session on a scale of 1-5 across a range of criteria, including participants' impressions of the relevance, interest, format, organization, and content of the workshop. Evaluations will also include space for comments not captured by the numeric data. This feedback will allow the facilitators to make adjustments before the next day training event and to address any concerns that are raised.

A sample module evaluation form (Figure 2.4), containing 11 key questions for each trainer to answer after each Module is completed, is presented below for potential use.

|  |  |
| --- | --- |
| Name |  |
| Name of Session |  |
| Date |  |
| Facilitator |  |
| Organisation |  |



|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | **Very true** | **Somewhat true** | **Neutral** | **Somewhat false** | **Very false** | **N/A** |
| 1. **The course was relevant to me /my job** |  |  |  |  |  |  |
| 1. **Purpose and objectives were clear** |  |  |  |  |  |  |
| 1. **Facilitator was engaging** |  |  |  |  |  |  |
| 1. **Facilitator was sufficiently knowledgeable** |  |  |  |  |  |  |
| 1. **Materials used were understandable and useful** |  |  |  |  |  |  |
| 1. **Module length of time was sufficient** |  |  |  |  |  |  |
| 1. **Timing was properly managed** |  |  |  |  |  |  |
| 1. **Participants had ample opportunity to express themselves** |  |  |  |  |  |  |
| 1. **Participation and interaction was encouraged** |  |  |  |  |  |  |
| 1. **The course was overall beneficial to me and my organisation.** |  |  |  |  |  |  |
| 1. **The facilitator was well able to address all concerns raised in the Course.** |  |  |  |  |  |  |

**Figure 2.4: Evaluation Form**

### Materials, Equipment and Supplies

The proposed approach to the training shall adopt a variety of practical and participatory leaning tools. Throughout the 3day training event, the intension is for the course to be enjoyable and fun as well as being informative. Debate throughout is encouraged and it is stressed that even argument, as long as it is respectful and constructive towards your colleague is acceptable!!

To assist the smooth running of the course, for each day of the training, there should be the following provided by the host organisation:

* Grouped seating (chairs arranged ideally around tables throughout the room, rather than auditorium or classroom style);
* Flip charts x 2, paper, and pens for the facilitator(s);
* PowerPoint projector, cable and screen;
* Pens and note paper for the participants;
* Vehicular transport arrangements for trainees (toKune-Vaini Lagoon between 10.30 to 13.30 – on 22 November 2018);

The training leader shall supply, any handouts required for the sessions (or the full Training Handbook) plus copies of all Power-Point presentations for participants at the end of the training and finally the Training Evaluation forms.

# PART A - Guidebook

## Overview

The following training modules are created along with a facilitator’s guide to support the delivery of the Coastal EbA Training event (into 2019 and beyond). Information (if made available from future coastal EbA projects) can be applied (even conceptually) for various locations around Albania. In the future, planners and nominated EbAfacilitators should be encouraged to adapt and update the material as appropriate for their audience and specific area of focus.

A systematic approach is set out for each Module and Session (see Figure 3.1), using the following format to convey the Objectives, key points, methods, process and activities, duration and tips for facilitators. This is developed in detail within Section 3.2 for the proposed 2 days of the training event.

|  |  |  |
| --- | --- | --- |
| MC910217453[1] | **Objectives** | An overview of the Module/Session objective. |
| MC900433903[1] | **Key Points** | An overview of the Module/Session key points to be interrogated. |
|  | **Method** | An overview of the methodological approaches to be adopted for the Session. |
| MC900431526[1] | **Process and Activities** | An overview to the steps to be taken to help with the delivery of the Session and cross links to actual exercise sheets prepared and presented in PART B “Sourcebook”. |
| MC900383884[1] | **Duration** | An indication of the likely time to complete the Session. |
|  | **Tips for Facilitators and Organizers** | Specific advice for the facilitator on how to deliver the Session. |
| MC900432594[1] | **Materials Needed** | An overview of the types of materials required to ensure the Session runs smoothly. |
| book2[1] | **References** | Some useful references to read prior to the training module or session |

**Figure 3.1: Format for each Module and Session (specific details are presented in Part B “Sourcebook”)**



## Module 1: Introduction to Climate Change, Coastal Risk Managementand EbA

### Summary

This module has three sessions. The main objective of this module is for participants to understand key climate change and ecosystem based management concepts, principles and activities and also for participants to understand the importance of information management and coordination. From this basic overview, participants hope to better appreciate that climate change adaptation and EbA can be “planned better” through a combination of various strategies through support from other players involved with delivering CCA and EbA in Albania. A focus on understanding climate related coastal hazards and risks shall be used where possible.

### Session 1.1: Understanding Coastal Risk Management

|  |  |  |
| --- | --- | --- |
| MC910217453[1] | **Objectives** | This Session is designed to outline the key principles of CCA and EbA and how these should be considered within the context of ICZM for Albania and Rodrigues. This “grounding day” is important to ensure that participants all have a consistent and general level of understanding of these topic areas. This session suggests alternative ways for conducting a workshop on the topic of CCA/EbA. It will provide a common starting point for understanding and discussing CCA and EbA to Government, private sector and civil society. Finally, participants will be asked to think about and discuss specific CCA/EbA measures and actions which would improve their state of climate resilience. |
| MC900433903[1] | **Key Points** | Useful to “engage” the participants early on by asking for people to recall any experiences they may have during and in the aftermath of any disaster pus the recovery period. This is an important facet of this session. A key point is to provide easy to understand training on the basic concepts of Climate Change and Ecosystem based Adaptation (EbA) in Albania, using simple “tools” to help deliver the key messages (including practical lessons and field exercises delivered by RAPA). |
|  | **Method** | Easy to understand lectures, discussions, exercises and mini-presentations shall be used. Group work and plenary discussion. Important to appreciate all attendees level of knowledge and expertise on coastal risk and EbA related issues at the outset. |
| MC900431526[1] | **Process and Activities** | Introduce the module, the first session and its objectives. Explain that this session is mainly group work, presentation, discussion and synthesis and to encourage the need for active participation. Introduce the session by encouraging participants to feedback on a range of key questions posed on a series of powerpoint slides to help gain momentum and examples.  An introduction to “coastal risks and hazards” in Albaniashall be introduced during this session to set the scene for the remaining sessions and modules (in particular the pending exercises which are planned for the remaining day). Specific Albaniaclimate related hazards to be addressed include: Extreme temperature, precipitation and riverine flooding; Sea level rise; Storm surge; Strong winds; Earthquakes; Tsunamis; Landslides.  Training Activity - (“Concept reinforcement exercise”) plus possible Group Exercise “Disaster Preparedness Measures” (see Part B: Sourcebook Section 4.1). |
| MC900383884[1] | **Duration** | 1 – 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | Review the Introduction to Climate Change and Disaster Preparedness session text (see Part B); be especially attentive to specific examples of activities and the potential planning roles of Albanian stakeholders prior to carrying out the training. |
| MC900432594[1] | **Materials Needed** | See Part B Section 4.1.2 for exercises. Flip charts, envelopes and coloured marker pens for each team.  Training Activity 1a: Group Discussion  Training Activity 1b: Concepts Reinforcement Exercise. |
| book2[1] | **Reference Material** | 1. Clay, E. and Benson, C, 2005. **Aftershocks: Natural Disaster Risk and Economic Development Policy, Briefing Paper**. Overseas Development Institute. 2. Loayza, N., Olaberría, E., Rigolini, J, & Christiaensen, L. 2009. **Natural Disasters and Growth: Going beyond the averages**. The World Bank East Asia and Pacific Social Protection Unit & Development Research Group 3. UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

### Session 1.2: Understanding Coastal Risk Reduction

|  |  |  |
| --- | --- | --- |
| MC910217453[1] | **Objectives** | This session identifies how best to reduce community risk from changing climates on the coast of Albania. It introduces the interrelated concepts of hazards, vulnerability and risk and their association to risk reduction strategies and activities. This session is appropriate for anyone who has general responsibilities for CCA/EbA implementation. Non-technical personnel interested in acquiring a better understanding of the elements that make people vulnerable to disasters and the strategies and measures to reduce their risks can also benefit from reading this module. This session shall consist of two parts. In the first part, participants will learn about draw maps of coastal hazards, vulnerabilities, capacities and resources. In the second part, they will identify possible risk reduction measures for specific coastal hazards and analyze how these impact on different organisations and members of a particular coastal community. Participants will gain a greater awareness of what kinds of risk reduction strategies they might employ in their own work and programmes. |
| MC900433903[1] | **Key Points** | Key points of this session are to include:   1. factors affecting vulnerability; b) why and how individuals perceive risks differently; c) community hazards, risks and capacity mapping; d) the relationship between hazards, vulnerability, capacities and risk; e) different types of risk reduction measures; f) hazard-specific risk reduction strategies; g) hazard-specific, community based risk reduction strategies. |
|  | **Method** | Mini-presentation and discussion on major points. Participants complete worksheets and engage in group discussions. Participants identify basic community-based risk and vulnerability reduction activities which Albanian stakeholders could be involved in organising or promoting. One possibility is the showing of the following videos on 3 different types of coastal hazard (tsunami/hurricane/cyclone) is a useful way of demonstrating the risks associated with different hazards (NB: these are in English so unlikely to be used).  <https://www.e-education.psu.edu/geog030/node/377> |
| MC900431526[1] | **Process and Activities** | Carry out Group Training Activity 1.3a - “What you See” as a session starter.   * General Training Activity 1.3b - Vulnerability exercise * Genera Training Activity 1.3c – Community Risk Reduction Measures |
| MC900383884[1] | **Duration** | 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | Risk reduction measures to be adequate and appropriate should:   * Address or correspond to elements at risk; * Be from the community perspective; * Strengthen community coping strategies and capacities * No lead to or create other vulnerabilities.   The instructor should understand the meaning of risk reduction and the equation *Risk=Hazards x Vulnerability.* S/he should also be ready to give examples and be familiar with the basic risk reduction measures proposed in the session. It is important that the instructor and participants recognise and discuss practical, basic and realistic community-based risk reduction measures such as: public education, and organising local communities and volunteers to build a flood prevention embankment, etc. |
| MC900432594[1] | **Materials Needed** | Sufficient copies of Handouts Simple materials are needed such as flip-chart paper or newsprint, and markers. |
| book2[1] | **Reference Material** | [How Resilient is your Coastal Community? A Guide for Evaluating Coastal Community Resilience to Tsunamis and other Hazards,](http://www.coast.noaa.gov/regions/pacific/resources/resilience/coastal_community_resilience_guide.pdf) published by the U.S. National Oceanic and Atmospheric Administration (NOAA) contains detailed steps to assess coastal community resilience, focusing on the non-structural components of coastal flood protection measures.  UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

### Session 1.3:Lessons from Overseas (EbA, CCA and ICZM delivery)

|  |  |  |
| --- | --- | --- |
| MC910217453[1] | **Objectives** | This session brings together a range of coastal adaptation risk and DRM experiences from around the world and how climate change adaptation and ecosystem services (ES) are considered within ICZM delivery. Its aim shall be to set the context for what Albanianeeds to consider with regards to the delivery of the future updates to national policy and project delivery on the coast etc. |
| MC900433903[1] | **Key Points** | Examples of ICZM delivery mechanisms from Sri Lanka, Maldives, Albania and Pacific Island States shall be presented. The session shall review a number of international case study examples to enable trainees to learn about how ES is included into ICZM and CCA/EbA policy making. |
|  | **Method** | Mini-presentation and discussion on major points. A series of activities shall be undertaken to help trainees understand the basic principles that have been identified during the day. |
| MC900431526[1] | **Process and Activities** | Collective discussion on international case studies presented |
| MC900383884[1] | **Duration** | Circa 1hr long |
|  | **Tips for Facilitators and Organizers** | Try to present case examples from Europe that would be suitable to help Albanian stakeholders learn about international ICZM Plans and how CCA/EbA is being integrated into them (or not). |
| MC900432594[1] | **Materials Needed** | PPT presentations and links to international ICZM examples (plans) if possible. Embed some YouTube video examples of projects that demonstrate the points being made. |
| book2[1] | **Reference Material** | [Coastal Hazards and Climate Change: A Guidance Manual for Local Government in New Zealand,](http://mfe.govt.nz/publications/climate/coastal-hazards-climate-change-guidance-manual/) published by the New Zealand’s Ministry of the Environment, is intended for coastal development planning. It explores the climate change impacts by coastline type, lays out a risk assessment framework, and explains methods to reduce coastal risk.  UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

## Module 2: EbA Impacts and Benefits on Built Defences

### Summary

This module has three sessions associated with it. The main objective of this module is for participants to understand risk and hazard vulnerability as it pertains to the impact on structures and the built environment and also for participants to understand the importance of coastal risk vulnerability around the Albanian coast. From this basic overview, participants hope to better deliver vulnerability assessments and how hazards may impact on infrastructural project components (man-made flood risk mitigation strategies).

### Session 2.1:Ecosystem based Adaption (General techniques and approaches 1)

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| --- | --- | --- |
| MC910217453[1] | **Objectives** | To have considered cross-sectoral coordination needs for addressing coastal issues and to have reviewed links between environmental goods and services with social and economic wellbeing in the context of climate change adaptation. |
| MC900433903[1] | **Key Points** | Using the ecosystem-based approach to determine future strategies to considerin addition to climate change adaptation. This session focuses on the concept of ecosystem services particularly as they relate to adaptation (e.g., ICZM and CCA projects). It shall highlight the differences and commonalities between ecosystem-based approaches to adaptation and ecosystem-based approaches to disaster risk reduction (Eco-DRR) and suggests key integration points at the project level through examining a number of Eco-DRR, EBA and hybrid (Eco-DRR/ CCA) projects. |
|  | **Method** | Session 2.1 shall review a number of international case study examples to enable trainees to learn about how ES is included into policy making. It shall include a short presentation on possible EBA technologies/methods relevant to Albaniashall be presented for understanding and discussion. A short presentation shall occur to revise the process thus far and introduce principles of EBA. A separate handout shall be produced that provides a reference sheet for EBA to be used in following sessions. |
| MC900431526[1] | **Process and Activities** | It will introduce some key terms including ecosystem adaptation and ecosystem based adaptation. This Session will describe the main ecosystems found in Albania. It describes the possible future of these ecosystems under climate change and the consequences for the Albanian environment, society and economy if this projected future is realized. This Session will then describe whether EbA can help provide adaptation for climate change and DRM. It will describe the responsibilities of regulators to ensure that ecosystems are in the best possible position to provide adaptation services for climate change, what to do and how to do it. Part B (“Sourcebook”) identifies the approach for this task. |
| MC900383884[1] | **Duration** | Up to 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | Important for facilitators to convey the “alternative” approach to structural measures plus also to make the strong case for how to integrate the methodology for applying an ecosystem-based approach to coastal management and climate change adaptation. Facilitators need to consider how adaptation can address issues of social and economic vulnerability resulting from coastal change. |
| MC900432594[1] | **Materials Needed** | Copies of Training Activity “Ecosystem Assessment”, Training Activity “Ecosystem Adaptations in Existing Plans” and Training Activity “Planning for Ecosystem Based Adaptations”. |
| book2[1] | **Reference Material** | UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017).  TESSA Toolkit |

### Session 2.2:Ecosystem based Adaption (Protocol techniques and approaches 2)

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| MC910217453[1] | **Objectives** | To present a summary of the UN Environment produced EbA Protocols Document (2017). |
| MC900433903[1] | **Key Points** | Overview to the Ecosystem-Based Adaptation Protocols Report (2017) covering a summary of the various Sections of that document namely protocols for Coastal Reforestation, dune rehabilitation and tidal inlet channels. |
|  | **Method** | Session 2.2 shall review a number of protocols that should include conceptual discussions on Site Selection Criteria Appropriate Climate-Resilient Species, Preferred Methods for Implementation and Cost Estimates |
| MC900431526[1] | **Process and Activities** | This Session will describe the main protocols presented within the Protocols Report (2017). A copy of this document should be made available at the outset of the training. |
| MC900383884[1] | **Duration** | Up to 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | Important for facilitators to convey the details needed to apply the EbA Protocols presented within the 2017 report. |
| MC900432594[1] | **Materials Needed** | Copies of The EbA Protocols Report (2017) in Albanian should be made available. |
| book2[1] | **Reference Material** | UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

## Module 3: “Adaptive Capacity” – Non-physical components

### Summary

The main objective of this module is for participants to understand assess how well a project’s *non-physical components* can manage or reduce the risk of coastal hazards. Non-physical components are project investments that do not include physical construction or work with the physical environment. They include zoning regulations, emergency planning, technical training and long-term monitoring and research. Practical examples and guidelines for incorporating risk assessment in local, national and international examples of environmental management coastal planning decision making shall be introduced plus how to mainstream CCA/DRM.

### Session 3.1: Applying a Climate Risk Assessment Lens

This Session shall allow Albanian stakeholders to systematically integrate adaptation to climate change, adaptation to degraded environments as well as EbA techniques into an existing or planned strategy or programme. This shall (for this training exercise) be at a conceptual level as it would only be applied when possible significant disaster risks have been identified and a more thorough assessment is considered necessary. At the strategic and programmatic level, the approach is called “Climate Risk Assessment Lens”.

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| MC910217453[1] | **Objectives** | The **ClimateRisk Assessment Lens** (this session) shall be applied when the screening case studies indicated a need for conducting a Detailed Assessment. This session is designed as an OVERVIEW ONLY at this time, but should be designed to take 2 to 3 days without taking into account the preparation time). This session is taught to participants to only apply in situations when possible significant disaster risks have been identified under Session 2.2 and a more thorough assessment is considered necessary. The results of the Session can be integrated into the field assessment work (Session 3.3). |
| MC900433903[1] | **Key Points** | The methodology for this assessment targets a different level of consideration (more strategic) than the project level. Session 3.1 aims at what coastal EbA projects should be requested to consider. Participants shall be trained on how to follow a Four step approach (steps A to D) which shall be demonstrated. It stresses the importance of this session taking place as early as possible when a strategy or programme planned. |
|  | **Method** | This session is proposed to be conducted in form of a workshop with project partners. The stepped approach set out in Part B: Sourcebook should be followed. |
| MC900431526[1] | **Process and Activities** | The “Climate Risk Assessment Lens” is a straightforward and rather short exercise. Each step is conducted on the basis of the findings and considerations of the previous step. Decisions on an eventual adjustment of the strategy shall be taken jointly by all participants at the end of the session. |
| MC900383884[1] | **Duration** | 1 – 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | Please note that this is a qualitative assessment where a certain scope of discretion is left for the persons conducting this analysis. It is also based on fictitious project examples. |
| MC900432594[1] | **Materials Needed** | Sufficient copies of *Training Activity – Applying the Climate Risk Assessment Lens exercise* (see Part B). National maps showing the coastal zone (national maps and local maps as appropriate), showing topography, political and geographic features maybe useful. *(to be completed in the field)* |
| book2[1] | **Reference Material** | [Adapting to Coastal Climate Change: A Guidebook for Development Planners](http://pdf.usaid.gov/pdf_docs/pnado614.pdf), published by USAID, explains the critical factors of a coastal vulnerability assessment, including climate change projections, exposure, sensitivity, and adaptive capacity. The guide also offers strategies for mainstreaming coastal vulnerability and adaptation into public planning, budgeting, and policies.  UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

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### Session 3.2: Selecting Suitable Coastal Approaches and Interventions

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| --- | --- | --- |
| MC910217453[1] | **Objectives** | This session is intended to introduce participants to EbA option and decision making on the coast. It is meant to stimulate participants' thinking and enhance their awareness about this topic. Participants will get an opportunity to run through a decision tree approach to better understand the decisions that need to be reached in order to select a sustainable coastal intervention on the coast. This session will therefore provide guidelines, ideas and tips for selecting the most suitable, hard, soft or hybrid coastal intervention option. |
| MC900433903[1] | **Key Points** | Key points of this session are to include:   1. Rather than, as can be the case in more traditional schemes, assuming the best solution is what has historically been used or has worked somewhere else, coastal EbAs should be used to ensure a wide range of interventions are assessed. 2. Understanding nature-based, hybrid and non-structural intervention options to achieve the wider benefits, provide longer-term sustainability and stability of the shoreline in addition to reducing the environmental impacts. |
|  | **Method** | Mini-presentation and discussion on major points. Group activity which engages participants in designing decision trees and then critically examining these; Group activity which engages participants in understanding the questions and baseline facts that EIAs should be providing to help determine and select the most suitable option on the coast. |
| MC900431526[1] | **Process and Activities** | Present the session by presenting ideas on selecting approaches and agreeing on the studies that need to be produced as part of any decision making process. Discussion on the details of the studies required shall be undertaken. |
| MC900383884[1] | **Duration** | 1 – 1.5hrs long |
|  | **Tips for Facilitators and Organizers** | The trainer should be familiar with the essentials of planning disaster awareness initiatives and activities—either through actual experience and/or by reading the accompanying module (Part B). The trainer may want to invite someone with a lot of public education or community disaster awareness experience to participate in the workshop as a resource person. |
| MC900432594[1] | **Materials Needed** | Copies of decision tree tables. |
| book2[1] | **Reference Material** | tbd |

### Session 3.3: Assessment of EbA Techniques in the Field

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| --- | --- | --- |
| MC910217453[1] | **Objectives** | Weather permitting a 2 hr field trip to Kune Vaini s proposed. This is important to two reasons; firstly it enables trainees to see (or at least conceptualize) in the field the EbA techniques set out in the Protocol session (Session 2.3) plus also debate whether there is the necessary institutional response mechanism in place to better manage EbA (upscale around Albania), and secondly, to help participants develop their thinking on how to implement on the ground activities correctly (tree planting etc). |
| MC900433903[1] | **Key Points** | Details to be determined |
|  | **Method** | Details to be determined |
| MC900431526[1] | **Process and Activities** | An additional task shall be undertaken in partnership with the RAPA help design the proposed field day. Ahead of the training, it is advised that the local team start to consider local logistical needs. They need to determine a consensus on the exact locations, and transport arrangements will have to be pre-agreed with the MoTE. |
| MC900383884[1] | **Duration** | Up to 5 hrs (in the field or as appropriate) |
|  | **Tips for Facilitators and Organizers** | Details to be determined |
| MC900432594[1] | **Materials Needed** | Good planning is needed for the field day. The priority sites to visit shall be selected based on the following parameters:   1. Appropriateness to demonstrate the EbA Protocols (dune planting, tree planting etc) being taught 2. Practicality of field site access 3. Health and safety in implementing the field visit.   Endure spare copied for all participants are available of Training Handout 3.1a, 3.2a, 3.2b and 3.2c. |
| book2[1] | **Reference Material** | UN Environment - Ecosystem-Based Adaptation Protocols Report for Albania (August 2017) Author, Jonathan McCue (2017). |

## 

# PART B Sourcebook (Knowledge Packages)

This PART B includes supporting information relating to the Session plus a range of possible exercise materials that may be used and replicated for future use.

## Module 1: Introduction to Climate Change, Coastal Risk Management and EbA

### Session 1.1: Understanding Coastal Risk Management

The session needs to ensure that all participants are roughly at the same level of understanding on disaster risk management. This therefore requires some pre-event planning and understanding of the audience and their working experiences.

#### Approach to delivering Session 1.1

* Group Training Activity 1.1a – group discussion (15 minutes)

A. Present the purpose and the general procedures for this session;

B. Pose the question, *“Can we, mere human beings, withstand the force of natural disasters?”* Answers will be both “yes” and “no”—and both are right. For the most part, humans are powerless against the occurrence of natural hazards that cause disasters. However, human intellect, creativity and diligence give us the opportunity to prepare for and reduce the effects of these hazards on our lives, livelihoods and environment.

C. Ask for examples, or ask participants for examples, of situations where humans are powerless against disasters, and where they are active in mitigating their effects

D. Explain that hazard occurrences by themselves do not constitute automatic disasters. A landslide in a remote uninhabited mountain region affecting no one's life or livelihood is not considered a disaster. Stress that for there to be a disaster, the hazard must adversely affect people’s lives and livelihoods.

E. Explain that disaster preparedness must begin with a proper assessment of the hazards and the elements which make certain people and structures particularly vulnerable to hazards.

F. Ask participants to share the types of main hazards that occur in Albania, and to identify those people and structures that are most vulnerable to each type.

G. Explain that disasters can be divided into two main categories: rapid onset and slow onset. Rapid onset disasters occur suddenly and include, for example, earthquakes.

* Group Training Activity 1.1b – group discussion: concept reinforcement exercise (15 minutes)

1. **Say which of the following situations can be regarded as a disaster and which cannot:**
   1. A tornado.
   2. A heavy rainfall caused by a hurricane.
   3. A fire in an office quenched by the employees using fire extinguishers
   4. The evacuation of a facility due to a bomb threat
   5. 200 people dead
   6. An explosion of an LPG cylinder in the desert
   7. An explosion that destroys a building after a bomb threat
   8. A hurricane that impacts a city
   9. A hurricane that impacts a city but causes only minor damages
   10. A hurricane that impacts a city and destroys it completely
2. **Say which state of social behaviour are we talking about in the following situations:**
   1. A hurricane warning is issued through the media
   2. A 2.0 Magnitude earthquake that impacts a city
   3. A city impacted everyday by a 2.0 Magnitude earthquake
   4. A bomb threat
   5. A bomb explodes 20 minutes in a building after a bomb threat with no casualties
   6. A building destroyed by a bomb without a previous bomb threat
   7. An island destroyed by a hurricane
   8. The reconstruction of 200 houses after they were destroyed by an earthquake
3. **Say to which System (Destructive, Vulnerable or Disaster Management) belong the following items:**
   1. A nuclear bomb
   2. A house
   3. A car
   4. A police car
   5. A hospital
   6. An earthquake
   7. An island

* A church

### Session 1.2: Coastal Risk Reduction

#### Overview

Disasters occur when natural or technological hazards have an impact on human beings and their environment. Those who have more resources, both economic as well as social often have a greater capacity to withstand the effects of a hazard than the poorer members of a society. Rapid population growth, urban or mass migration, inequitable patterns of land ownership, lack of education and awareness, and subsistence agriculture on marginal lands lead to vulnerable conditions such as unsafe siting of buildings and settlements, unsafe homes, deforestation, malnutrition, unemployment, underemployment, and illiteracy.

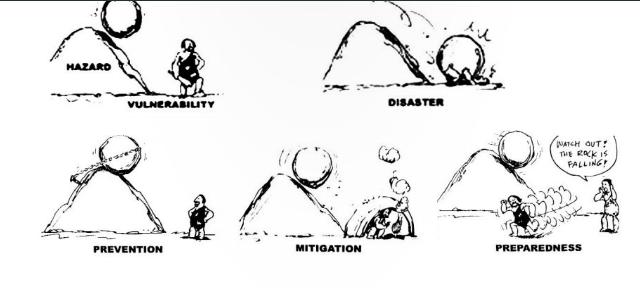
The following terms need to be easily communicated and understood by all participants. A hazard is a phenomena, event, occurrence or human activity which has the potential for causing injury to life or damage to property, livelihood, community facilities and the environment.

* Vulnerability is a set of prevailing and long term factors, conditions and weaknesses which adversely affect the ability of individual, households, organisations and the community to protect itself, cope with or recover from the damaging effects of disasters.
* Capacities are knowledge, skills, resources, abilities, coping strategies and strengths present in individuals, households, organisations and communities which enable them to prevent, mitigate, prepare for and cope with damaging effects of disasters or quickly recover from them.

A disaster occurs when an emergency resulting from hazards cannot be managed by the communities alone, using their own resources. The community requires external assistance because the damage and destruction exceeds their abilities and capacities.

DRM is a range of activities (preparedness, mitigation, prevention, emergency response, recovery) that contribute to increasing capacities and reducing immediate and long term vulnerabilities to prevent, or at least minimize, the damaging impact in a community.

The community based DRM (CBDRM) approach involves activities, measures, projects and programmes to reduce disaster risks which are designed and implemented by people living in high risk areas with the goal of building safer disaster resilient and developed communities.



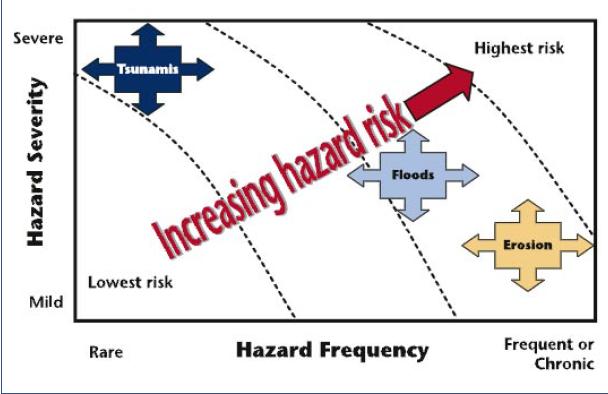
**Figure 4.1: Key Definitions**

There is a need to communicate and differentiate between hazard and disaster by defining both. It is important to stress that a hazard is not a disaster but has the potential for becoming one if the emergency caused by it is not managed well due to a lack of preparation. A disaster occurs when a hazard strikes a vulnerable community, whose capacity is inadequate to withstand or cope with its adverse effects, resulting in damages, losses and disruption in community functioning. The source of the hazard can be natural, human or a combination of both (see Figure 4.1). It is therefore key to differentiate between natural hazards (eg: earthquakes and volcanic eruptions) from human induced hazards (war or armed conflict). Note that flooding or landslides can be a combination of both.

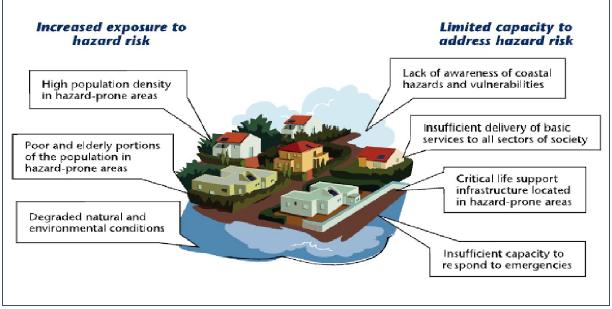
Disaster risk (covered in Session 2.3) needs to be explained well. It is the probability that individuals, households and the community suffer damage or loss from a hazard. It is therefore important for participants to understand hazards, reduce vulnerability and increase capacity to manage disaster risks.

#### Case Examples – Coastal Risks and Hazards

The risk from coastal hazards is characterized by the frequency of occurrence and severity of the hazard (Figure 4.4). For example tsunamis are typically infrequent events with moderate to severe consequences. Mild flooding may occur frequently, while severe flooding may be an infrequent event. Coastal erosion may be a chronic event with mild consequences or, coupled with other hazards, may result in severe impacts on the shoreline. Infrequent events with limited predictability pose the greatest risk of disaster and the longest time needed for disaster recovery. Frequent or ongoing hazards such as resource or environmental degradation processes can be monitored to reduce risk.



**Figure 4.4 – coastal resilience to tsunami and other coastal hazards**



**Figure 4.5: Factors that contribute to vulnerability in coastal populations**

#### Risk reduction measures

The range of risk reduction measures can be classified into the following categories, each of which is discussed below:

* Societal

Risk reduction will occur when there is a consensus that it is desirable, feasible and affordable. Risk reduction planning should aim to develop a “safety culture” in which all members of society are aware of the hazards they face; know how to protect themselves; and will support the protection efforts of others, of society and of the local population as a whole.

Public education campaigns aim to create this safety culture. Public awareness can be raised in a number of ways, from short-term, high profile campaigns using broadcasts, literature and posters, to more long-term, low profile campaigns that are carried out through general education. Planning disaster awareness and disaster preparedness activities in isolation from people's daily lives will rarely succeed. Therefore, these programs are most effective when linked to ongoing and immediate daily community needs such as basic health care, water scarcity and potability, sanitation concerns, employment and community based first aid.

The objective is to develop an everyday awareness of the possibility of hazard occurrence in which people take conscious precautions. Their understanding should include an awareness of what to do in the event of a hazard; and a sense that their choice of house, the placement of a bookcase or stove and the quality of construction of a garden wall around an outdoor work or play area all affect their safety. Local involvement in risk reduction planning processes can include public meetings and consultations; public inquiries; full discussion of decisions at special meetings and involvement in generating hazard, risk and capacity maps. Awareness can be developed through regular practice drills, practice emergencies, quizzes and anniversary remembrances. In hospitals, schools and large buildings, it is necessary to rehearse what the occupants should do in the event of a fire, earthquake or other hazard. This reinforces awareness and develops automatic behavioural responses.

* Physical planning

Careful location of new facilities—particularly community facilities such as schools, hospitals and infrastructure—plays an important role in reducing vulnerability. In urban areas, de-concentration of elements especially at risk is an important principle. That is, services provided by one central facility are always more at risk than those provided by several small facilities. This principle also applies to population density: a denser concentration of people will always increase the potential for disaster compared to a more dispersed population.

* Economic

Linkages between different sectors of the economy may be more vulnerable to disruption by a disaster than the physical infrastructure. Diversification of the economy is an important way to reduce risk. A strong economy is the best defence against disaster. Within a strong economy, governments can use economic incentives to encourage individuals or institutions to take disaster mitigation actions.

* Engineering

Engineering measures range from large-scale engineering works to strengthening individual buildings and small-scale, community-based projects. Codes of practice for disaster protection (such as building codes) are unlikely to be effective unless they are accepted and understood by the community. Training local builders, for example, in techniques that incorporate better protection into traditional structures (such as buildings, roads, and embankments) is likely to be an essential component of such measures.

* Management and institutional

Building disaster-protection takes time. It needs to be supported by a programme of education, training and institution-building to provide the professional knowledge and competence required.

#### Risk Reduction Strategies (Storms and Flooding)

* Flood Management structures

The main risk reduction strategies for floods and water hazards include land-use control and planning to avoid locating vulnerable facilities in flood plains. Retaining walls and levees along rivers and sea walls along coasts may keep high water levels out of flood plains (although levees may create other problems over time or elsewhere downstream). Structures which are located in flood plains should be engineered to withstand flood forces and designed with elevated floors to reduce damage from flood waters. Dams are capable of storing water so that it can be released at a manageable rate. Levees and dams are subject to failure and can also be damaged by earthquakes. They must be carefully engineered to anticipate maximum water levels since failures may cause much more damage than if the facilities had not been built.

Water regulation (slowing the rate at which water is discharged from catchment areas) can be achieved by constructing reservoirs, increasing vegetation cover to slow down run-off, and building sluice systems. Removing silt build-up or dredging deeper channels and constructing alternative drainage routes (new river channels, spillways and pipe systems) may prevent river overload. Storm drains in towns assist drainage rates; and beaches, dune belts, and breakwaters can sometimes reduce the power of tidal surges.

Flood reduction aims to decrease the amount of runoff, usually by altering the watershed, and is most effective when employed over most of the drainage basin. Typical treatments include reforestation or reseeding; contour ploughing or terracing; and protection of vegetation from fire, overgrazing and clear-cutting. Other approaches involve clearing sediment and debris from streams, deepening and widening the riverbed and constructing or preserving farm ponds and other water holding areas. In urban areas, water holding areas can be created in parks and ponds. Flood-proofing helps reduce the risk of damage. Temporary measures include blocking or sealing entrances or windows and the use of sandbags to keep flood waters away.

Permanent measures include the use of hazard resistant designs such as raising living or working spaces high above the possible flood level. Houses may be elevated by structural means (stilts) or by raising the land using landfill. Buildings should be set back from water bodies. Land surrounding buildings and infrastructure should be protected against erosion. Streambeds should be stabilised with stone masonry or vegetation, especially bridges.

Strong, wind-safe public buildings which can be used for community shelter in vulnerable settlements can also reduce the risk to community members whose homes are not safe in storms. Crops can be protected by introducing agricultural practices and crops which are more resistant to high winds.

* Community-based risk reduction measures

Communities can help reduce their risk of damage from storms by preparing evacuation plans and warning systems to be implemented in the event of a storm; by constructing wind-resistant or easily rebuilt houses; by securing and fastening down those elements that could blow away and cause damage or injury elsewhere, such as metal sheeting, fences, and signs; by taking shelter in strong, wind-resistant buildings; by taking protective measures for boats, building contents or other possessions at risk; and by protecting food storage facilities from storms.

The main mitigation strategies for hazards due to storms include a public that is well informed regarding the hazard and an effective warning system. Engineering structures to withstand wind forces, developing wind load requirements in building codes and wind safety requirements for non-structural elements are also important. In addition, siting key facilities in less vulnerable areas (such as in the lee of hillsides), planting windbreaks, and planning forestry areas upwind of towns can also reduce the risks associated with storms.

The majority of deaths and much of the destruction created by floods can be prevented by mitigation and preparedness measures. Communities can be actively involved in reducing the risk of flood damage. Where construction in flood-prone sites is necessary or cannot be avoided, houses can be constructed to be flood resistant using materials resistant to water damage and strong foundations. Awareness of water hazards can be reflected in living practices such as constructing elevated storage and sleeping areas. Crop cycles can be modified to avoid the flooding season, and flood-resistant crops can be introduced.

Community members should also be aware that deforestation can exacerbate flooding. Communities can reduce the risk of personal harm by preparing flood evacuation plans which include the identification of evacuation routes and availability of boats or other appropriate transport and rescue equipment. Monitoring and warning systems at the local (and regional) level are also important components of a risk reduction strategy.

Inhabitants of flood prone areas usually have a number of traditional methods for coping with floods. Some aspects of flood planning and response can be managed at the village level and upgraded with outside assistance. These are:

* issuing warnings at the local level
* participating in flood fighting by organising work parties to repair embankments or clear debris from drainage areas, pile sandbags and stockpile needed materials.
* facilitating agricultural recovery planning emergency supplies of food and clean drinking water
* identifying traditional mitigation and preparedness measures and determining their effectiveness.

Programmes to promote public awareness of flood hazards may contain the following components:

* Explanations of the function of flood plains, location of local flood plains and drainage patterns
* Identification of flood hazard and warning signs
* Advice on how to flood-proof possessions and develop personal escape plans
* Explanation of local evacuation plans and warning systems, and appropriate post disaster activities
* Emphasis on personal responsibility for flood prevention/mitigation in day-to-day living practices. This includes the use of proper farming practices, prevention of deforestation and maintenance of drainage systems.
* Provision of escape routes, neighborhoods’ should have clear escape routes and designated areas of refuge on higher ground
* Evacuation procedures should be practiced on a regular basis and ways to disseminate warnings via radio, television, warning sirens or bells should be devised.

#### Approach to delivering Session 1.2

* General Training Activity 1.2a: “What do you see?”

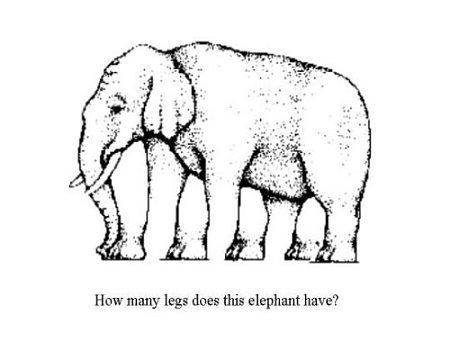
Show one or two of the following pictures and ask participants “What do you see?” Have the participants point to the features of what they see. If there is time, show the other pictures. Relate the differences in what the participants see in the picture to the varying perceptions of disaster risk among people or groups living in the same situation. Ask the participants why there is such a different perception of disaster risks amongst different groups.

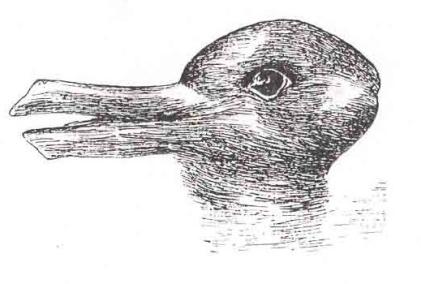
Summarize that peoples’ perceptions of disaster risk is often influenced by age, educational background, occupation, length of stay in the community, experience of risk beforehand, economic status, culture, ethnicity and gender

Link the discussion of differing perceptions of risk to the purpose of risk assessment (as identified within this Session 1.3). For this Training Activity, stress that “community” risk assessment is often the basis for sound planning of appropriate and adequate risk reduction measures. This is because it aims to:

* Contribute to the communities awareness of threats they did not know before;
* Provide information which can be used in situational analysis for community development programmes;
* Provide baseline data or indictors to measure changes in people’s vulnerability and capacity over time.
* Recap over Session 1.1’s discussion on DRM concepts and then run through the 3 concepts of disaster risk (namely hazard, vulnerability and capacity).

**Training Activity 1.2a “Illusions “What do you See”**

[](http://www.google.co.uk/url?sa=i&rct=j&q=&esrc=s&frm=1&source=images&cd=&cad=rja&docid=_qMDwINbwxC8KM&tbnid=nOP1mNYM7IhS_M:&ved=0CAUQjRw&url=http://www.studentsoftheworld.info/sites/sport/24794.php?Page=2&ei=q9QUUsAsxcO1Bp2egfAC&bvm=bv.50952593,d.Yms&psig=AFQjCNE1_RGKXVc3iEaicEeCHMMNJ1FmRw&ust=1377182981956530)

[](http://www.google.co.uk/url?sa=i&source=images&cd=&cad=rja&docid=yqJfpSbw33ttjM&tbnid=93kuwH31HEO5DM:&ved=0CAgQjRwwAA&url=http://www.spring.org.uk/2012/01/duckrabbit-illusion-provides-a-simple-test-of-creativity.php&ei=O9IUUse0K4iPswaZ7IGYAQ&psig=AFQjCNHmcrVqExYEvP8uUwS6zwVgijZT_A&ust=1377182651852098)



#### General Training Activity 1.2b: Vulnerability Exercise (3 Parts)

Part 1: Identify the vulnerable elements or subsystems (e.g.: population, facilities/infrastructure, services, information, environment and economy when applicable) within the following vulnerable systems.

* An Oil Refinery
* A school
* A Hotel
* A port

Part 2: On a Google map of Albaniachoose and define a geographic area, categorize and quantify the vulnerable elements for the above. (Time allocated is 20 minutes).

Part 3: Based on your rapid assessment of Parts 1 and 2 above, complete the table in Part 3 below identifying (for a range of hazard types) the likely vulnerability “scores” for one particular Parish or location of your choice.

**VULNERABILITY PRIORITIZING**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **HAZARD TYPE** | **PROBABILITY** | **HUMAN IMPACT** | **PROPERTY IMPACT** | **BUSINESS IMPACT** | **INTERNAL**  **RESOURCES** | **EXTERNAL**  **RESOURCES** | **TOTAL** |
|  | HIGH - 5  LOW - 1 | HIGH - 5  LOW - 1 | HIGH - 5  LOW - 1 | HIGH - 5  LOW - 1 | WEAK - 5  STRONG - 1 | WEAK - 5  STRONG - 1 |  |
| **Hurricane** |  |  |  |  |  |  |  |
| **Tsunami** |  |  |  |  |  |  |  |
| **landlide** |  |  |  |  |  |  |  |
| **flood** |  |  |  |  |  |  |  |
| **fire** |  |  |  |  |  |  |  |

General Training Activity 1.3c: “Identifying Risk Reduction measures?”

1. Present the different types of general risk reduction measures.

2. Present the concept of community-based risk reduction and local capacity building introduced above, "Reducing hazards vs. reducing vulnerability."

3. Explain that there is specific risk reduction measures associated with each type of hazard. Take one type of natural hazard, such as an earthquake, or cyclone, and describe some of the general risk reduction measures, as well as specific community-based measures

4. Participants will now apply these points in the following group exercise.

5. Ask participants to form four small groups of 4-5 participants. Each group should sit under one of the hazard signs.

6. Distribute the worksheets (see below) and briefly discuss each question, checking for understanding. Also distribute the handout below: Community-Based Risk Reduction Measures and refer participants to this Section 4.2.3 of Part B Sourcebook which describes general types of risk reduction measures for specific hazards (see above).

7. Monitor individual and group progress and assist where necessary. Ensure that the groups follow the three stages on the instruction sheet below.

|  |
| --- |
| **INSTRUCTIONS**  Step 1 On your own, complete the worksheet (see below) on risk reduction (10-15 minutes)  Step 2 Compare your responses with those of others in your group (15 minutes)  Step 3 Consolidate individual responses into one group response and prepare your group presentation (20 minutes). Each group will have 5 minutes to report back to the larger group. |

8. After each group presents, facilitate a discussion around the following questions (allow 10 minutes of discussion after each presentation):

*• What are the advantages and disadvantages of the suggested measures? Explore the assumptions behind each suggestion and point to the fact that risks are often perceived differently by different people.*

*• How will the suggested activities affect the lives of people in a given area or community?*

*• How will the work involved in the risk reduction measures be distributed? Who will do the work?*

*• What kind of stimulus, organising or education is required to involve the local population and volunteers in implementing community-based risk reduction measures?*

**Training Activity 1.2b Community Risk Worksheet**

|  |
| --- |
| **WORKSHEET** |
| Based on your group's community hazard, risk and capacity map and/or based on your experience and knowledge of hazards and disaster management in your community, complete the following worksheet. |
| 1. Select a hazard that is common in your community (or chosen coastal EIA/SEA). |
| 2. For this specific hazard, identify the most vulnerable elements and populations. What factors contribute to their vulnerability? |
| 3. Suggest two or three risk reduction measures which are currently being done either by your organisation or by others to support local preparedness and capacity building. Name the measures or activities and identify the organisations or agencies that are responsible for them. Write these on a flip chart. |
| 4. Suggest two or three risk reduction measures which your organisation *could* be involved in to support community-based disaster preparedness and capacity building. These should be measures which build or rely primarily on locally available resources and capacities and which mobilise and organise local populations, organisations and volunteers. (When preparing these lists think of a) education and training activities, b) activities aimed at families and individuals, and c) activities aimed at the entire community.) Write these on a flip chart. |
| 5. Describe the potential impact of your proposed risk reduction measures on the various elements at risk. |

|  |
| --- |
| **Supporting Handout – Training Activity 1.2b: Community-Based Risk Reduction Measures** |
| **1. Education and training** |
| * Of community members, in benefits of disaster risk reduction |
| * Of builders, in ways to design and build strong buildings |
| * Of community members and builders, in ways to make existing buildings stronger |
| * Of community members, in first aid |
| * Of the community, in identifying hazards, weaknesses and strengths in the community |
| * Of school students, in disaster preparedness |
| **2. Individuals and families** |
| **The objective is to prevent injury and loss of life, protect possessions and property, and maintain the family's means of earning a living:** |
| * Identify and reduce risks in the home and surrounding area e.g. remove loose objects and trim trees in areas which are prone to cyclones |
| * Inspect the house to identify weak parts of the building |
| * Strengthen weak parts of the house |
| * Reduce hazards in the area around the house, e.g. build flood protection walls |
| * Plant suitable crops which will still be usable after disasters |
| * Take out an insurance policy |
| * Take part in education and training programmes in disaster related, risk reduction and health-related issues |
| **3. Community** |
| **Community risk reduction activities need to be accepted and supported by the community members and are most effective where there is strong community leadership. They must be supported by community leaders and community members must be involved. Cooperation with local government authorities is also important. When this happens, community risk reduction activities are of great benefit in preparing the community to reduce the effects of future disasters. Examples of community risk reduction activities include:** |
| * Development of early warning systems which can reach the whole community |
| * Periodic use and testing of the warning systems to make sure that everyone knows about them |
| * Identification of places in the community that are at risk from hazards |
| * Production of maps that record the risk areas which are most likely to be affected |
| * Detailed lists of important places and structures which may be damaged in a disaster, e.g. roads, bridges, medical clinics, emergency services buildings, water supplies, fuel depots, electricity supplies, crops, livestock. |
| * Development of plans to protect these and procedures for what to do if they are damaged in a disaster |
| * Establishment of procedures to ensure that all new buildings comply with building codes or guidelines |
| * Reinforcement of important community buildings which could be useful for evacuation shelters |
| * Regular inspection of these buildings |
| * Identification of evacuation routes and procedures |
| * Production and regular updating of lists of those individuals and groups who will most need assistance after a disaster |
| * Introduction and planting of a variety of crops |
| * Coordination of activities with the Government and other organisations involved in disaster management. |

### 

### Session 1.3: Lessons from Overseas (DRM, CCA, EBA and ICZM Delivery)

* **4.4.1 Introduction**

The purpose of DRM and climate change adaptation (CCA) on the coast is to adjust coupled human and natural systems in a proactive and sustainable way in response to actual or expected climatic variation, with a view to moderating harm or exploiting beneficial opportunities. The focus on actions that target coupled human and natural systems is important because it implies that the challenge cannot be solved solely by social or environmental methodologies and technologies. This, therefore, explicitly recognises the requirement for cross-sectoral working and for this reason is usually referred to as a process of ‘***Mainstreaming***’ (Box 2).

This Session shall therefore focus on one key factor (mainstreaming) which needs consideration in Albania regarding the delivery of risk resilient ICZM in the future. Lessons from overseas shall be presented especially with regards to how ecosystem services are integrated into helping to mitigate against hazards and disasters.

**Box 2. Defining Mainstreaming**

Mainstreaming means integrating climate adaptation responses into policies, plans, programmes, and projects at all levels of governance and management. It aims to pro-actively seek to achieve the short-, medium, and long- term sustainability of social, economic and environmental systems. Mainstreaming is characterised by:

* Collective and individual operations of all government agencies, at all levels of government, and across all sectors, as well as by civil society and the private sector.
* Incorporating climate risks into all development decisions and development planning to promote resilience.

Climate change mainstreaming therefore contributes to more sustainable development and more resilient communities.

Mainstreaming climate change adaptation is the iterative process of integrating considerations of climate change adaptation into policy-making, budgeting, implementation and monitoring processes at national, sector and subnational levels. It is a process that recognises that climate change adaptation should contribute to the overall success of governance processes, societal wellbeing, economic goals and regional/international targets, such as achievement of the SDGs. It entails working with a range of government and non-governmental actors, and other actors in the development field.

The most effective route to mainstreaming is through an integrated ‘whole-of-government’ approach, preferably coordinated at the highest level of government. Good governance, reflected in vision,commitment, transparency and accountability, provides a vital foundation for climate change mainstreaming. Mainstreaming also seeks to avoid a phenomenon known as maladaptation where a country’s development choices can worsen its vulnerability to the impacts of climate change, for instance:

* Destroying mangrove forests and wetlands which can increase vulnerability to climate-related impacts, such as stronger and/or more frequent storms and sea level rise.
* New infrastructure, even taking future climate into account, might trigger new human settlements in areas highly exposed to particular impacts of climate change such as coastal zones vulnerable to sea level rise or floodplains.
* Investment that encourages dependency on resources that will be affected by climate changes, such as water for irrigation.

The process of mainstreaming consists of three components;

1. Finding the entry points and making the case to all stakeholders sets the stage for mainstreaming. This entails understanding the linkages between climate change and national development priorities, as well as understanding the governmental, institutional and political contexts and needs, in order to define adaptation outcomes on which to focus.
2. Mainstreaming adaptation into policy processes focuses on integrating adaptation issues into an ongoing policy process, such as a national development plan or sector strategy. Such efforts are based on country-specific evidence, including impact, vulnerability and adaptation assessments, socio-economic analysis, and demonstration projects.
3. Meeting the implementation challenge aims to ensure mainstreaming of climate change adaptation into budgeting and financing, implementation and monitoring, and the establishment of mainstreaming as standard practice.

This process can be summarised as determining who has to work together, how this can be achieved and what mechanisms need to be established in order to allow this to happen.

International experience on this topic suggests the following should be considered in terms of mainstreaming for Albania:

* There is an increasing emphasis on integrating (mainstreaming) adaptation into current policy and development, rather than implementing measures as a stand-alone activity. This requires the integration of adaptation into existing policies and processes, taking account of broader policy objectives and wider costs and benefits, not only for climate change risks.
* Effective mainstreaming requires the identification of suitable entry points in the policy and development planning process, noting these will differ across sectors and national contexts.
* An evaluation of case studies has been undertaken, focusing on low-income countries where mainstreaming is being advanced. These indicate that the presence of a high level champion, the involvement of strong Ministries, the availability of climate finance and critically, technical assistance and capacity building support are important in effectively advancing mainstreaming.
* There is a need for pragmatism when mainstreaming and success will often be contingent on the timing of action and the ability to take advantage of intervention opportunities. A critical finding is that there is a strong need for technical assistance and capacity building to enable mainstreaming to occur.
* This remains an emerging area, and further practice-orientated research and support is needed.

The topic of climate change mainstreaming, focusing on key characteristics and barriers (of relevance to ICZM) shall be the focus of this Session. Trainers shall introduce the concept of CCA/DRM mainstreaming and outline key features. This shall outline the way forward for risk resilient ICZM and what needs to be undertaken to deliver this at a national level.

## Module 2: EbA Impacts and Benefits on Built Defences

### Session 2.1 - Ecosystem Based Adaptation (Protocol techniques and approaches 2)

### Risk and Impact Screening

#### Overview

The **screening** aims at identifying whether a strategy, programme or project (hereafter called activity) is potentially at risk from disasters emanating from climate change, environmental degradation and/or natural hazards and whether an activity may have an impact on GHG emissions and/or the environment. The goal is to conduct a **rapid and basic assessment of risks and impacts** and make the decision whether to proceed with a Detailed Assessment (for a strategic level or for a project level) or not. Please note that some risk always exists. The question is whether the probability and potential negative impacts constitute a significant additional risk. Therefore, disaster risks may be assessed in comparison to other risks (e.g. social, institutional etc.) for an activity that might have been identified within the regular risk assessment process in the planning phase. The screening shall be applied at a very early stage of the planning phase. It is meant to be completed in a rather generic and quick manner. The screening can be conducted with only minimal knowledge of climate change, environmental degradation and natural hazards and without access to detailed climate data.

**The screening exercise has two components:**

* (A) Risk Screening (General Training Activity 2.2a);
* (B) Impact Screening (General Training Activity 2.2b).

These should be performed by answering a series of the key questions (as per the separate training activities and handouts)*.* At the end of the process, participants will make an overall estimation of the risks and impacts. Based on your estimation you shall decide whether a Detailed Assessment shall be conducted or not. In general, it is recommended to pursue a Detailed Assessment if the risks are high and the capacities to cope with these risks are low. Hence, if you consider that the risks for the activity will negatively affect the resilience of systems or if the impact of the activity are high and the capacities of women and men to absorb or reduce those impacts are low, a Detailed Assessment should be conducted. The following key questions should be answered:

* *Are there any significant disaster risks for the activity caused by climate change, environmental degradation and/or tectonic activities, taking into account the vulnerability of the community or systems?*
* *Are there any significant impacts on GHG emissions and/or the environment by the activity, taking into account the capacities of the community or systems?*

Please note that there is a certain level of subjectivity on what is meant by “significant” risk and subsequently on whether there is a need to conduct a Detailed Assessment.

The screening is applied at the beginning of the planning process of a new activity or during the review of a running activity.

The outcome of the exercise will be as follows:

* As a result of this screening, the key questions in the template checklist provided below are completed.
* Overall risks are roughly estimated.
* Overall impacts are roughly estimated.
* It is decided whether a Detailed Assessment shall be conducted or not.

**4.6.2: Approach to delivering Session 2.2**

1. Select one of the following case study scenario examples:

* **GOM national policy decision to increase trade through Port Louis port by 100% from 2018 onwards;**
* **GOM national policy decision to designate the whole Coastal Zone as a tourism development zone (concessions only for tourist infrastructure);**

1. Using one of the above case examples, complete the following Risk Screening exercise (Training Activity handout 2.2a).
2. Complete Training Activity Handout 2.2b (Impact Screening).

**Training Handout 2.2a: DRM Risk Screening Exercise**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **DRM RISK SCREENING** |  |  |  |  |
| **Questions** | **Yes** | **Not sure1** | **No** | **Explanation2** |
| **1. Exposure and hazards** |  |  |  |  |
| **1.1. Does the activity take place in at least one of the following areas or sectors?** | | | | |
| › Agriculture and food security (including livestock and fisheries) |  |  |  |  |
| › Forestry (e.g. reforestation, forest management, agro forestry) |  |  |  |  |
| › Land use management |  |  |  |  |
| › Water Resource Management |  |  |  |  |
| › Biodiversity conservation |  |  |  |  |
| › Water and sanitation |  |  |  |  |
| › Urban development (including land use and planning) |  |  |  |  |
| › Health |  |  |  |  |
| › Infrastructure and transport (e.g. communication, roads, transport) |  |  |  |  |
| › Energy (e.g. hydropower) |  |  |  |  |
| › Others |  |  |  |  |
| **1.2 Is the activity located in any of the following types of sensitive geographical areas, zones and/or protected areas?** | | | | |
| › Arid/semi-arid zones |  |  |  |  |
| › Mountain ecosystems |  |  |  |  |
| › Small islands |  |  |  |  |
| › Coastal regions |  |  |  |  |
| › Deltaic areas, flood plains, alluvial fans, peat land |  |  |  |  |
| › Zones exposed to (tropical) storms |  |  |  |  |
| › Zones within the reach of volcanic activity |  |  |  |  |
| › Zones exposed to landslides |  |  |  |  |
| › Seismic zones |  |  |  |  |
| › Zones exposed to wildfire |  |  |  |  |
| › Zones exposed to biological hazards (e.g. locust) |  |  |  |  |
| › Zones exposed to chemical hazards (pesticides, chemicals) |  |  |  |  |
| › Zones in the vicinity of hazardous material (e.g. vicinity to industrial plants) |  |  |  |  |
| › Zones exposed to heavy air pollution |  |  |  |  |
| › Primary forests |  |  |  |  |
| › Others |  |  |  |  |
| **1.3 Are the objectives of the activity affected by one of the following hazards?** | | | | |
| ›Shifts (special and temporal) in mean temperature and rainfall patterns |  |  |  |  |
| ›Extreme temperature and precipitation events |  |  |  |  |
| › Droughts |  |  |  |  |
| › Storms and/or cyclones |  |  |  |  |
| ›Volcanic eruptions |  |  |  |  |
| › Earthquakes (including tsunamis) |  |  |  |  |
| › Mudflows, landslides |  |  |  |  |
| › Rock-, snow-, ice-avalanches |  |  |  |  |
| › Floods, inundations |  |  |  |  |
| › Deforestation |  |  |  |  |
| › Desertification |  |  |  |  |
| › Wildland fires |  |  |  |  |
| › Degradation (land, soil, ecosystems, biodiversity) |  |  |  |  |
| › Soil, water and air pollution (including contamination by hazardous material) |  |  |  |  |
| › Other natural hazards |  |  |  |  |
| **1.4 Do the hazards above significantly endanger the achievement of the objectives of the activity?** | The activity is significantly endangered if it is located in a sector and in a geographical area exposed to hazards. To answer the question, an overall evaluation of questions 1.1–1.3 is needed: ……. | | | |
| **2. Impacts and Vulnerability** |  |  |  |  |
| **2.1 If the activity is exposed to hazards mentioned above, which impacts do you expect?** | | | | |
| **Impact on water resources and their management** |  |  |  |  |
| › Increased frequency of high flow events (floods) |  |  |  |  |
| › Increased peak flows, runoff and river bank erosion |  |  |  |  |
| › Seasonal or permanent reduction in the availability of freshwater, e.g. seasonal changes in stream flows |  |  |  |  |
| › Increased pathogens and disease vectors as a result of higher water temperature (e.g. malaria) |  |  |  |  |
| › Decrease in water resource quantity and quality |  |  |  |  |
| › Others |  |  |  |  |
| **Impact on coastal systems and low-lying areas** |  |  |  |  |
| › Raised sea level and increases of coastal erosion |  |  |  |  |
| › Changes in wave direction |  |  |  |  |
| › Others |  |  |  |  |
| **Impacts on ecosystems, their properties, goods and services** |  |  |  |  |
| › Loss or shifts of habitats and changes in ecosystems |  |  |  |  |
| › Acceleration in soil loss and erosion processes |  |  |  |  |
| › Increased and accelerated land sliding |  |  |  |  |
| › Increased pollution of ecosystems, soils and lands |  |  |  |  |
| **Impacts on food and forest products** |  |  |  |  |
| › Decrease in food productivity |  |  |  |  |
| › Decrease in forest productivity |  |  |  |  |
| › Others |  |  |  |  |
| **Impacts on human health** |  |  |  |  |
| › Increased frequency and/or severity of disease and pest outbreaks |  |  |  |  |
| › Increase in negative health impacts due to atmospheric pollution patterns |  |  |  |  |
| › Increased frequency and/or severity of negative health impacts due to polluted water systems |  |  |  |  |
| › Loss of human lives |  |  |  |  |
| › Human migration |  |  |  |  |
| › Others |  |  |  |  |
| **Impact on Industry, settlement and society** |  |  |  |  |
| › Loss or damage of infrastructure |  |  |  |  |
| **2.2 Are there particularly vulnerable groups potentially affected by the impacts (e.g. women, children?** | If yes, please specify which groups are affected:  **……** | | | |
| **2.3 Which of the following factors reduce their vulnerability? Which of the following factors increase their vulnerability?** | | | | |
| **Questions** | **Increase** | **Not Sure3** | **Reduce** | **Explanation4** |
| › Human capital: skills, knowledge, health and ability to work |  |  |  |  |
| › Social capital: social resources, including informal networks, membership of formalised groups, relationships of trust that facilitate co-operation and inclusion of vulnerable groups |  |  |  |  |
| › Natural capital: natural resources such as land, soil, water and forests |  |  |  |  |
| › Physical capital: basic infrastructure (roads, water & sanitation, schools, information and communication technologies (ICT) and producer goods (tools, equipment)) |  |  |  |  |
| › Financial capital: financial resources including savings, credit, insurance and income from employment, trade and remittances |  |  |  |  |
| › Political capital: power and capacity to influence political decision-making, formal and informal participation, access to political processes, freedom and capacity to collectively organise and claim rights |  |  |  |  |
| **2.4 Do you estimate that communities and systems involved in the activity are potentially vulnerable to the impacts under 2.1?** | Make an overall evaluation of 2.1. to 2.3:  **……** | | | |
| **3. Overall estimation of the risk for the activity** |  |  |  |  |
| **3.1 Based on the evaluation 1.4 and 2.4, do you estimate that there are significant risks for the activity and that a Detailed Assessment should be carried out?** | Yes No  In general, it is recommended to do a Detailed Assessment  if the activity is significantly endangered by impacts and the vulnerability is high.**5** | | | |

**Training Handout 2.2b: Impact Screening Exercise**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **IMPACT SCREENING** | | |  | | |  |  |  |
| **Questions** | | | **Yes** | | | **Not sure6** | **No** | **Explanation7** |
| **1. Exposure and impacts** | | |  | | |  |  |  |
| **1.1. Does the activity take place in at least one of the following areas or sectors?** | | | | | | | | |
| › Energy generation and distribution | | |  | | |  |  |  |
| › Transport | | |  | | |  |  |  |
| › Construction (housing, infrastructure, etc.) | | |  | | |  |  |  |
| › Industry | | |  | | |  |  |  |
| › Agriculture (including livestock) and rural development | | |  | | |  |  |  |
| › Water | | |  | | |  |  |  |
| › Urban development (including land use and planning) | | |  | | |  |  |  |
| › Tourism | | |  | | |  |  |  |
| › Forestry | | |  | | |  |  |  |
| **1.2 Is there a risk that the activity produces the following negative impacts on GHG emissions and/or the environment?** | | | | | | | | |
| › Impacts on increasing GHG emissions |  |  | |  |  | | | |
| › GHG emissions by operation of buses, cars, airplanes, ships, trains, etc. |  |  | |  |  | | | |
| › GHG emissions by generation and distribution of energy (e.g. diesel generator) |  |  | |  |  | | | |
| › GHG emissions from heating, cooling and construction of buildings |  |  | |  |  | | | |
| › GHG emissions by digestion processes of cattle and other ruminant animals (production of fermentation gases) and manure concentration in more intensive systems |  |  | |  |  | | | |
| › Others |  |  | |  |  | | | |
| **Negative impacts on water** |  |  | |  |  | | | |
| › Impacts of infrastructure on natural water regimes |  |  | |  |  | | | |
| › Contamination of water through pesticides, chemicals |  |  | |  |  | | | |
| › Siltation of reservoirs |  |  | |  |  | | | |
| › Water pollution, changes in groundwater resources, depletion of water resources |  |  | |  |  | | | |
| › Others |  |  | |  |  | | | |
| **Negative impacts on air** |  |  | |  |  | | | |
| › Release of air pollutants by operation of buses, cars, airplanes, ships, trains, etc. |  |  | |  |  | | | |
| › Release of air pollutants by generation and distribution of energy (e.g. diesel generator) |  |  | |  |  | | | |
| › Release of air pollutants from heating, cooling and construction of buildings |  |  | |  |  | | | |
| **Negative impacts on ecosystems** |  |  | |  |  | | | |
| › Impacts of infrastructure on ecosystems etc. (e.g. new access roads) |  |  | |  |  | | | |
| › Deforestation by excessive consumption of fuel wood |  |  | |  |  | | | |
| › Deforestation, forest degradation and unsustainable land use |  |  | |  |  | | | |
| › Resource use displacement: protected areas may increase the pressure on other resources |  |  | |  |  | | | |
| › Unsustainable use of natural resources |  |  | |  |  | | | |
| › Others |  |  | |  |  | | | |
| **Negative impacts on soils** |  |  | |  |  | | | |
| › Impacts of infrastructure on soil |  |  | |  |  | | | |
| › Contamination of soils through pesticides, chemicals |  |  | |  |  | | | |
| › Soil degradation, desertification, erosion and acidification |  |  | |  |  | | | |
| › Microbial transformation of nitrogen fertilisers in soils |  |  | |  |  | | | |
| › Others |  |  | |  |  | | | |
| **1.3 Is there a significant risk that substantial negative impacts are caused by the activity?** | To answer the question, make an overall evaluation of 1.1 and 1.2:  ……. | | | | | | | |
| **2. Capacities** |  |  | |  |  | | | |
| **2.1 Which of the following factors increase or reduce the capacity of people to reduce the impact of the activity?** | | | | | | | | |
| › Human capital: skills, knowledge, health and ability to work |  |  | |  |  | | | |
| › Social capital: social resources, including informal networks, membership of formalised groups, relationships of trust that facilitate co-operation and inclusion of vulnerable groups |  |  | |  |  | | | |
| › Natural capital: natural resources such as land, soil, water and forests |  |  | |  |  | | | |
| › Physical capital: basic infrastructure (roads, water & sanitation, schools, ICT) and producer goods (tools, equipment) |  |  | |  |  | | | |
| › Financial capital: financial resources including accessible savings, credit, insurance and income from employment, trade and remittances |  |  | |  |  | | | |
| › Political capital: power and capacity to influence political decision-making, formal and informal participation, access to political processes, freedom and capacity to collectively organise and claim rights |  |  | |  |  | | | |
| **2.2 Do you estimate that women and men involved in the activity have the capacities to manage the risks of negative impacts identified in 1.3?** | Make an overall evaluation of 2.1 taking into account 1.3:  **……** | | | | | | | |
| **3. Overall estimation of the impact of the activity** | | | | | | | | |
| **3.1 Based on the evaluation 1.3 and 2.2 do you estimate that there are significant impacts by the activity and that a Detailed Assessment should be carried out?** | Yes No  In general, it is recommended to do a Detailed Assessment  when assessed impacts are high and capacities of women and men to reduce those impacts low.**10** | | | | | | | |

*NB: It will not always be possible to respond clearly with “yes” or “no” to a particular question; in this case “not sure” should be marked.*

*Add a comment if you feel that a clarification or explanation is necessary, e.g. specifying the type of activity (from the listing) that is concerned.*

*Please note, that also in case of unclear effects (many times “not sure” marked), it might be advisable to conduct a Detailed Assessment.*

### Session 2.2 – Ecosystem Based Adaptation (Protocol techniques and approaches 2)

#### Overview

Ecosystem-based Adaptation (EbA) in coastal environments is being considered as a valid concept to help address the consequences of climate change. It represents a range of adaptive management approaches that use biodiversity and natural habitats as part of an overall approach towards helping coastal business and communities to better adapt to the negative effects of climate change. In addition, EbA can provide other benefits to communities, for example, through the maintenance and enhancement of ecosystem services crucial for livelihoods and human well-being, such as clean water and food. Appropriately designed EbA initiatives can also contribute to climate change mitigation by reducing emissions from ecosystem loss and degradation, and enhancing carbon sequestration.

The design and implementation of coastal adaptation measures, using the EbA approach, is a key goal of the current UNEP funded project objective (being managed by the Ministry of Environment) which involves (specifically for the Kune-Vaini Lagoon System- KVLS), a range of coastal EbA interventions that include:

* The implementation of coastal forests involving the reforestation of some sites of the Ceka. These areas have deteriorated over a number of years, and support is needed to help stabilize the sandy dunes and restore the damaged natural habitats, selecting native plants resilient to climate change.
* Dune rehabilitation. Stabilizing the upper level of the sand dunes, to control erosion caused by normal tide/wave activities and wind erosion, by planting native water and salt resistant species.
* Opening a new tidal inlet channel between the Ceka Lagoon and the Adriatic Sea;
* Possible opening/reopening of 12 artesian wells, to ameliorate the balance on salt and not salted water, and to offer drinking water for wildlife (subject to initial feasibility assessment works).

Building on the knowledge created to date, from key projects initiated by UNDP (2012) and UNEP (this project), the purpose of this Session is to provide an overview to the EbA Protocols Report (2017) produced by UN Environment for the Ministry of Environment. Its purpose is to set up the framework for delivering coastal EbA at a national level for Albania. This framework includes the design of a series of technical “Protocols” which may be applied at a national level, though are initial defined based on experience attained from local pilot study work (UNDP 2012 and UNEP 2017).

The key aspects of the Protocol report are as follows:

* Introduce international examples of coastal EbA protocol or “guidance” documents that have been produced in temperate countries that are of relevance to the interventions that have been undertaken in Albania;
* Introduce technical “protocols” that may be adhered to on specific coastal EbA interventions (for practitioner assistance);

Introduce how the protocols (technical details) presented in this document can apply within an EbA mainstreaming “guideline” for the future and how this Protocol document will support the development of a more robust EbA Guidance Manual to be produced separately for Albania

#### Ecosystem Services

All living organisms and their ecosystems are interconnected. Biological resources have been used to sustain livelihoods since time immemorial and this continues. Ecosystems provide a range of services that are vital for human wellbeing. These include: a) Provisioning services b) Regulating services c) Cultural services d) Supporting service.

* Provisioning services

This includes products that provide direct benefits to people either by direct consumption or by selling them.

* Food – a range of food products obtained from both plants and animals
* Fuel – biological material used as a source of energy. E.g.: wood, dung, fossil fuel
* Ornaments – plant and animal products. E.g.: skin, shells, horns and flowers
* Water
* Medicine – a number of medicines, biological materials and food additives are derived from ecosystems
* Genetic resources – genetic material used for biotechnology.
* Regulating services

This includes ecosystem processes such as:

* Maintain air quality – organisms in an ecosystem add and remove a number of chemicals from the atmosphere
* Regulate climate
* Regulate water
* Prevent erosion
* Treat water
* Regulate diseases
* Biological control
* Pollination
* Protect from storms
* Cultural services

These are the benefits communities obtain from ecosystems that are non-materialistic. These provide spiritual enrichment and cognitive development. They can be recreation and aesthetic experiences such as:

* Recreation – ecosystems provide suitable environments for people to spend their leisure time. This may be a picnic on the beach, a snorkelling activity on the coral reef or a walk through the park.
* Knowledge – cultural knowledge systems are influenced by ecosystems. Traditional and formal education includes information about cultural knowledge. Very often ecosystem components and processes form the basis for education.
* Cultural diversity – ecosystem diversity has impacts on cultural diversity
* Heritage values – communities value historically important places and species
* Inspiration – ecosystems play a significant role in providing inspiration for folklore and art
* Aesthetics – people appreciate beauty and aesthetic values of ecosystems. It provides tranquillity and mental relaxation.

Cultural ecosystem services like maintenance of traditions, identity and spirituality have been recognised by many as other important benefits from biodiversity. More than 1.2 billion people living in severe poverty depend directly on environmental services provided by the ecosystems for their food, water, fuel, medicine and shelter.

* Supporting services

These may not be directly benefiting the people but are essential for the smooth functioning of ecosystems. Nutrient cycling and soil formation are such services which underpin the provision of other ecosystem services. The survival and wellbeing of the human population depends very much on biodiversity and the health of ecosystems. Loss of biodiversity and ecosystem degradation is resulting from demographic changes, overconsumption and use of none environmentally friendly technologies. Any decline in diversity will have repercussions on human health, livelihoods and culture.

Ecosystems are dynamic systems which react to various disturbances and may result in a shift to an alternative state. These disturbances can be in the form of fire, drought or loss of species. These shifts may happen gradually or rapidly affecting ecosystem services such as food production. The rate at which these shifts take place depends on the capacity of an ecosystem to absorb such disturbances and is known as ecosystem resilience. Continuous modification of ecosystems over long periods can reduce the ecosystem resilience resulting in these shifts. A healthy ecosystem has a better chance of absorbing the impacts of climate change. Similarly, a healthy community is more resilient to climate change impacts. We cannot think of one or the other in isolation.

As the ecosystem services degrade due to anthropogenic effects and climate change a number of ecosystem services will be affected. It is essential to preserve ecosystem services to help communities adapt to climate change impacts.

* For many coastal communities fish is the main source of protein and minerals. MoSSNSE&SDrly 3 billion people obtain nutrients from fish and shellfish (UNEP, 2009).
* More than 500 million people have built their livelihoods on fishing and aquaculture (UNEP, 2009).
* Ecosystem services provided by coral reefs (which also include tourism, fisheries and coastal protection) are estimated at US$ 30 billion a year (UNEP, 2009).
* Marine organisms capture more than 50% of the atmospheric carbon. A large portion of this carbon is captured by plankton, mangroves, seagrasses and salt marshes.

#### Ecosystems and Coastal Zone Management

The most intriguing location of any small island is its coastal zone. This transitional strip of land contains some of the most productive and valuable habitats of the biosphere. It has multiple resources, resource users, varying levels of development and in essence is fundamental to the very existence of a small island. It has been recognised that the coastal zone is such a complex and sensitive zone that it requires holistic and integrated management involving all sectors and stakeholder interests. This has led to the development of concepts of integrated coastal zone management (ICZM) as the best way forward for effective management of the coastline. ICZM recognises that management of sectoral components (e.g., fisheries, forestry, agriculture, tourism, urban development) should be part of a functional whole (a holistic and integrated approach to management). In ICZM the focus is on the users of natural resources, not on the stock per se of these resources

It is a fact that the social and economic wellbeing of Albania has a high dependency on the goods and services that are provided by coastal ecosystems, and that climate change poses a significant additional threat to ecosystem health and vitality. It is appropriate that a primary goal of policy should the maintenance of the goods and services provided by coastal ecosystems and, therefore, should be a principle driver of approaches and methods for determining future strategies for coastal management. It is equally true that many of the current changes found impacting coastal ecosystems, and future changes from climate change, are beyond either local or national control. What this means it that options to mitigate climate change are largely not available and the only management choices are to adapt social and economic and, where possible, environmental systems to current and future changes. These considerations have led to concepts of ecosystem-based approaches (EBA), which “….places human needs at the centre of biodiversity management. It aims to manage the ecosystem, based on the multiple functions that ecosystems perform and the multiple uses that are made of these functions. The ecosystem approach does not aim for short‐term economic gains, but aims to optimize the use of an ecosystem without damaging it “

ICZM and EBA approaches have, in past, been implemented separately with ICZM typically attempting to accommodate multiple to achieve sustainable development of coastal and ocean areas. In contrast, EBA has been applied where there has been a more explicit focus on maintaining ecosystem service functions.

SIDS are especially vulnerable to climate change with a high risk of beach erosion, sea level rise, coral bleaching, and water resource reduction. In addition, SIDS are heavily dependent upon marine and coastal resources to support local economies and livelihoods and have little capacity for adaptation. This has led to a drive to combine ICZM and EBA approaches in recognition that the former has a stronger focus on governance that can establish the management framework to achieve greater resilience and maintenance of ecosystem function embodied within EBA. ICZM therefore sets the strategy and EBA provides the rules for designing management interventions. This is a particularly strong tactic to address the demands of climate change adaptation because it sets forth goals for management actions, namely:

• Promoting the resilience of both ecosystems and societies.

• Promoting multi-sectoral approaches.

• Operating across the full scale of issues i.e. not to be confined by artificial project/area boundaries.

• Integrating flexible management structures that enable adaptive management.

• Minimizing trade-offs and maximizing benefits with development and conservation goals to avoid unintended negative social and environmental impacts.

• Using best available science and local knowledge, and fosters knowledge generation and diffusion.

• Ensuring participatory, transparent, accountable, and culturally appropriate activity.

#### Approach to delivering Session 2.2

* General Training Activity 2.2a “Ecosystem Assessment”

There are four main ecosystems in Albania. These include coral reef, mangrove, seagrass and coastal vegetation.

1. List the ecosystem(s) found on and around your identified case study Parish area in order of importance.

2. List the service(s) that these ecosystems provide to that Parish community in order of importance.

3. For the most important ecosystem service under item 2 list the risks from climate change in order of importance.

* General Training Activity 2.2b “Ecosystem Adaptations in existing plans”

Examine the existing Coastal Zone Management Plan for Albania and identify measures to address the risks from climate change.

1. List the measures taken to address climate change related risks.

2. If no measures exist explain why you think that this is.

3. Taking into account Activity 2.2a provide a suggestion as to what might be done in terms of good practice tools to reduce the climate change risk to the most significant ecosystem based service provided to your island.

* General Training Activity 2.2c “Planning for Ecosystem Based Adaptation”

Using the assessment approach under Activity 2.2a and the planning approach under Activity 2.2b and for each key ecosystem and ecosystem good/service……

1. Prepare the outlines of a plan of actions each comprising: - Issue (ecosystem and service) - Why it is a local planning issue - Target (what you want to achieve) - Any further information needed - Good practice tool(s) to be used to deliver the target - Where, when and who should implement the action(s)

2. Present the plan outline to participants in the training and try to achieve a consensus.

## Module 3: Adaptive Capacity (non-physical components)

### Session 3.1: Applying a Climate Risk Assessment Lens

#### Aim

The aim of applying a “Climate Lens” for strategic projects or policies is to appraise whether the strategic goals, objectives or priorities is at risk from disasters and conceive a strategy which is more effective at reaching its objectives increasing the resilience of systems and communities. The Climate Lens shall be applied as early as possible in the planning of a new strategy or programme or a new phase of an existing strategy and programme.

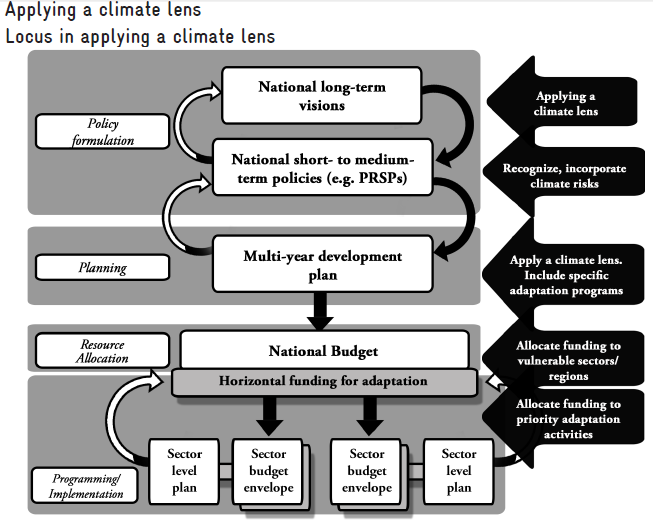
#### What is the “climate lens”?

* The climate lens is a systematic approach to incorporate/integrate climate change in to your planning approach or project;
* If you think about how climate change will affect your life (project) you need to look at how exposed you are to it.

Applying a “climate lens” puts in focus the extent to which:

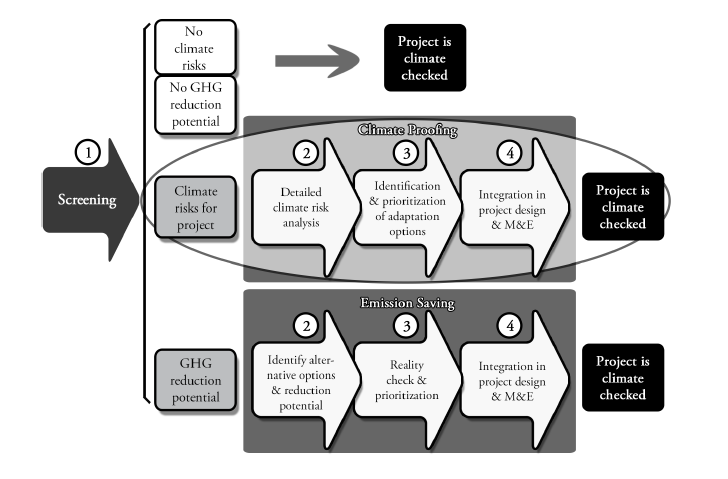
* a measure or a set of measures could be vulnerable to climate risks;
* climate change risks have been factored in formulating these measures;
* the measure or set of measures could lead to increased or decreased vulnerability or lead to mal-adaptation;
* opportunities arising from climate change can be utilized;
* current strategies and policies need to be revised to address climate risks.

The following diagrams (Figure 4.6 and 4.7) indicate where applying a climate lens is often needed in planning situations.



**Figure 4.6: Applying the Climate Lens**

The next diagram shows that climate proofing, as a planning tool, can be used to help with GHG emission reduction strategies or (for our purposes today) to help improve the design of a proposed goals, objectives or projects.



**Figure 4.7: Climate Proofing as a planning tool**

#### Approach to delivering Session 3.1

* General Training Activity 3.1a

The learning objective of the exercise is:

* To understand the need to identify the relevance of climate change to a project or activity:
* To help it become more resilient to climate change or more supportive of adaptation by understanding the relevant climate change risks and opportunities.

**Instructions for exercise**

* Agree on which groups are to consider which coastal EIA/SEA examples to use.
* Complete the provided reporting formats below (to be taken in the field as part of Session 3.2).

**Handout 3.1a (Analysing the context)**

|  |
| --- |
| **Analyse the context of climate change, environmental degradation and natural hazards** |
| **What are the most important natural hazards also related to climate change and environmental degradation and/or natural hazards in the case study example?** |
| **What are the relevant factors influencing current and future vulnerability?** |
| **Which key national development priorities, geographical areas, and/or sectors are likely to be particularly affected by climate change, environmental degradation and/or natural hazards?** |

Matrix 1 provides a template for your Parishes ***preferred activities or projects*** that may be already identified. Your task is to begin to identify the Parish priorities and potential administrative responsibilities for further analysis. Use Matrix 2 below to guide you through the following steps: -

* In column A, write down up some possible projects or activities.
* In column B for each Parishes proposed project, explain if and how it could be affected by climate change, e.g. CC could affect the natural resources upon which the project depends.
* In column C, based on what you know about the Parish, select the specific locations /areas especially at risk (so that the project is not located in “hazard” risk areas).
* In column D, identify the additional information that is needed (climate data) to be certain that the proposed project is climate proofed (studies to be undertaken possibly as part of a regulatory EIA/SEA?).

**Matrix 1: Assess relevance of climate change to island activities or planned projects**

|  |  |  |  |
| --- | --- | --- | --- |
| 1. **Project** | **B How could the project be affected by climate change?** | **C What part of your Parish is/ most at risk and is this important to the project (Y/N)?** | **D What additional climate information is needed to ensure the project is climate proofed?** |
| **1** |  |  |  |
| **2** |  |  |  |
| **3** |  |  |  |
| **4** |  |  |  |
| **5** |  |  |  |
| **6** |  |  |  |
| **7** |  |  |  |
| **8** |  |  |  |
| **9** |  |  |  |

**Handout 3.1b (Report format to summarise eventual strategy adjustments)**

|  |  |  |
| --- | --- | --- |
| **Adjust the project design or strategy (if necessary)** | | |
|  |  | Type of adjustments |
| **Does the strategy need to be adjusted due to the identified disaster risks?** | Yes No | If yes, explain what kind of adjustments are needed (e.g. reformulations, recommendations at project level – see Session 3.3) |

### Session 3.2:Selecting Suitable Coastal Approaches and Interventions

There are several steps that should be taken before deciding on the preferred intervention for a project, whether that is a shoreline protection project or a development project within the coastal zone. Figures C1 to C6 provide flow diagrams to depict a best practice route to follow in determining a preferred coastal intervention. This process has been linked to the Albanian planning and EIA processes and through following the steps, the majority of the required evidence for planning may be considered and assessed.

The following high level process may be applied to several different scenarios or projects. The level of detail and exact methodologies should be adapted on a project level that embraces local conditions that are specific to the local site, size of the project, requirements of the MoTE and complexity of the project. However there are some key themes throughout the process which should be applied to every project, however small/large or complex.

#### Community engagement

Including the local community in the decision making process (using appropriate communication programmes) is vital to the successful selection of a sustainable solution which provides wider benefits to the coastline. Community knowledge must not be neglected as part of the preferred option decision making process. Furthermore, a detailed analysis of past flooding/erosion (or other climate related) events, will enable a decision maker to use local and site specific knowledge and learn from past experiences. Sharing data with other stakeholders, who may be engaged in monitoring or follow-up activities, is highly commendable and cost effective. In particular, the social dimension of nature-based interventions for coastal protection is increasingly seen as a critical component for the long-term success and resilience of coastal environments (UNEP, 2013 and 2016; Wicander et al., 2016; Day et al., 2015). In Albania, the need to engage local communities in coastal ecosystem restoration is particularly important because many of the local stressors are associated with bad practices, such as over-fishing and unsustainable harvesting of coastal lands/habitats. Where possible restoration interventions focusing on dunes and wetlands should try and include a more holistic programme that involves the management of the entire ecosystem with the support and engagement of the community.

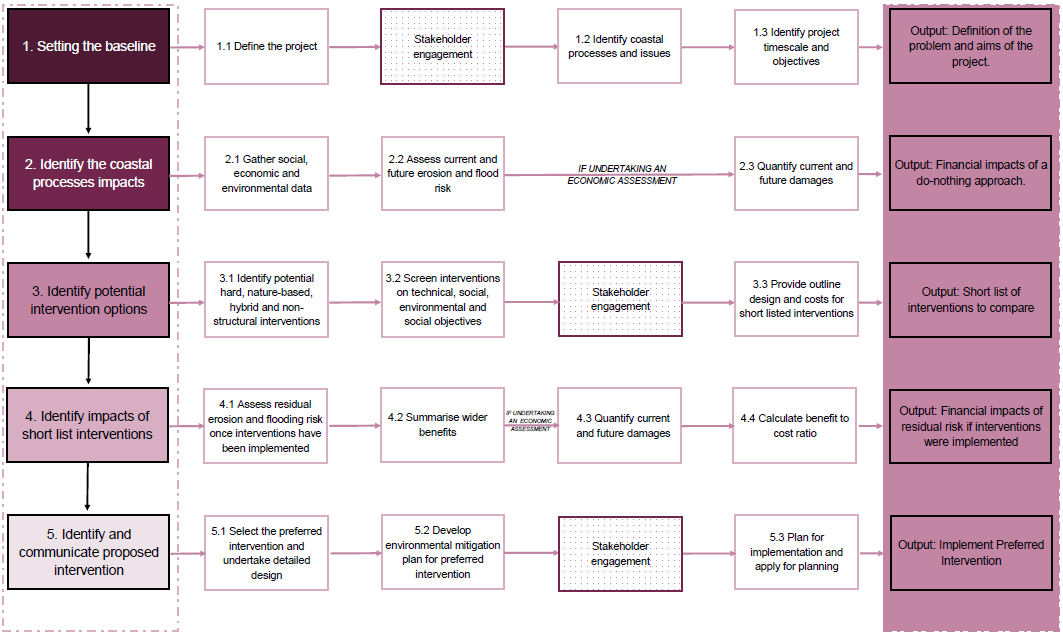
#### Incorporating consideration of future change

Scenario analysis is a crucial first step in determining robust decisions when faced with significant climate uncertainty. By exploring different future scenarios, an understanding of what the future may look like (often referred to as “future-casting”) and, importantly, how different decisions play-out in those futures, can be developed. Designers and developers must think imaginatively about change and not simply project existing trends. A comprehensive view of the potential drivers that might influence future coastal change must be considered and discussed. It is through this process that the status quo can be challenged and space given for innovation.

#### Assessing different interventions

Rather than, as can be the case in more traditional schemes, assuming the best solution is what has historically been used or has worked somewhere else, this EbA project should be used to ensure a wide range of interventions are assessed. This should include assessment of nature-based, hybrid and non-structural intervention options to achieve the wider benefits provide longer-term sustainability and stability of the shoreline in addition to reducing the environmental impacts (see Figure 4.1).

**Figure 4.1 - HOW TO SELECT AN INTERVENTION**



2

### Session 3.3: Assessment of EbA Techniques in the field

#### Approach to delivering Session 3.3

***NB: an overview of the approach only is put forward for this Session (field training). A full session (as highlighted above) is likely to take a few days to plan for and deliver.***