

INTRODUCTORY PRESENTATION

16 January 2018

International workshop on “Mainstreaming Biodiversity in Production Landscapes: Integrated Approaches in Design and Implementation of National Biodiversity Strategies and Action Plans (NBSAPs)”



UNITED NATIONS
UNIVERSITY

UNU-IAS

Institute for the Advanced Study
of Sustainability



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Overview of research

Background

- Biodiversity sustains ecosystem services in production landscapes.
- Integrated landscape approaches are expected to contribute to achieving many of the Aichi Biodiversity Targets.
- Integrated landscape approaches, however, **have not yet been well incorporated into policies in many countries.**

Overview of research

Objectives

- This research project will **analyze** National Biodiversity Strategies and Action Plans (**NBSAPs**) focused on “**integrated approaches in production landscapes**”.
- The study will provide useful knowledge on **future NBSAP development and implementation**.
- It is expected to contribute to the achievement of the Aichi Biodiversity Targets.

Overview of research

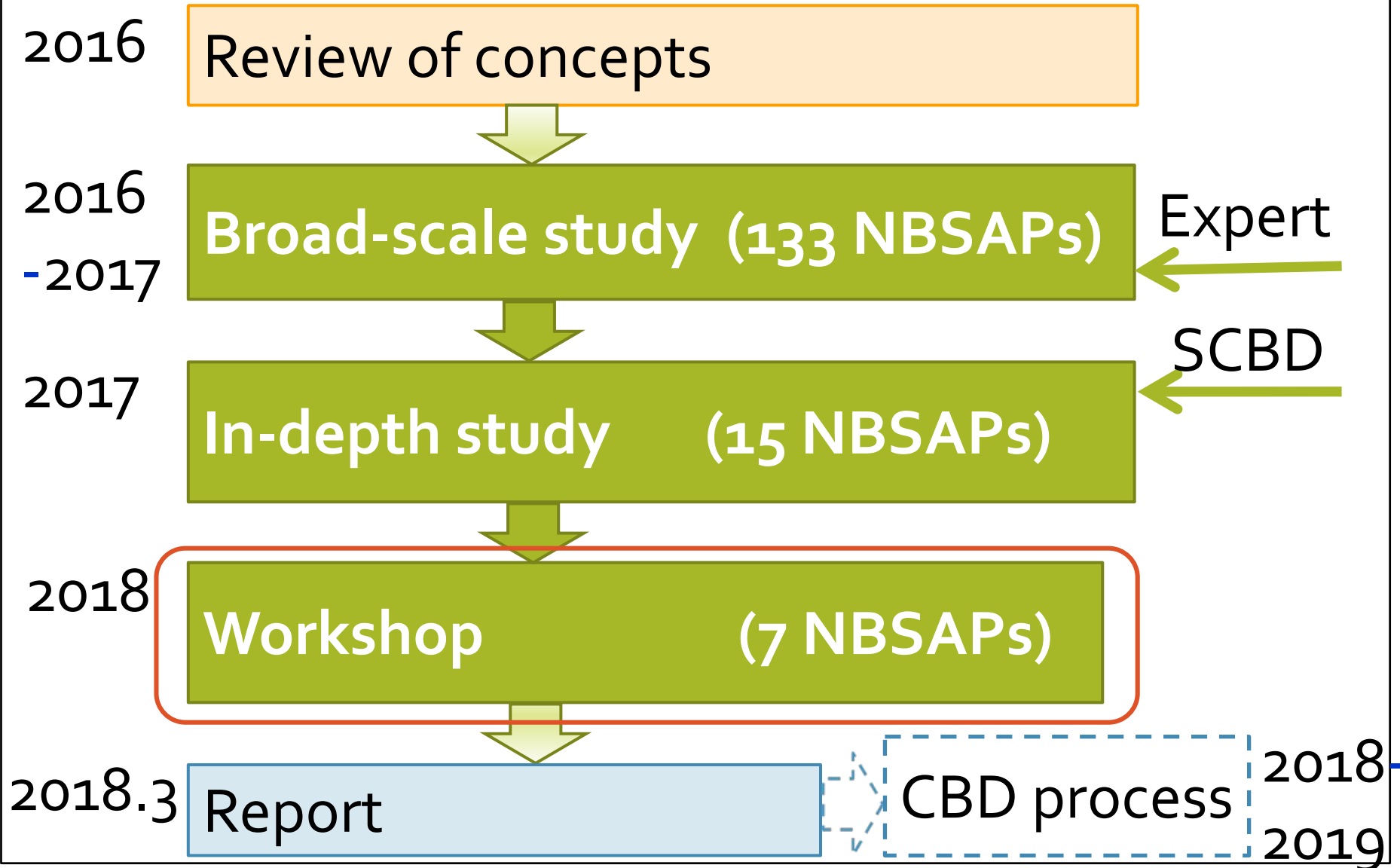


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Key research findings

- There are multiple concepts;
 - “Socio-Ecological Production Landscapes” (SEPLS),
 - “cultural landscapes”, “landscape approaches”, and
 - related local terms.
- 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 (in descending order).

Background of the workshop

- **Activities on the ground** and **incorporation process** are not described in the NBSAPs
- There are **common challenges**.
 - Problems occurred with the **loss of traditional production landscapes**.
 - **A few good practices** already solved the problems.
 - To refer to other **countries' activities** is helpful.
- The **different situations in each** country need to be considered.

Sharing experiences with other countries
is helpful

Objectives of the workshop

The workshop aims to identify:

- Good practices of each country;
 - incorporation processes of concepts
 - implementation of policies related to the concepts
- Effective measures of incorporation and implementation.
- Contribution to achieving Aichi Biodiversity Targets.

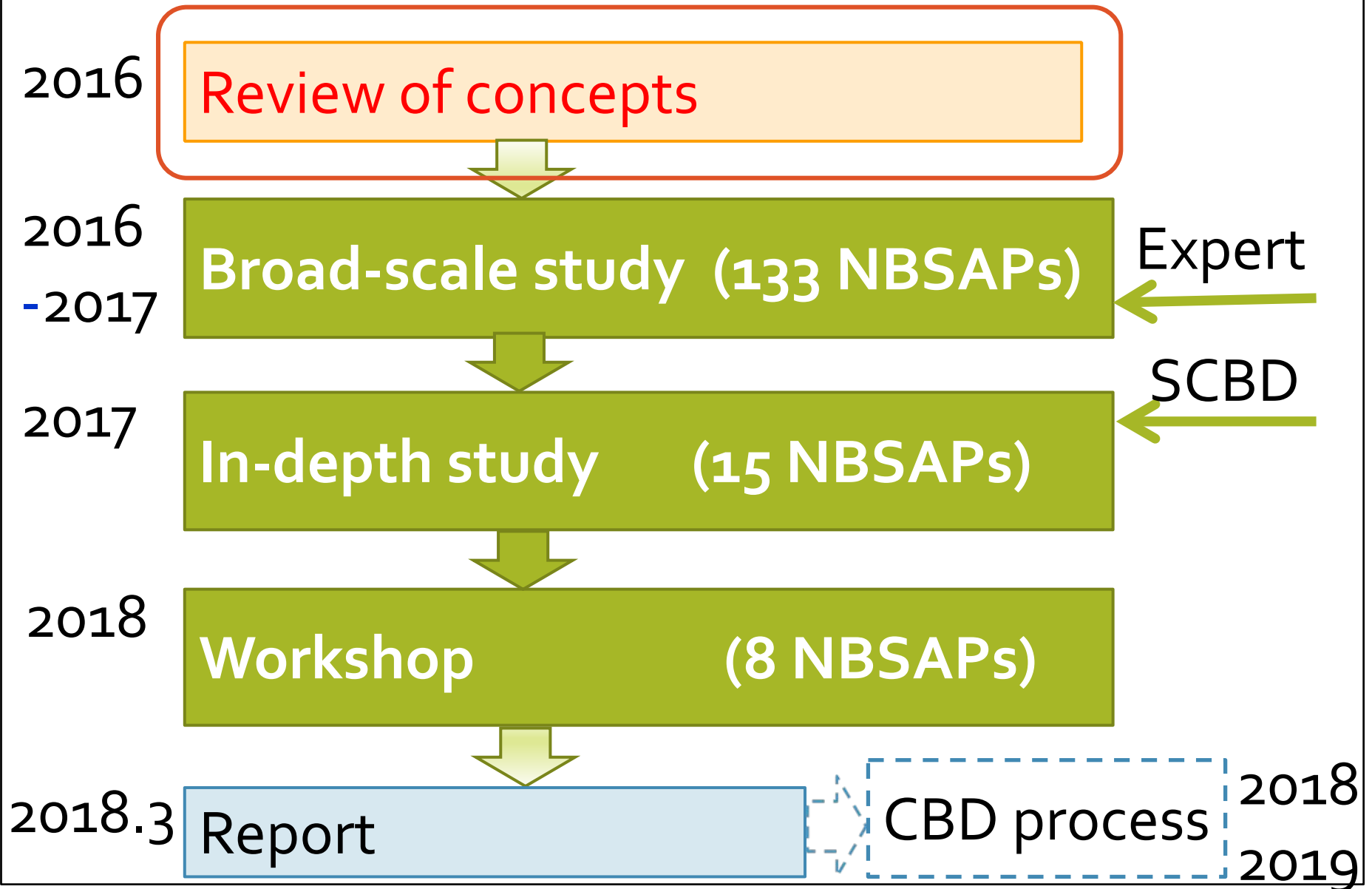
What do we want to achieve in future?

- Promote incorporation into NBSAPs.
- Promote practical activities.

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Overview of the research



Review of concepts

- Integrated Approaches in Production Landscapes.
 - Socio-Ecological Production Landscapes (SEPLS)
 - Cultural Landscapes
 - Globally Important Agricultural Heritage Systems (GIAHS)
 - Landscape approach
 - Local terms related to these landscapes/approaches (e.g. *Dehesa* in Spain, *Muyong* in Philippines)
- Ecosystem approach
- Mainstreaming biodiversity in other sectors

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Broad-scale study

Objectives

Research question:

Are concepts related to integrated approaches in production landscapes referred to in NBSAPs?

Data set

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

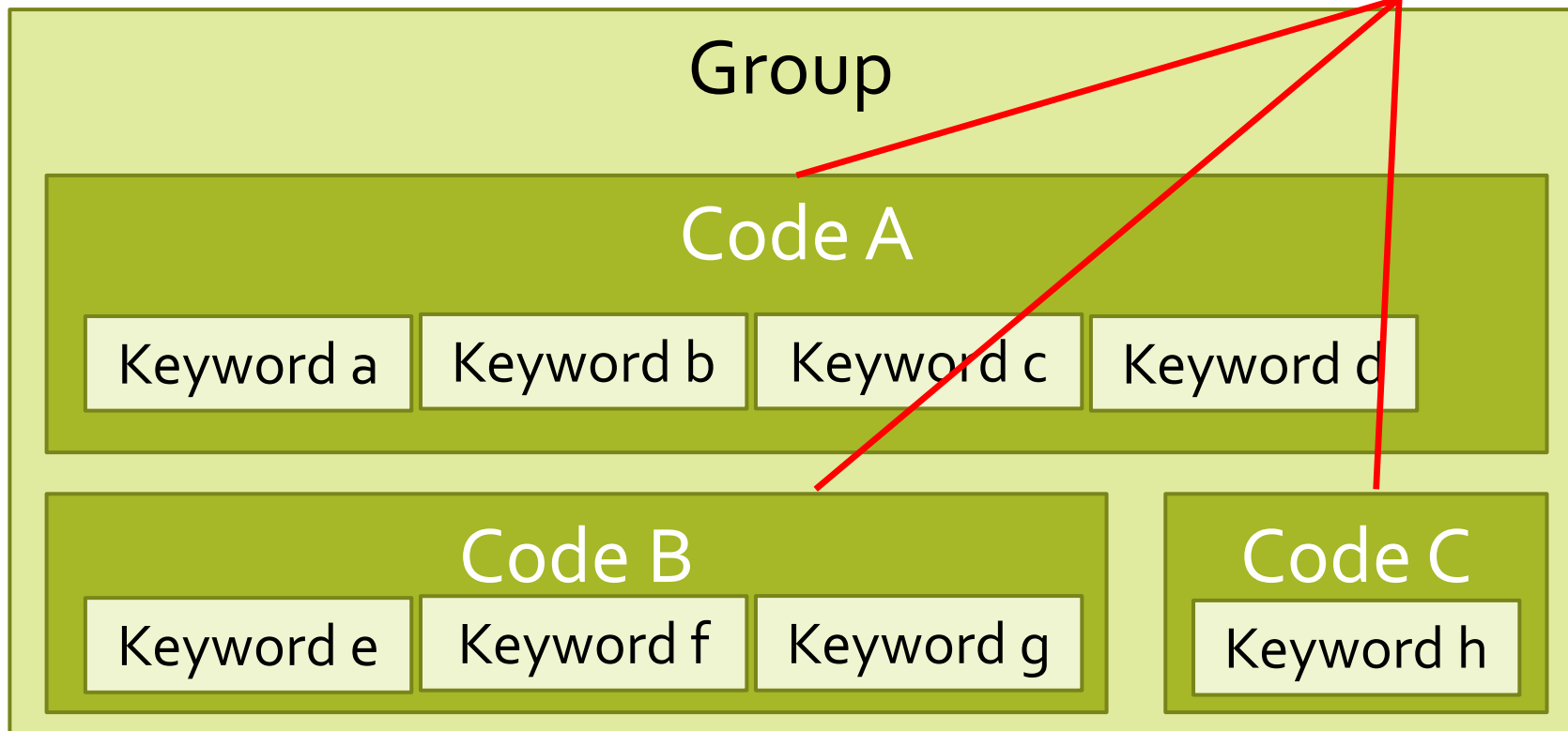
Text mining

Broad-scale study

Methods 2/2

- Setting of Groups, Codes, and Keywords

Unit for text mining

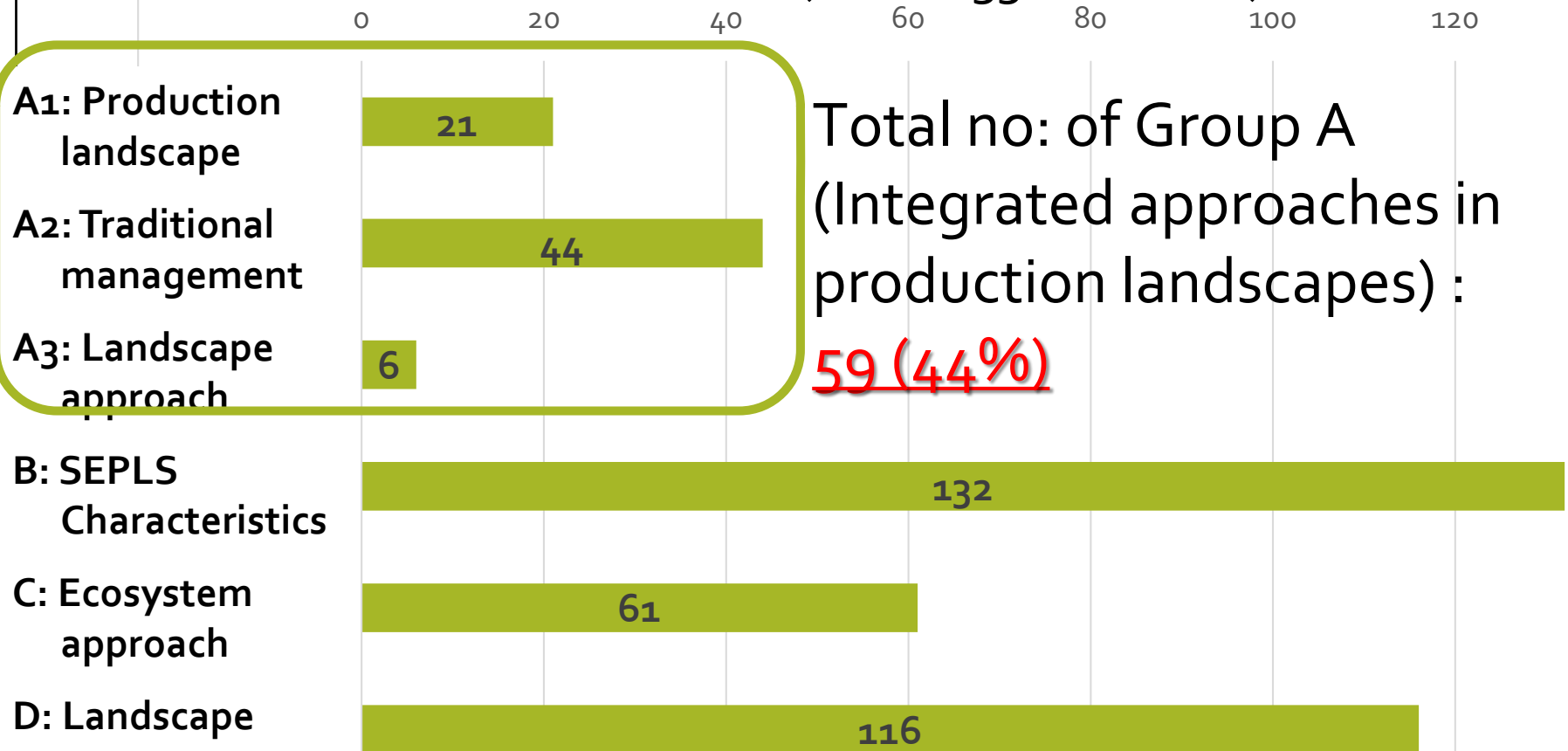


Group		Code	Examples of Keywords
A: Integrated Approaches in Production Landscapes	A1: Production landscapes	*GIAHS	Globally Important Agricultural Heritage Systems, GIAHS
		*SEPLS	SEPL, SEPLS, socio-ecological production landscape, social ecological production landscape
		*Cultural landscape	Cultural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

Broad-scale study

Results 1/5

Fig. Number of countries referred to in each Group in total (total: 133 countries)

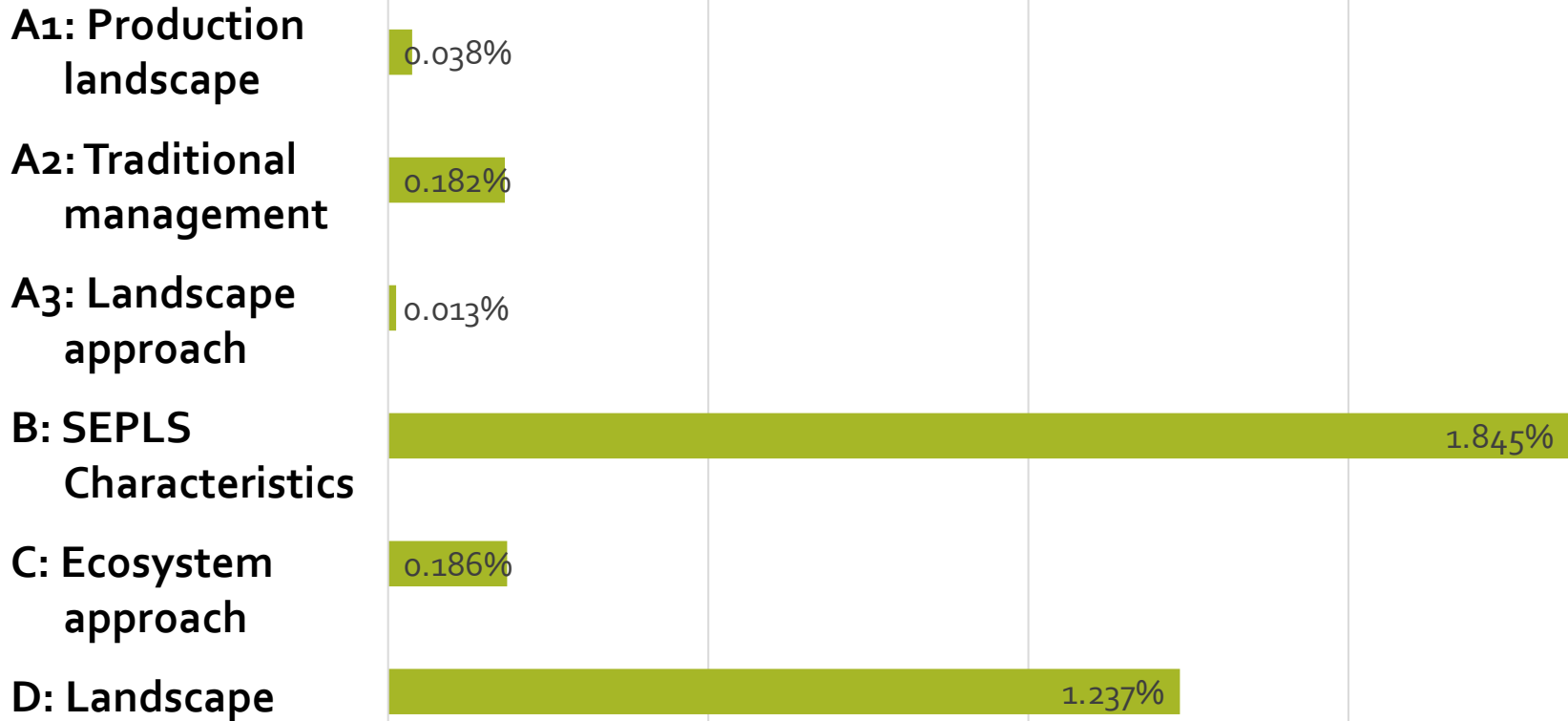


Broad-scale study

Results 2/5

Fig. Appearance frequency of each Group in total

0.000% 0.500% (0%) 1.000% 1.500% 2.000%



Broad-scale study

Results 3/5

Regional trends:

- “Europe and Central Asia” was different from other regions. These countries preferably used “landscapes” (Group D) but not traditional local terms (Group A2).

Trends in publication versions

- References of “production landscapes” (Group A1) and “ecosystem approach” (Group C) increased with versions.

Broad-scale study

Results 4/5

Group A

Integrated approaches in production landscapes

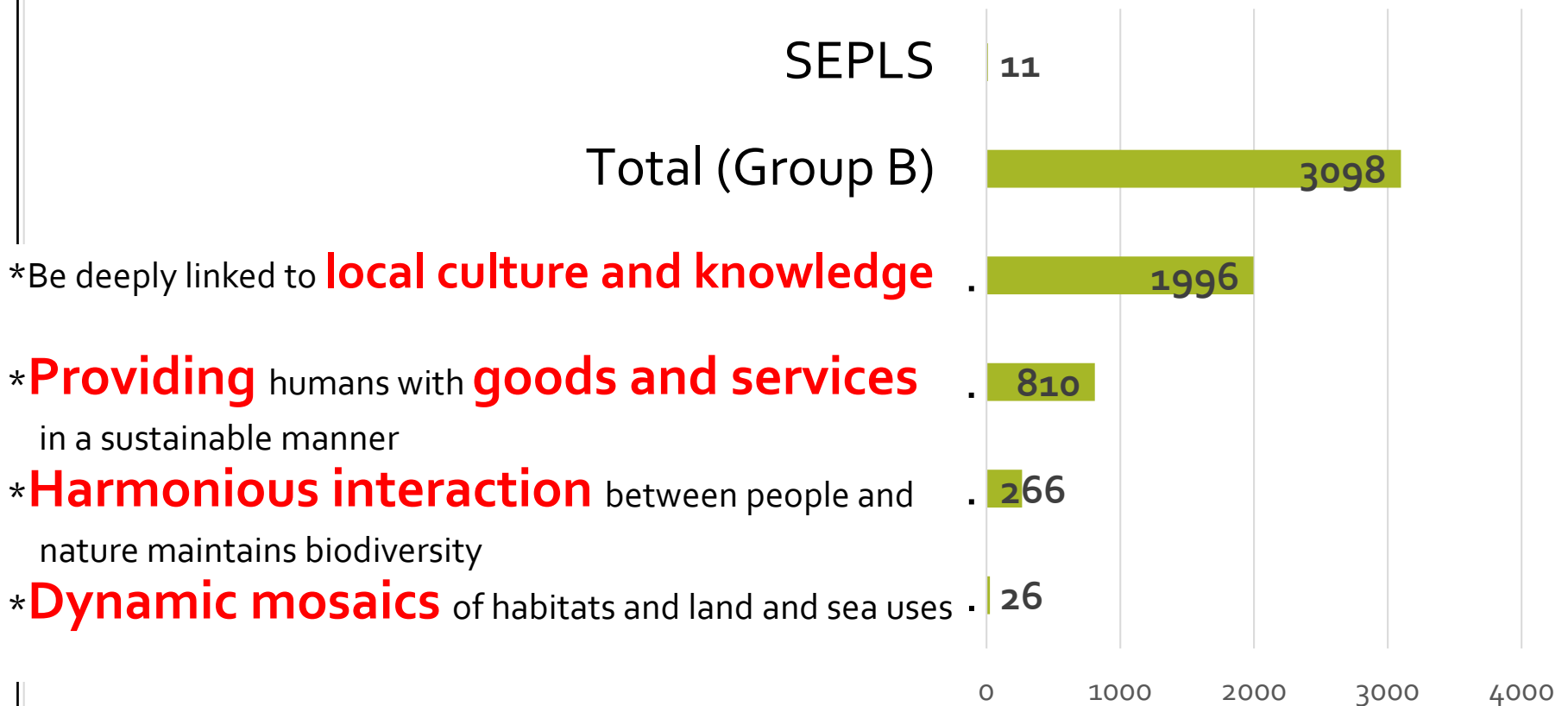
Groups	A1: Production Landscape				A2: Traditional managemen t	A3: Landscape approach	Total of Group A	Total number of countries
	*GIA HS	*SEPL S	*Cultural landscape	Total				
Africa	0	0	2	2	17	0	19	29
Americas	0	0	1	1	4	2	5	17
Asia-Pacific	2	2	5	7	20	0	21	44
Europe and Central Asia	0	0	11	11	3	4	14	42
Total	2	2	19	21	44	6	59	133

Broad-scale study

Results 5/5

Group B (SEPLS characteristics)

Fig. Number of references of the 4 Codes of Group B



Broad-scale study

Summary of results

- About half of the NBSAPs referred somehow to integrated approaches in production landscapes (Group A).
- Each concept of Group A was referred to in a limited way.
- However, SEPLS characteristics (Group B) was well referred to.
- Europe and Central Asia was different from other regions. These countries preferably used “landscapes” (Group D) but not traditional local terms (Group A2).
- References to production landscapes (Group A1) increased with versions.

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In-depth study

Objectives

Research Question

How were the concepts described and what concrete measures were suggested in the NBSAPs?

Data Set

15 NBSAPs, including the concepts related to the integrated approaches in production landscapes, were selected.

Ethiopia (2016, v2), Ghana (2002, v1), Namibia (2015, v2), South Africa (2016, v2), Colombia (2012, v2), Dominica (2014, v2), Cambodia (2016, v2), Japan (2013, v5), Jordan (2015, v2), Nepal (2014, v2), Estonia (2014, v2), Greece (2014, v1), Switzerland (2012, v2), United Kingdom (2011, v3), Fiji (1995, v1)

In-depth study

Methods

- Read NBSAPs and extract the descriptions related to the concepts (Group A, Group M)
- Examine by questions how the concepts were described
- Check implementation from National Reports
- Check the ground-level situation from related project websites

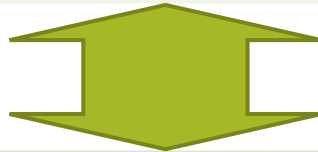
In-depth study Concepts

Group A: Integrated approaches in production landscapes

A₁: Production landscapes

A₂: Traditional management

A₃: Landscape approach



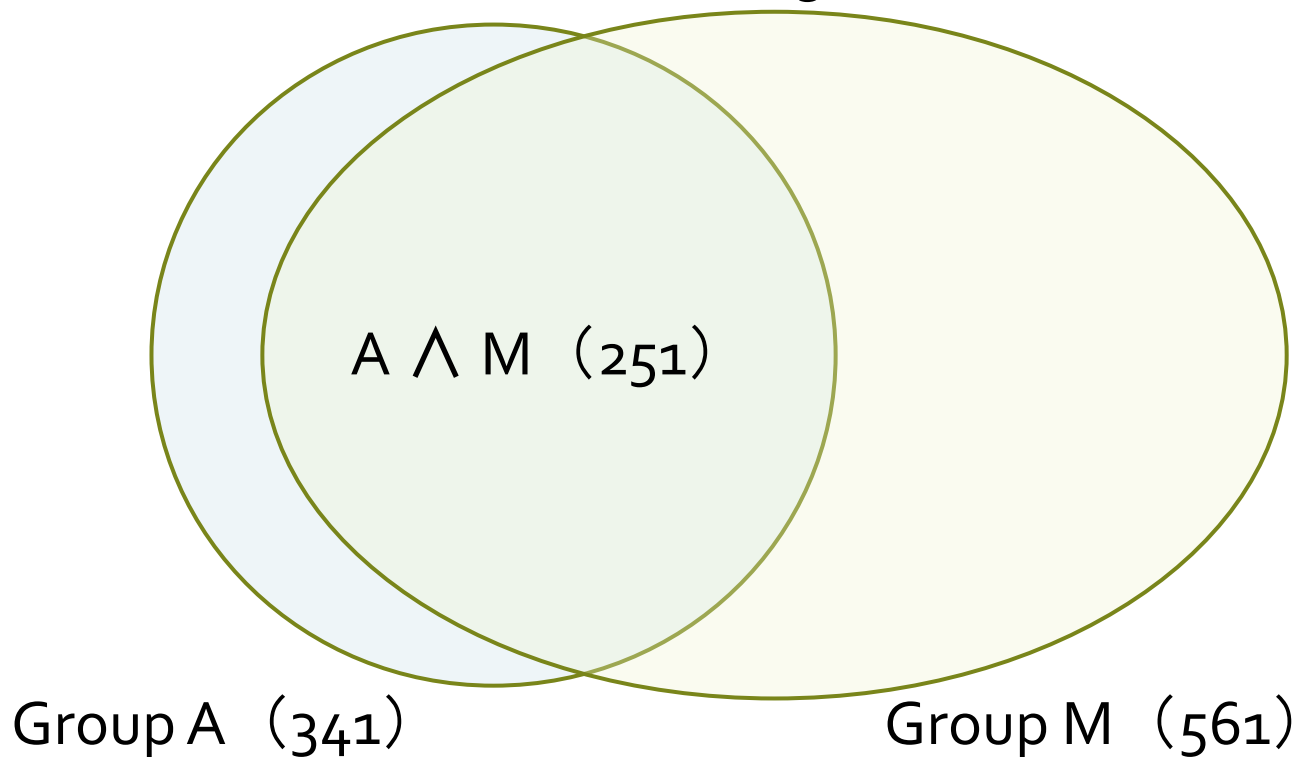
Group M: Biodiversity mainstreaming

In-depth study

Results -NBSAPs

- The occurrence of Group A overlapped appreciably with that of Group M.

Total: $A \vee M$ (651)



In-depth study Results -NBSAPs

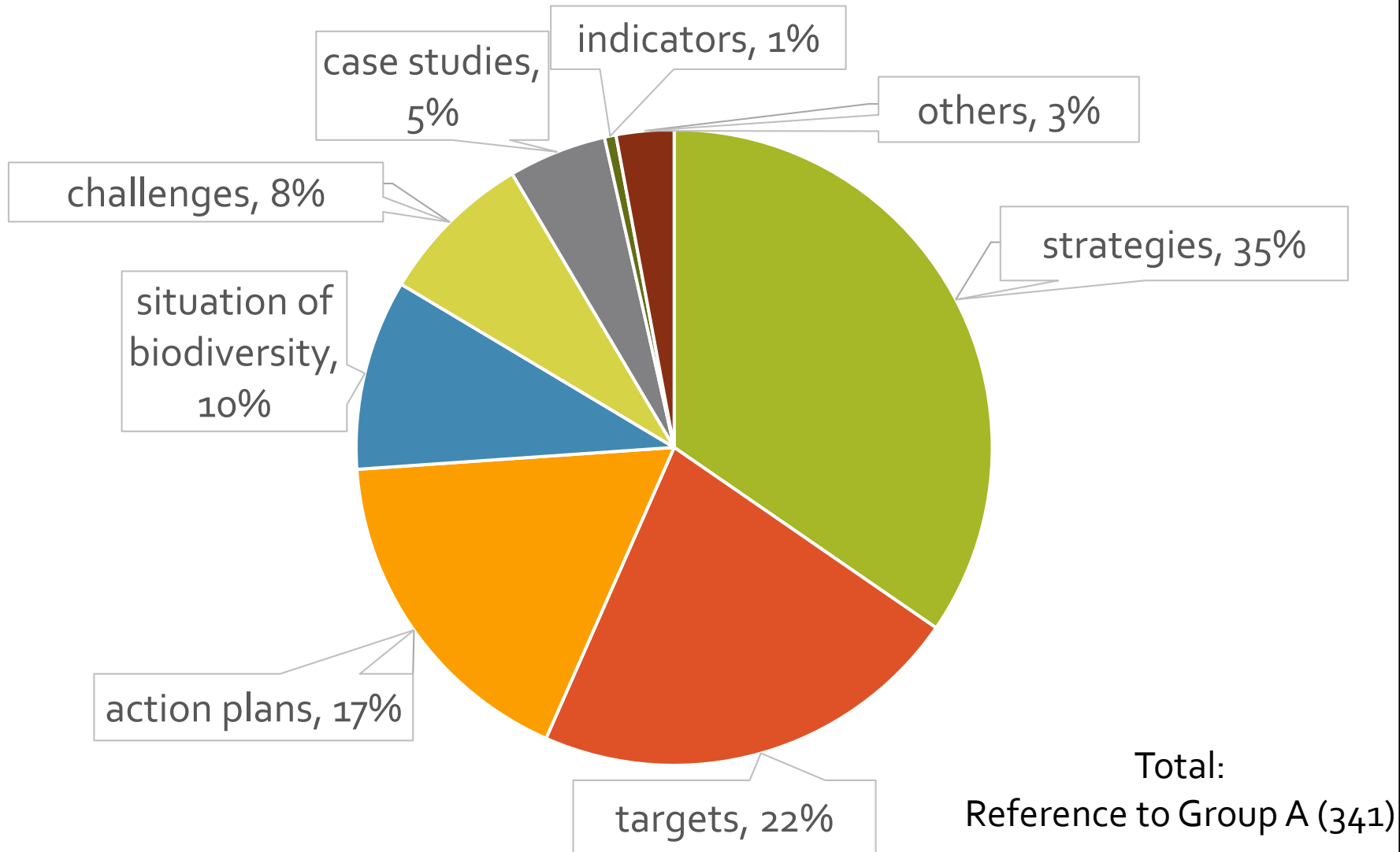


Fig. Numbers of descriptions in each chapter of the NBSAPs

In-depth study

Results -NBSAPs

- Group A better referred to the **importance of biodiversity and ecosystem services** than Group M.
- **Importance of biodiversity and provisioning services** were relatively well referred to.

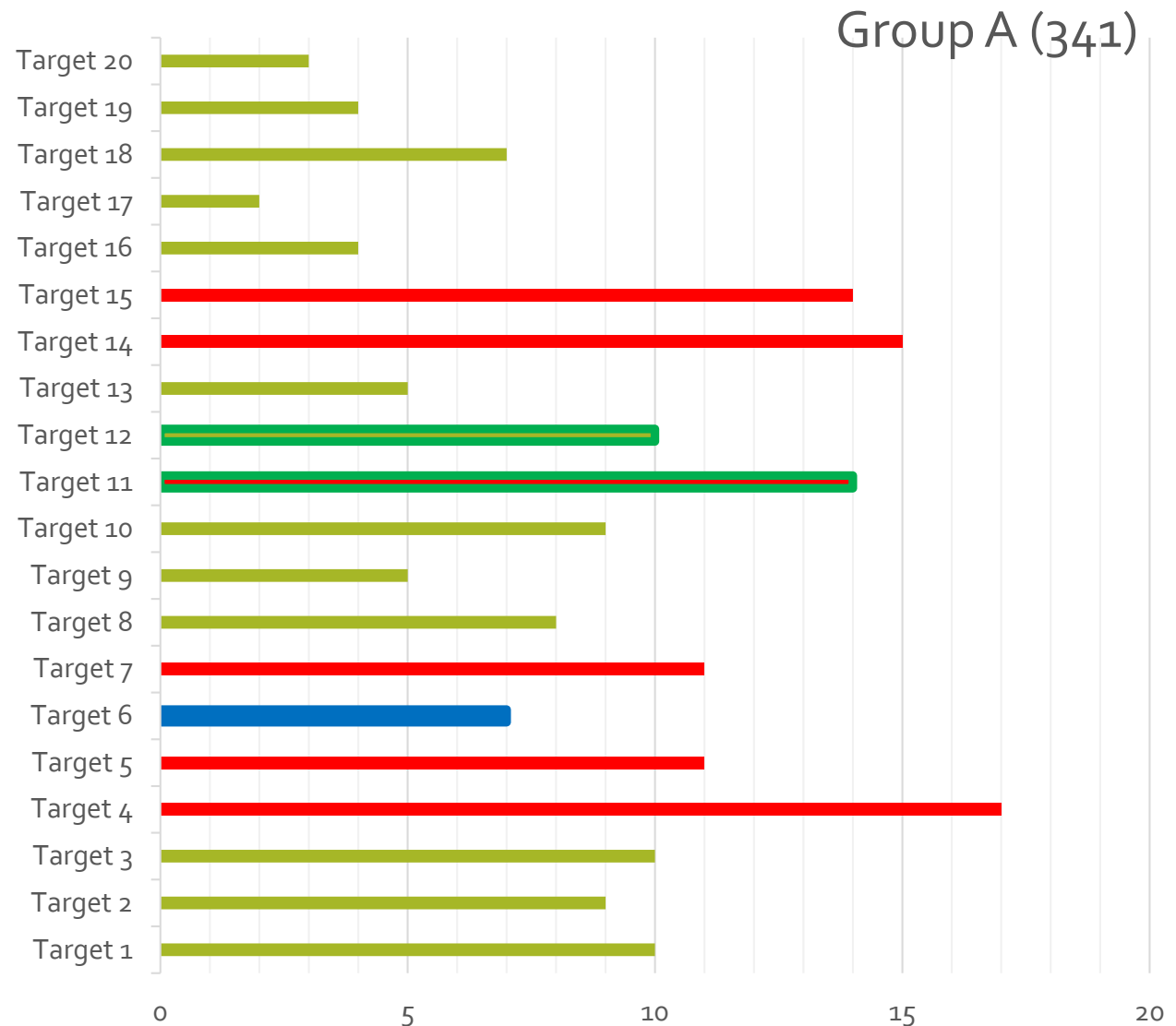
Importance of biodiversity and ecosystem services	Group A (341)
	number of descriptions
Importance of biodiversity	22
ecosystem services (provisioning)	14
ecosystem services (supporting)	7
ecosystem services (regulating)	7
ecosystem services (cultural)	6
others	0

Table. References to the importance of biodiversity or ecosystem services in the NBSAPs

In-depth study

Results -NBSAPs

Table. The number of descriptions related to Group A that were found to be related to the Aichi Biodiversity Targets in the NBSAPs



In-depth study

Reference from case study sheets

Many policies related to Group A contributed to achieving multiple Aichi Biodiversity Targets

Case study policies	A T 1	A T 2	A T 3	A T 4	A T 5	A T 6	A T 7	A T 8	A T 9	A T 10	A T 11	A T 12	A T 13	A T 14	A T 15	A T 16	A T 17	A T 18	A T 19	A T 20
Cambodia																				
Colombia																				
Estonia																				
Ethiopia																				
Japan																				
South Africa																				

In-depth study Results - National Reports

- ▶ The overall results of the National Reports (NRs) backed up the results of the NBSAPs
- ▶ The trends in the NRs that were different from that in the NBSAPs were;
 - better co-occurrence with Biodiversity mainstreaming,
 - lower references to the importance of biodiversity and ecosystem services,
 - More categories of “projects”,
 - higher references to the Aichi Biodiversity Targets.

In-depth study

Results - Other related project websites

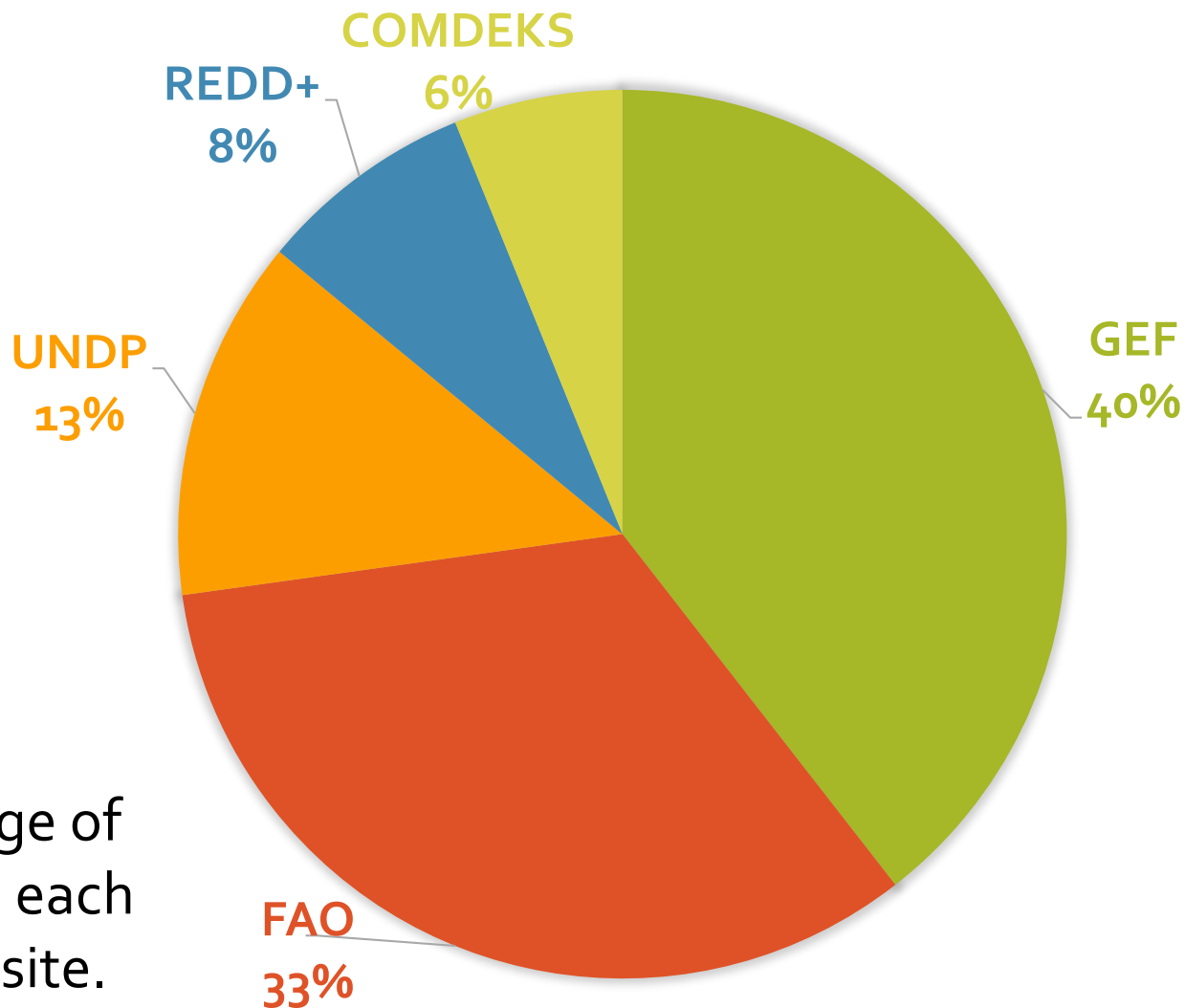


Fig. Percentage of projects from each resource website.

In-depth study

Results -Other related project websites

- The objectives of the related projects were **consistent with** the descriptions in the **NBSAPs**.
- However, **only 8 projects in 3 countries** were referred to in the respective country's NBSAPs.

Cambodia

REDD+ projects (3), Landscape management

Dominica

Sustainable Land Management

Nepal

Landscape Conservation, SGP, CSUWN

Key points of the research findings so far

- There are multiple concepts;
SEPLS, cultural landscapes, landscape approaches, and related local terms.
- 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 the Aichi Biodiversity Targets 4, 14, 15, 11, 5, and 7 (in descending order of contribution).

Next activities

What do we want to achieve in future?

- Promote incorporation of the concepts into NBSAPs, in the next revision (after 2020).
- Support practical activities.

What are the next steps?

- Compile and provide useful knowledge for the effective incorporation of the concepts into the NBSAPs.

Objectives of the workshop

The workshop aims to:

- Study good practices of each country;
 - incorporation processes of concepts
 - implementation of concepts
- Examine the effective measures of incorporation and implementation
- Discuss the contributions to achieving the Aichi Biodiversity Targets



Useful knowledge for incorporating the concepts into the NBSAPs and their effective implementation.