RESEARCH ON DEVELOPMENT AND IMPLEMENTATION OF NATIONAL BIODIVERSITY STRATEGY AND ACTION PLANS (NBSAPS) TOWARD REALIZATION OF SOCIETIES IN HARMONY WITH NATURE

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CBD SBI-2 Side Event 2440: Mainstreaming Biodiversity in Production Landscapes and Seascapes: Integrated Approaches in Design and Implementation of National Biodiversity Strategies and Action Plans (NBSAPs)
Background of Research

• COP 13: **Mainstreaming of biodiversity into sectors** including agriculture, forestry, fisheries and tourism etc.

• **Integrated approaches in production landscapes and seascapes**, include socio-economic aspects, are shaped by high levels of human intervention involving both productive, cultural, aesthetic, or educational activities

• Expected to **contribute to mainstreaming of biodiversity into relevant production sectors and to achieving many of the Aichi Biodiversity Targets**.

• Can help Parties **involve relevant ministries, agencies and stakeholders** to mainstream biodiversity, and **capture existing measures** under their NBSAPs implementation
Research Objectives

• How “*integrated approaches in production landscapes (and seascapes)*” are being incorporated into and implemented under NBSAPs?

• How they are contributing to the *achievement of the Aichi Biodiversity Targets*?

• Provide useful knowledge for future NBSAP development and implementation.
Overview of Research

2016
- Review of concepts

2016-2017
- Broad-scale study (133 NBSAPs)

2017
- In-depth study (15 NBSAPs)

2018
- Workshop (7 NBSAPs)

2018.3
- Report

SCBD
- Expert

Parties
- SCBD

CBD process
- 2018-2019
Review of concepts

- Integrated Approaches in Production Landscapes (and Seascapes):
  - Cultural Landscapes
  - Socio-Ecological Production Landscapes (SEPLS)
  - Globally Important Agricultural Heritage Systems (GIAHS)
  - Landscape management/approach
  - Local terms related to these landscapes/approaches (e.g. Dehesa in Spain, Muyong in Philippines)…etc

- Ecosystem approach

- Mainstreaming biodiversity in other sectors
Objectives
Are the concepts related to integrated approaches in production landscapes (and seascapes) referred to in NBSAPs?

Data set
- All countries’ latest NBSAPs, in English, shared on the CBD website by 31 July 2016 (total number analyzed: 133).

Methodology
Text mining
<table>
<thead>
<tr>
<th>Group</th>
<th>Code</th>
<th>Examples of Keywords</th>
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<tbody>
<tr>
<td><strong>A: Integrated Approaches in Production Landscapes</strong></td>
<td></td>
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<tr>
<td>A1: Production landscapes</td>
<td>*GIAHS</td>
<td>Globally Important Agricultural Heritage Systems, GIAHS</td>
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<td></td>
<td>*SEPLS</td>
<td>SEPL, SEPLS, socio-ecological production landscape, social ecological production landscape</td>
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<tr>
<td></td>
<td>*Cultural landscape</td>
<td>Cultural landscape, biocultural landscape, high-nature-value farmland</td>
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<tr>
<td>A2: Traditional management</td>
<td>*Traditional natural resource management</td>
<td>dehesa, ahupua'a, satoyama, muyong, community forestry, transhumance, agroforestry, homegarden, etc.</td>
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<td>A3: Landscape approach</td>
<td>*Landscape approach</td>
<td>Landscape approach, integrated landscape management</td>
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<td><strong>B: SEPLS Characteristics</strong></td>
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<tr>
<td></td>
<td>*Dynamic mosaics of habitats and land and sea uses</td>
<td>dynamic mosaic, mosaic land use, heterogeneous landscape</td>
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<tr>
<td></td>
<td>*Harmonious interactions between people and nature maintains biodiversity</td>
<td>human influenced landscape, society, harmony with nature, etc.</td>
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<tr>
<td></td>
<td>*Providing humans with the goods and services in a sustainable manner</td>
<td>sustainable natural resource use, etc.</td>
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<tr>
<td></td>
<td>*Be deeply linked to local culture and knowledge</td>
<td>local knowledge, local culture, traditional knowledge, etc.</td>
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<td><strong>C: Ecosystem approach</strong></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>*Ecosystem approach</td>
<td>Ecosystem approach</td>
</tr>
<tr>
<td><strong>D: Landscape</strong></td>
<td>*Landscape</td>
<td>landscape</td>
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<tr>
<td></td>
<td>*Seascape</td>
<td>seascape</td>
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</tbody>
</table>
About half (44%) referred to the production landscapes concepts

Almost all (132/133) referred to characteristics related to production landscapes
Objectives
What measures taken to implement the concepts in the NBSAPs?

Data Set
15 NBSAPs and National Reports, that included the concepts related to the integrated approaches in production landscapes

In-depth study (NBSAPs)

Interrelationship between Integrated approaches in production landscapes (A) and Biodiversity mainstreaming (BM)

- Both concepts are well connected
- A in BM: 48% (251/561); BM in A: 74% (251/341)

Group A: Integrated approaches in production landscapes (and seascapes)
- A1: Production landscapes
- A2: Traditional management
- A3: Landscape approach

Group BM: Biodiversity mainstreaming

Total: A ∨ BM (651)
In-depth study (NBSAPs)

Number of descriptions related to Group A that were found to be related to the Aichi Biodiversity Targets in the NBSAPs

N = 155

Relates most to achieving Aichi Biodiversity Targets 4, 14, 15, 11, 5, & 7.
In-depth study (National Reports)

Trends in the NRs concurred mostly with the results of NBSAPs study, but differed in:

- Better co-occurrence with Biodiversity mainstreaming,
- Less references to the importance of biodiversity and ecosystem services,
- More categories of “projects”,
- Higher references to the Aichi Biodiversity Targets.
Multiple concepts used in NBSAPs;

These concepts were;
1) referred to in about half of the NBSAPs,
2) well described in the “strategies”, “targets”, and “action plan” chapters,
3) co-occurred with Biodiversity Mainstreaming,
4) well related to ecosystem services,
5) contributing the most to achieving Aichi Biodiversity Targets 4, 14, 15, 11, 5, and 7.
Objectives:

• Examine the effective measures of incorporation and implementation of the concepts under NBSAPs
• Discuss contributions to achieving Aichi Biodiversity Targets

Useful knowledge for incorporating the concepts into the NBSAPs and their effective implementation.
A: Success factors and challenges in incorporation of integrated approaches in production landscapes and seascapes into NBSAPs

a. Integration of cross-cutting issues among different institutions
b. Communication and education of society including local communities
c. Incentives at multiple levels for different stakeholders
d. Processes of incorporation and implementation

[Diagram showing steps in the process, such as Situation assessment, Approve budget allocation, Involve local stakeholders, Develop action plan and goal setting, Evaluate socio-ecological value of production landscapes/seascapes, Select targeted areas and criteria to be applied, Launch pilot project, Implementation and evaluation.]
B: Contributions to Aichi Biodiversity Targets

a. Contributions to multiple Aichi Biodiversity Targets
   - Clearly contributes to Target 11 and relevant to Targets 4, 5, 7, and 14.

b. Synchronizing goals among different policy levels

c. Using technology for data capturing
   - Technological tools such as GIS and mapping tools etc for assessment and evaluation

d. Better global target setting
   - Include the concepts into global biodiversity targets post 2020.
C: Future steps and revision of NBSAPs

a. Bridging institutions and establishing environmental accounting mechanisms

b. Science-policy interface

c. Incentives for different stakeholders’ ownership

d. Expectations from international bodies
   - Promote research,
   - Provide information platform,
   - Guidance, customized capacity building,
   - “Matchmaking” of users and providers,
   - And facilitate collaboration
## Workshop (Outcomes)

<table>
<thead>
<tr>
<th>International</th>
<th>National</th>
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<tr>
<td>Support for national-level implementation by international bodies:</td>
<td>Cooperation between different ministries and sectors, and cooperation between national, sub-national and local levels:</td>
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<tr>
<td>• Enabling common understanding</td>
<td>• Concept integration</td>
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<td>• Customized know-how for implementation</td>
<td>• Institutional cooperation</td>
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<tr>
<td>• Information-sharing mechanisms</td>
<td>• Horizontal</td>
</tr>
<tr>
<td>• Target setting</td>
<td>• Vertical</td>
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<tr>
<td>• Facilitating trans-boundary approaches</td>
<td>• Communication and education</td>
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<td>• Involving local communities</td>
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<tr>
<td></td>
<td>• Science-policy interface</td>
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<td></td>
<td>• Environmental accounting</td>
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<td>• Assessment and evaluation</td>
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<td>• Incentives for stakeholders</td>
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<td>• Governments</td>
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<td>• Local communities and practitioners</td>
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Workshop

Workshop Recommendations

1. Encouraging and promoting the incorporation and implementation of these approaches in NBSAPs
2. Mainstreaming these approaches globally
3. Connecting integrated approaches in production landscapes and seascapes to global targets
4. Enhancing information exchange and capacity building for NBSAP implementation
Mainstreaming Biodiversity in Production Landscapes and Seascapes: Integrated Approaches in Design and Implementation of National Biodiversity Strategies and Action Plans (NBSAPs)

- Share research findings and workshop outcomes
- Country experiences:
  - Estonia and Japan (workshop)
  - UK (in-depth study)

Discussion:
- Merits, needs and challenges of incorporating and implementing these integrated approaches under NBSAPs
- Principles, including factors and processes, for successful implementation of these approaches
- Recommendations for future NBSAP development and implementation