

Mountains and Inland Waters

NWP, 2013 EbA workshop

Knowledge Needed

- Higher “dynamic” of change in mountains; thus need local knowledge
- Greatest impacts will be from land-use, dams etc – not CC
- Localised information
 - Flow; land-use; degradation; land and snow slides
- Localised models
 - *Modellers “Stop using Mt ranges as model boundaries”*
- Local knowledge
 - it is not static; it is context & scale dependent; blend it other knowledge
- Need information on species shifts
 - including crop species
- Inform people about costs of damage & value of ecosystem services
 - For local people & decision makers
- Need information on vegetation & crop water use changes – to plan water extraction

Tools & Best Practices

- Develop risk maps
 - Slides; flooding
- Use water flow modelling to allocate use, incl to natural ecosystems
- Improve Cost-Benefit analysis to improve non-motorized costs
 - Does EBA really save money?
- Reservoir design needs to be updated to a changing climate
- Assess degree of community dependency on natural systems
- Use Strategic Environmental Assessment
- Emphasise the value of tourism and the compatibility of EBA

Tools & Best Practices

- Adaptation is context specific
 - EBA even more so
- EBA needs all the knowledge that Adaptation does but also
- Mountains are difficult to physically access and thus to “manage”
- It should be first nature to use vegetation for stabilization & water management – not concrete & steel
- Political churn mitigates against EBA as EBA requires long-term effort
 - Must work with governance systems; and private sector
 - Emphasize the short-term benefits; play the tourism card
 - EBA has a ribbon cutting problem

Potential Indicators

- We need EBA for sustainable development
 - Thus most SD indicators apply and be a basis for assessing changing vulnerability
- Monitoring must be long-term and inclusive of all sectors, stakeholders, and their goals
- Regular monitoring of robustness (resilience) of the EBA ecosystems
- Measure and report Ecosystem Services
- Is the EBA delivering as expected?
- Monitor community support for the EBA
- Area of ecosystems with a EBA function
- Monitor ongoing governance
- Maintenance of high biodiversity
- Legal provisions allocating environmental flows
- Ecosystem services must be included in National Accounts

Further Work

Capacity (11)

- Trans-“boundary” issues (water & Mts)
- Transparent decision making
- Policy makers
- Knowledge management tools at different levels

Communication (19)

- Local relevance & local language
- How to communicate with communities
- Action leaning at community level
- Engagement of vulnerable groups

Indicators (9)

- Priorities through testing
- More monitoring tools

Governance & Economics (4)

- Recognising EBA in National Legislation
- Economic assessment of Ecosystem Services

Science (14)

- Downscaling
- Convective storms
- Environmental flows
- Ecosystem dynamics & function
- Biospherical limits (vegetation)
- Pests & invasives
- Place of livelihoods in ecosystem functioning
- Traditional knowledge & genetic resources
- Causal links of EBA and resilience