

## **Ecosystem based Adaptation (EbA) Road Map**

The process of creating EbA measures for the problems in the river basins was based on two Vulnerability Analysis. The following gives a short overview of the steps that need to be carried out to define the vulnerabilities and the right EbA solutions;

### **1. Geographical scaling**

The first step for building EbA measures defines the geographic boundaries of the areas. Sub-regions are identified within each project area and major hydro system features as well as economic activities are mapped out.

### **2. Scoping**

Scoping addresses the major concerns and issues by assessing their environmental and socio-economic impacts.

### **3. Causal Chain**

This analysis traces the major concerns and issues to their root causes, immediate causes and environmental or socio-economic impacts. It is conducted to serve as the basis of the selection of solutions.

### **4. Data collection, analysis**

Data collection and analysis is a critical step that collects and organizes all data from available sources and prepares it for analysis then conducts analysis.

### **5. Considering climate change consequences**

To address climate change impacts, future climate information for the basins needs to be obtained. According to the geographic boundaries, the global climate change information is has to be downscaled and the effects on the chosen regions then have to be modelled.

### **6. Modelling**

Water resources modelling or hydro-system modelling is state of the art in order to adequately address behavior and mutual dependencies of water resources components. The results of water resources modelling allows to derive effects on other sectors and to verify assessments and observations made prior.

### **7. Verification of cause-effect relations**

Verification substantiates the causal-chains. Whenever it is possible, it is backed with data, calculations or any other proven indicators.

### **8. Selection of EbA Measures to adapt to vulnerabilities**

Technically feasible measurements are prioritized economically. Public hearings and stakeholder participation to ensure the acceptance from the communities finalize the process of measurement selection.