Ecosystem-based Adaptation in the National Adaptation Programmes of Action (NAPAs)

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National Adaptation Programmes of Action (NAPAs)

Process/ mechanism for the LDCs:
- Based on existing information & stakeholders
- Identify urgent needs & prioritize actions
- Create awareness & build capacity
- Initiate implementation & access funding

Good starting point for adaptation but need evaluation & improvement as new knowledge emerges!
Ecosystem-based Adaptation (EbA)

Aims at **reducing societal vulnerability** through the **sustainable management**, restoration and/or conservation of ecosystems (CBD Secretariat, 2009)

**Examples:**
- Restoring mangroves for coastal zone protection
- Protecting forests in watersheds for conserving water & soil
- Managing forest products for income diversification

**Advantages**
- Multiple socio-ecological benefits
- Cross-sectoral benefits → sustainability
- Cost-effectiveness (WB, 2009)
- 'No-regret' measures (BirdLife International, 2009)

**Research Question**

*Are ecosystem services considered in the NAPAs, to what extent and how?*

- Content analysis (background & project profiles)
- Decision tree for project categorization
Example:

- Cambodia: Rehabilitation of multiple use reservoir
- Sierra Leone: Establishment of new forest reserves, protected areas and national parks
- Djibouti: Protection and rehabilitation of forests for timber, fodder and soil & water regulation
- Bangladesh: Reduction of climate change hazards through coastal afforestation
## Content Analysis Results: Background Information

<table>
<thead>
<tr>
<th>№ References</th>
<th>№ Countries</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
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<td>0 ref:</td>
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<td>32%</td>
</tr>
<tr>
<td>1-2 ref:</td>
<td>7</td>
<td>16%</td>
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<tr>
<td>3-5 ref:</td>
<td>14</td>
<td>32%</td>
</tr>
<tr>
<td>6 or more ref:</td>
<td>9</td>
<td>20%</td>
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Content Analysis Results: **Background Information**

- 68% of the NAPAs with at least one reference to ecosystem services
- 20% stress that importance more than 5 times

![Graph showing ecosystem providers](Image)
Lesotho: "Forest resources play a critical role in the vulnerable zones; in particular for fuel wood, prevention of soil erosion, income generation, scenery for tourists attraction, building material, forage and shelter."

Maldives: "Reefs function as natural sea defenses for the highly vulnerable islands. The two major economic activities tourism and fisheries are reef based and provide more than 80% of the total revenues to the country."
Ecosystem-based projects usually combine ecosystem measures with non-ecosystem measures.

Regulating services (erosion control, water flow control, natural hazard regulation) considered more frequently than other services.
- 175 sectoral benefits in 106 projects
- Burkina Faso: *Sustainable management of natural vegetation and valorisation of NTFPs* (food, income, health, forestry, biodiversity)
Content Analysis Results: Project Profiles

- 11 countries allocate more than 28%, 9 allocate 50% or more

**Share of Ecosystem Projects for Societal Vulnerability**

<table>
<thead>
<tr>
<th>% Country Total</th>
<th>% All NAPAs</th>
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<tbody>
<tr>
<td>0%</td>
<td>25%</td>
</tr>
<tr>
<td>Up to 12%</td>
<td>25%</td>
</tr>
<tr>
<td>13% -27%</td>
<td>25%</td>
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<tr>
<td>28% or more</td>
<td>25%</td>
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</table>

(map of countries)
Conclusion

- **Non-ecosystem projects** mainly considered, even if importance of ecosystems substantiated (e.g. CAR)

- **Role of ecosystems** for adaptation is understood

- Ecosystem measures usually considered with non-ecosystem measures
- **Cross-sectoral benefits** of EbA recognized

- Importance of **forest ecosystems** for **livelihoods** (income) in background information but few such projects

- Ecosystem services **purify water & regulate disease** but almost no such projects in the NAPAs

Questions for Further Research

- What conditions distinguish the countries that include a large № of ecosystem projects from other countries?

- Are the NAPAs an efficient mechanism for mainstreaming ecosystem-based adaptation?
THANK YOU!

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