An Overview IPBES Global Assessment on Biodiversity and Ecosystems

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7th IPSI Global Conference
UNU-IASS
Ministry of Environment of Japan
Ishikawa Prefectural Government




www.ipbes.net

UN environment
United Nations Educational, Scientific and Cultural Organization
Food and Agriculture Organization of the United Nations
UNDP empowered lives. Resilient nations.

Outline:

-Introduce the **I**ntergovernmental **P**latform on **B**iodiversity and **E**cosystem **S**ervices (IPBES)

-Overview of the **global assessment on ecosystems and biodiversity**

-Brief comments on the importance of **social-ecological production landscapes and seascapes for the next decade of global biodiversity targets**

What is IPBES?

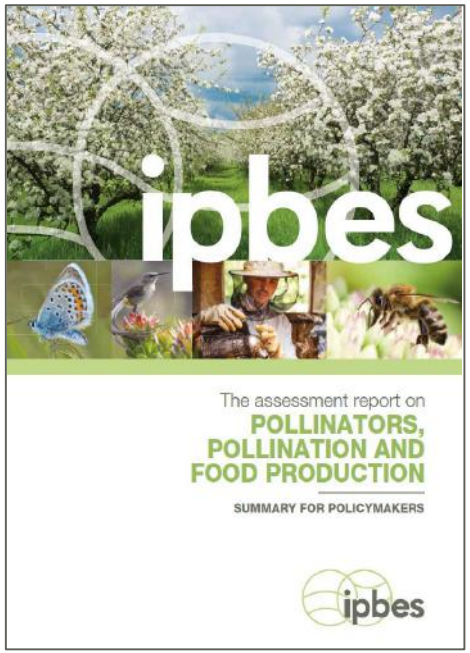
IPBES-1 (Jan 2013, Bonn)

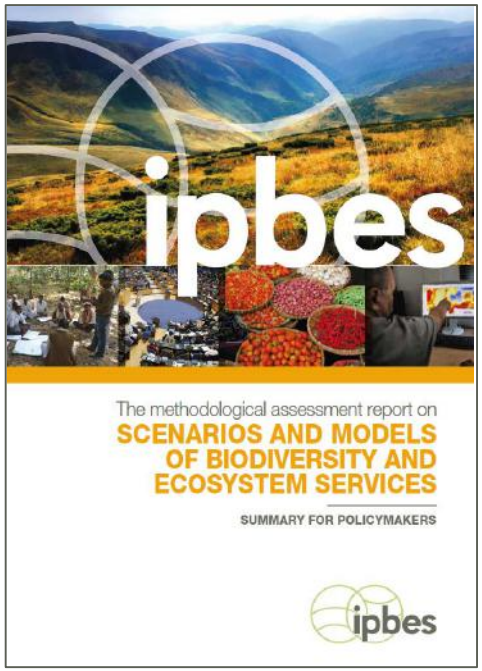
IPBES-2 (Dec 2013, Antalya)

IPBES-5 (Dec 2017, Bonn)

- **Intergovernmental Platform on Biodiversity and Ecosystem Services**
- Overall objective: ***To provide policy relevant knowledge on biodiversity and ecosystem services to inform decision making***
- Established in April 2012, Panama
- **130 member countries**
- collaborative partnership agreement with FAO, UNDP, UNEP, UNESCO
- Secretariat hosted in Bonn, Germany
- Implementing its **first Work Programme** (2014-2018)

Completed Assessments





Recently Approved Assessments

The Regional assessments of biodiversity and ecosystem services

- **Africa,**
- **The Americas**
- **Asia-Pacific**
- **Europe and Central Asia**

Land degradation and restoration assessment

The IPBES Global Assessment on Biodiversity and Ecosystem Services

- The global assessment will **critically assess the state of knowledge on past, present and possible future trends in multi-scale interactions between people and nature**, taking into consideration different world views and knowledge systems.

- Geographic area includes **land, inland waters, coastal zones and oceans.**

- **Timeframe:**
  - Status and trends: **back as far as 50 years up to 2020**.
  - P**lausible future projections and possible pathways: between 2020 and 2050**

IPBES -GLOBAL ASSESSMENT

- **Contribute to 2020 Global Biodiversity Outlook**
- **Assess progress to Aichi 2020**
- **Contribution to 2030 SDG**
  - **Prospects to achieve 2050 Vision**
- **Scientific basis for updated strategic plan to 2030**

Vision of the Strategic Plan **2050**

2030 SDGs

2020 Aichi Biodiversity Targets

2010 Adoption of the Strategic Plan for Biodiversity

What are we assessing? The GA Scoping Questions

Chap. 1	Scope, conceptual and analytical foundations, chapter organization, main themes
Chap. 2	What is the status of and trends in nature, nature's benefits to people and indirect and direct drivers of change?
Chap. 3	How do nature and its benefits to people contribute to the implementation of the Sustainable Development Goals? What is the evidence base that can be used for assessing progress towards the achievement of the Aichi Biodiversity Targets?
Chap. 4	What are the plausible futures for nature, nature's benefits to people and their contribution to a good quality of life between now and 2050?
Chap. 5	What pathways and policy intervention scenarios relating to nature, nature's benefit to people and their contributions to good quality of life can lead to sustainable futures?
Chap. 6	What are the opportunities and challenges, as well as options available to decision makers, at all levels relating to nature, nature's benefit to people and their contributions to good quality of life?

The team working on it

Third Author Meeting, July/August 2018, Frankfurt Germany

- **150 Experts from 51 Countries**
- **52.7% (79) Natural sciences, 47.3% (71) social sciences, interdisciplinary**
- **17 Review Editors**
- **16 Fellows; 6 Chapter Scientists**
- **252 Contributing Authors**
- **14 Management Committee Members (MEP & Bureau)**
- **TSUs: Global, Indigenous and local Knowledge, Scenarios, Values, Knowledge & Data, Capacity Building**

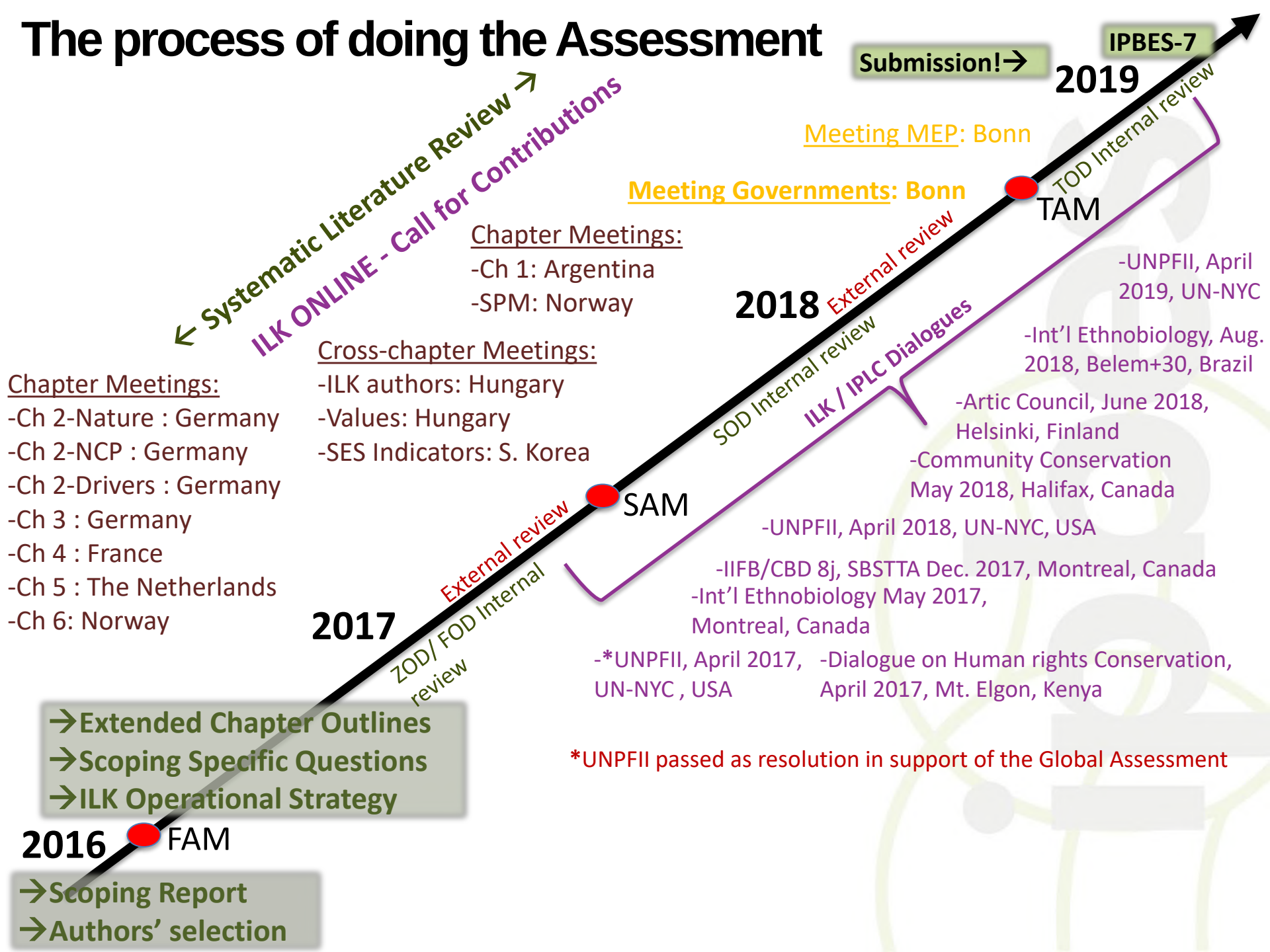
Eduardo (Edu) Brondizio (Brazil/USA

Sandra Diaz (Argentina)

Josef (Sepp) Settele (Germany)

Global Assessment TSU

The process of doing the Assessment

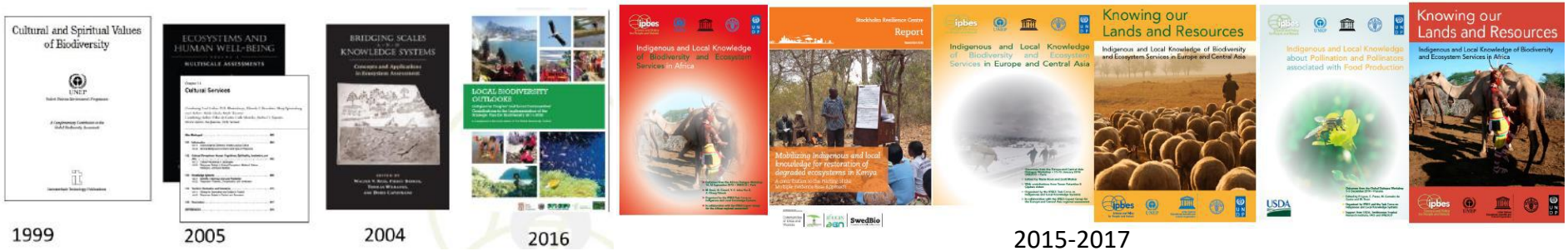


*UNPFII passed as resolution in support of the Global Assessment

CHAPTER and CROSS-CHAPTER MEETINGS 2017

ILK Authors liaison group meeting

Building upon previous efforts…



… the GA is the first assessment to systematically examine and incorporate indigenous and local knowledge and issues concerning indigenous peoples and local communities at a global scale.

Garnett et al 2018

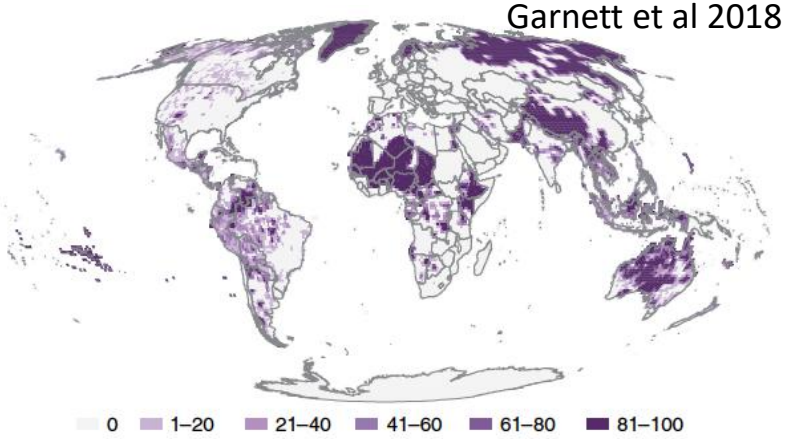


Fig. 1 | Global map of lands managed and/or controlled by Indigenous Peoples (percentage of each degree square mapped as Indigenous in at least one of 127 source documents; Supplementary Information section 2).

Indigenous Peoples: manage or have tenure rights over at least ~38 million km2 in 87 countries [~25% land surface]

40% Protected areas and + intact nature

The IPBES Global Assessment : A Strategy dedicated to Indigenous and Local Knowledge and Issues concerning Indigenous Peoples and Local Communities

Ch 1	Introduction
Ch 2	Status & Trends: last 50 years
Ch 3	Progress on internationally-agreed goals
Ch 4	Looking into plausible future 20/30 yrs
Ch 5	Looking into desirable sustainable futures and possible pathways 30/50 yrs
Ch 6	Evaluation of policy instruments

→ILK-IPLC SYSTEMATIC COVERAGE ACROSS CHAPTERS:

-3 Guiding Questions

-36 Chapter specific questions

→SYSTEMATIC LITERATURE REVIEW

→ONLINE and FACE TO FACE CONSULTATIONS

Evidence indicates that Indigenous & Local Knowledge and Practices:

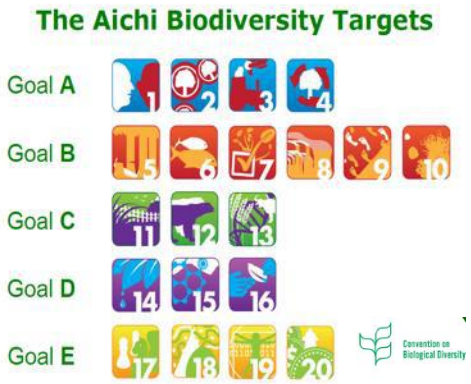
Locally based, regionally manifested, globally relevant

1. What have been ***the contributions of ILKPs/IPLCs to the sustainable use, management and conservation*** *of nature and Nature's Contributions to People at regional and global scales?*

Evidence indicates that Indigenous & Local Knowledge and Practices:

Confronting pressures, conflicts, and facing fast rates of change

*2. What are the most important features, **pressures** and factors related to and/or **enabling** these contributions, as well as **impacting** present and future relationship to nature and quality of life of IPLCs?*



3. What **policy responses, measures, and processes** can contribute to **strengthen and improve** the institutions and governance of nature and its contributions with regard to ILKP/IPLCs?

Consultations, dialogues, and call for contributions on Indigenous and Local Knowledge

Home / Contribute to incorporating indigenous and local knowledge as part of the IPBES global assessment on biodiversity and ecosystems

Contribute to incorporating indigenous and local knowledge as part of the IPBES global assessment on biodiversity and ecosystems

Start | Your info | Contribution | Description | Suggestions | Complete

0%

The purpose of this survey is to invite experts on indigenous and local knowledge, holders of indigenous and local knowledge, as well as their organizations and networks, to engage with and support the Global Assessment on Biodiversity and Ecosystem Services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES).

Read more on the work of IPBES
Read more on the global assessment and the guiding questions of its 6 chapters

The work of IPBES is innovative in that it explicitly embraces different scientific disciplines (natural, social, engineering sciences), as well as diverse stakeholders (the scientific community, governments, international organizations, and civil society at different levels), and their different knowledge systems (western science, indigenous, local and practitioners' knowledge).

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Chapter Goals:

1-Scoping Document

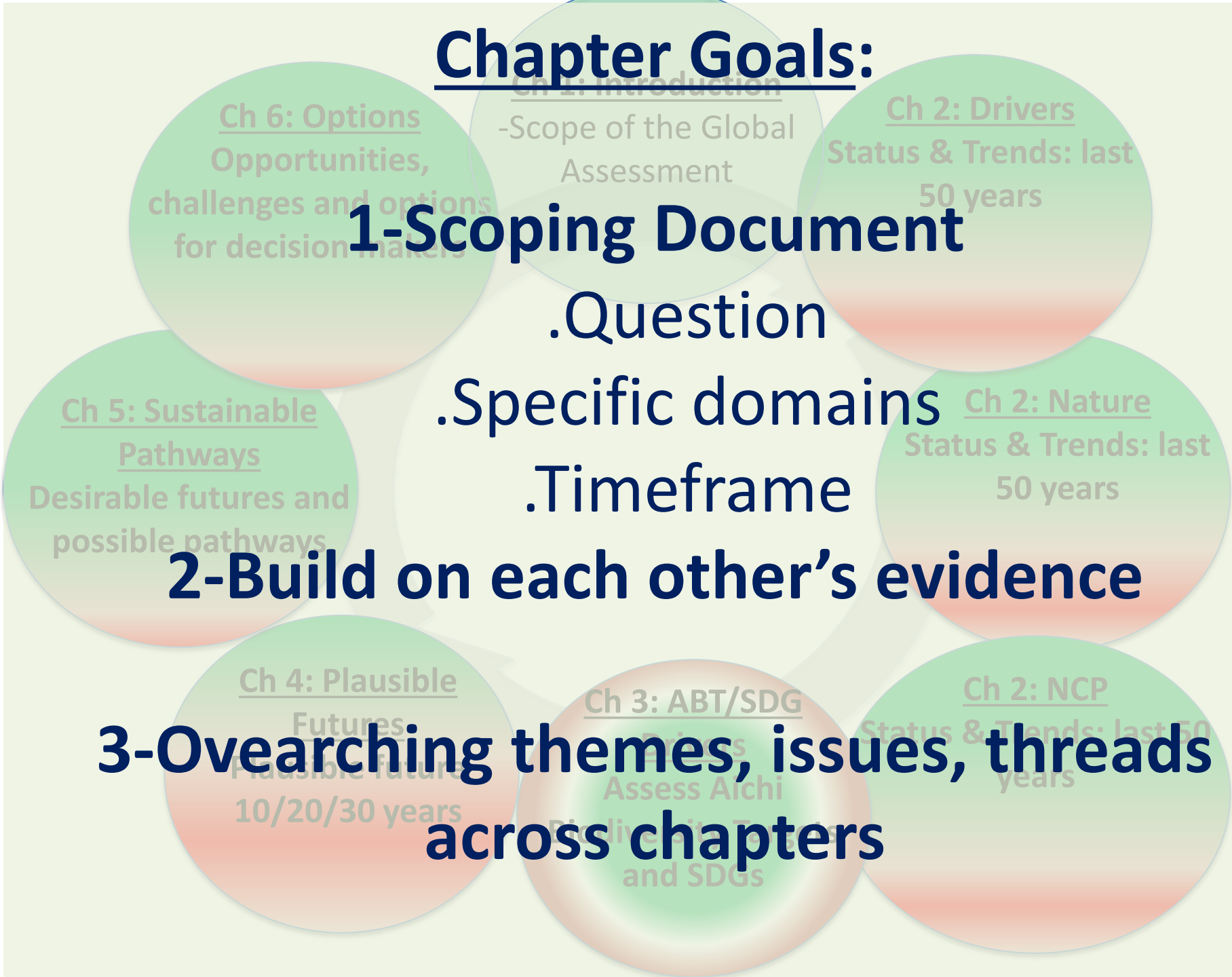
.Question

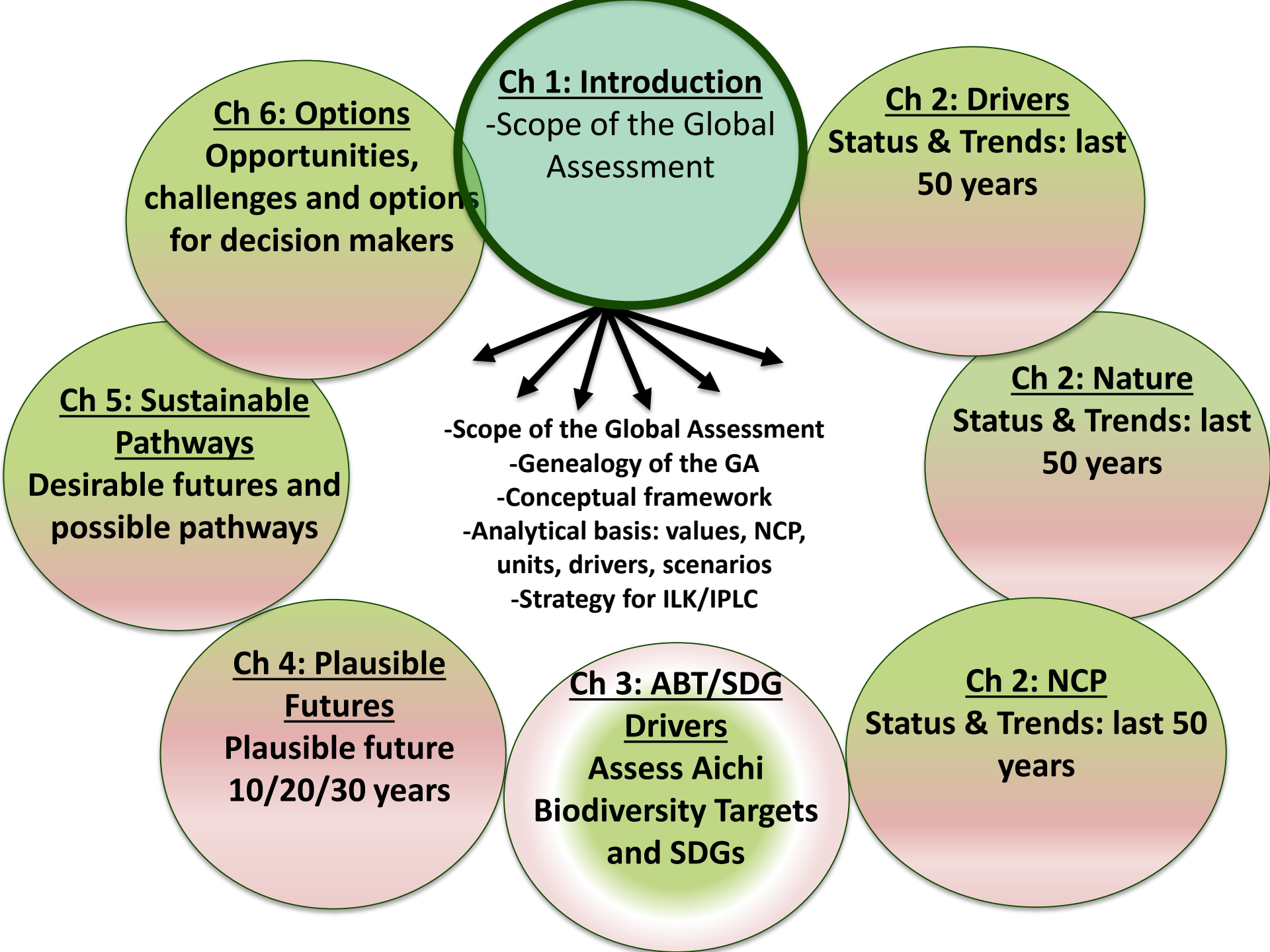
.Specific domains

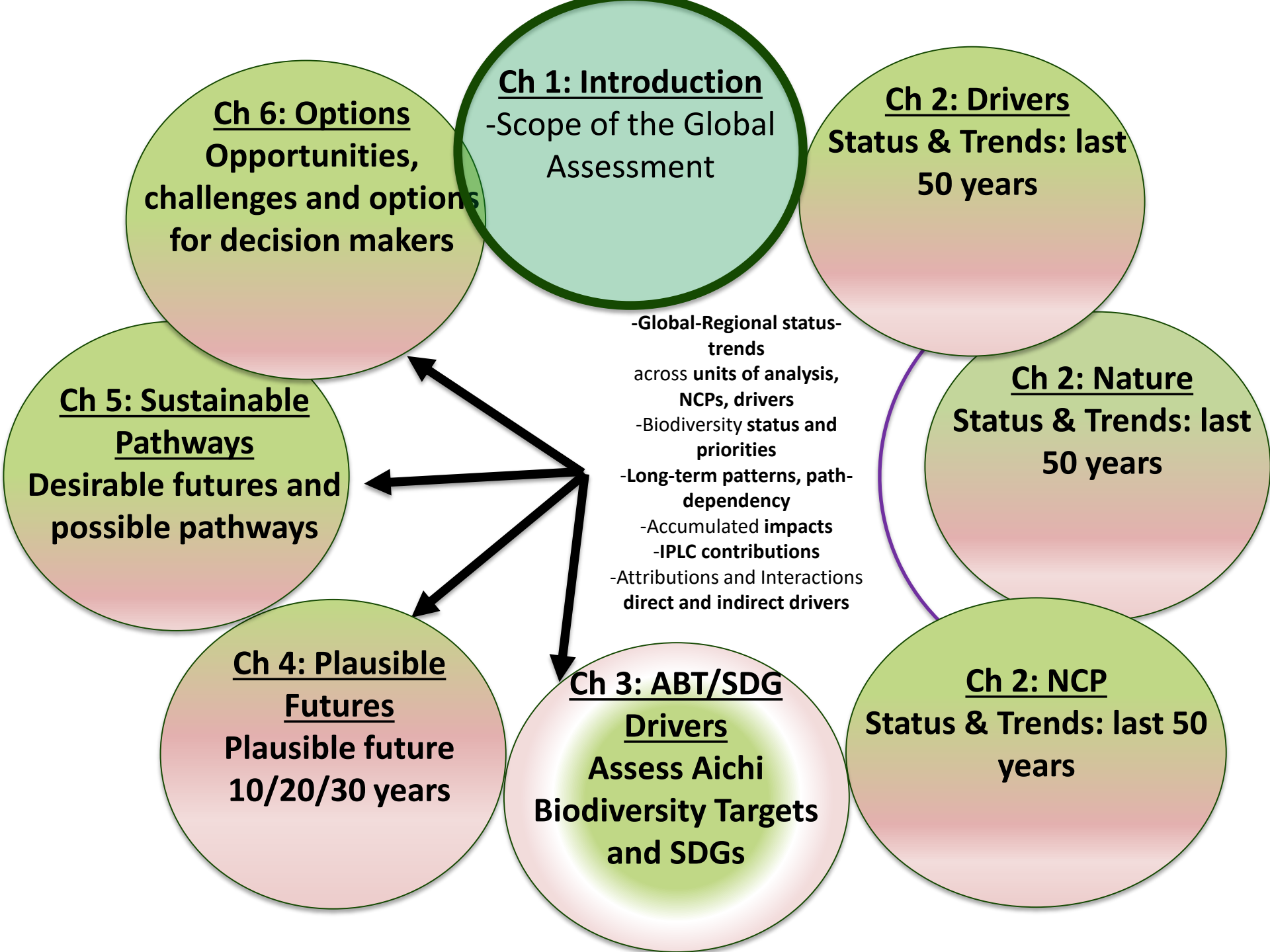
.Timeframe

2-Build on each other's evidence

3-Ovearching themes, issues, threads across chapters




Ch 1: Introduction
-Scope of the Global Assessment
Ch 2: Drivers
Status & Trends: last 50 years
Ch 2: Nature
Status & Trends: last 50 years
Ch 2: NCP
Status & Trends: last 50 years
Ch 3: ABT/SDG Drivers
Assess Aichi Biodiversity Targets and SDGs
Ch 4: Plausible Futures
Plausible future 10/20/30 years
Ch 5: Sustainable Pathways
Desirable futures and possible pathways
Ch 6: Options
Opportunities, challenges and options for decision makers
-Scope of the Global Assessment
-Genealogy of the GA
-Conceptual framework
-Analytical basis: values, NCP, units, drivers, scenarios
-Strategy for ILK/IPLC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Desirable futures and possible pathways
-Global-Regional status-trends
across units of analysis, NCPs, drivers
-Biodiversity status and priorities
-Long-term patterns, path-dependency
-Accumulated impacts
-IPLC contributions
-Attributions and Interactions
direct and indirect drivers
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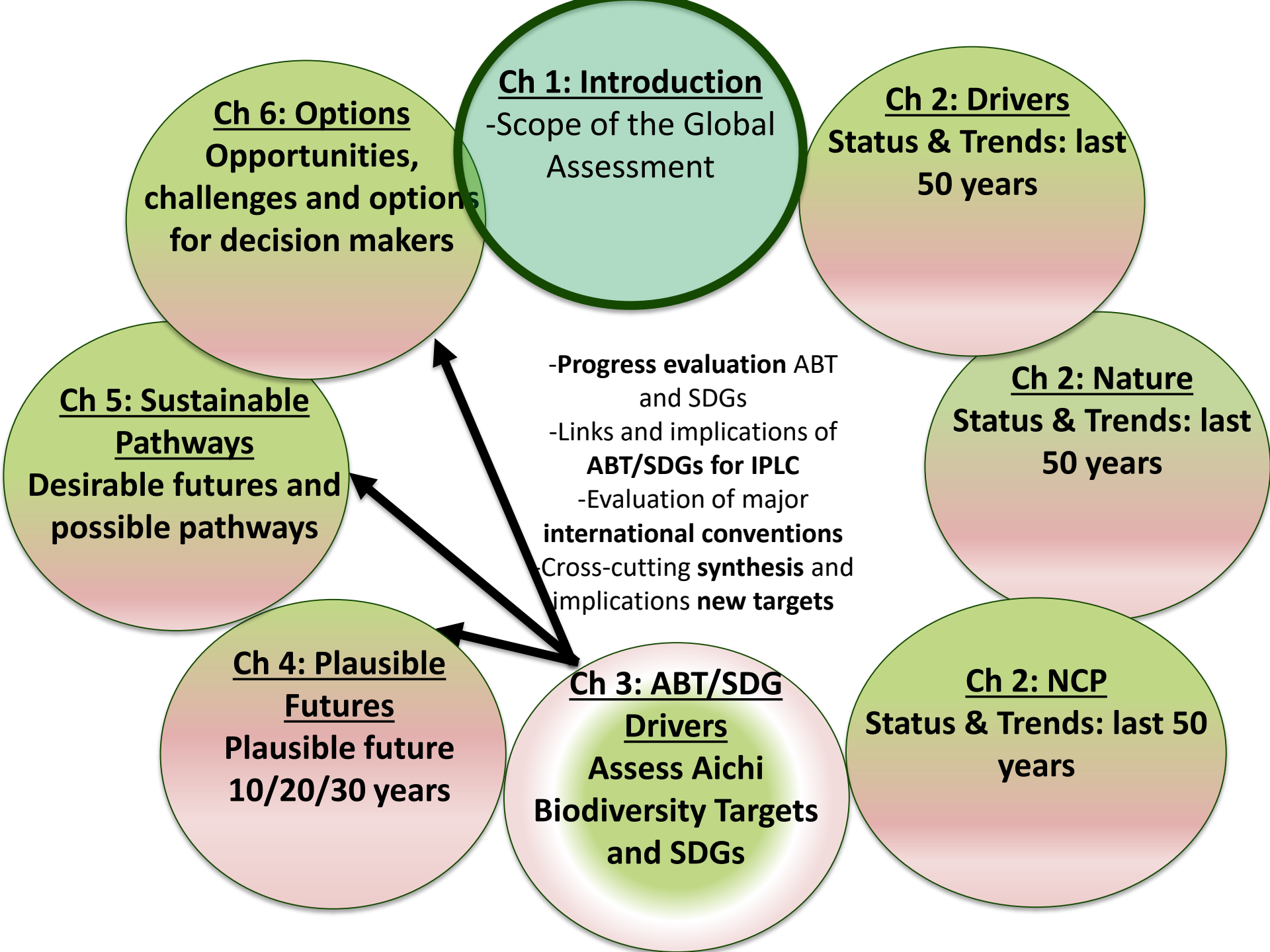
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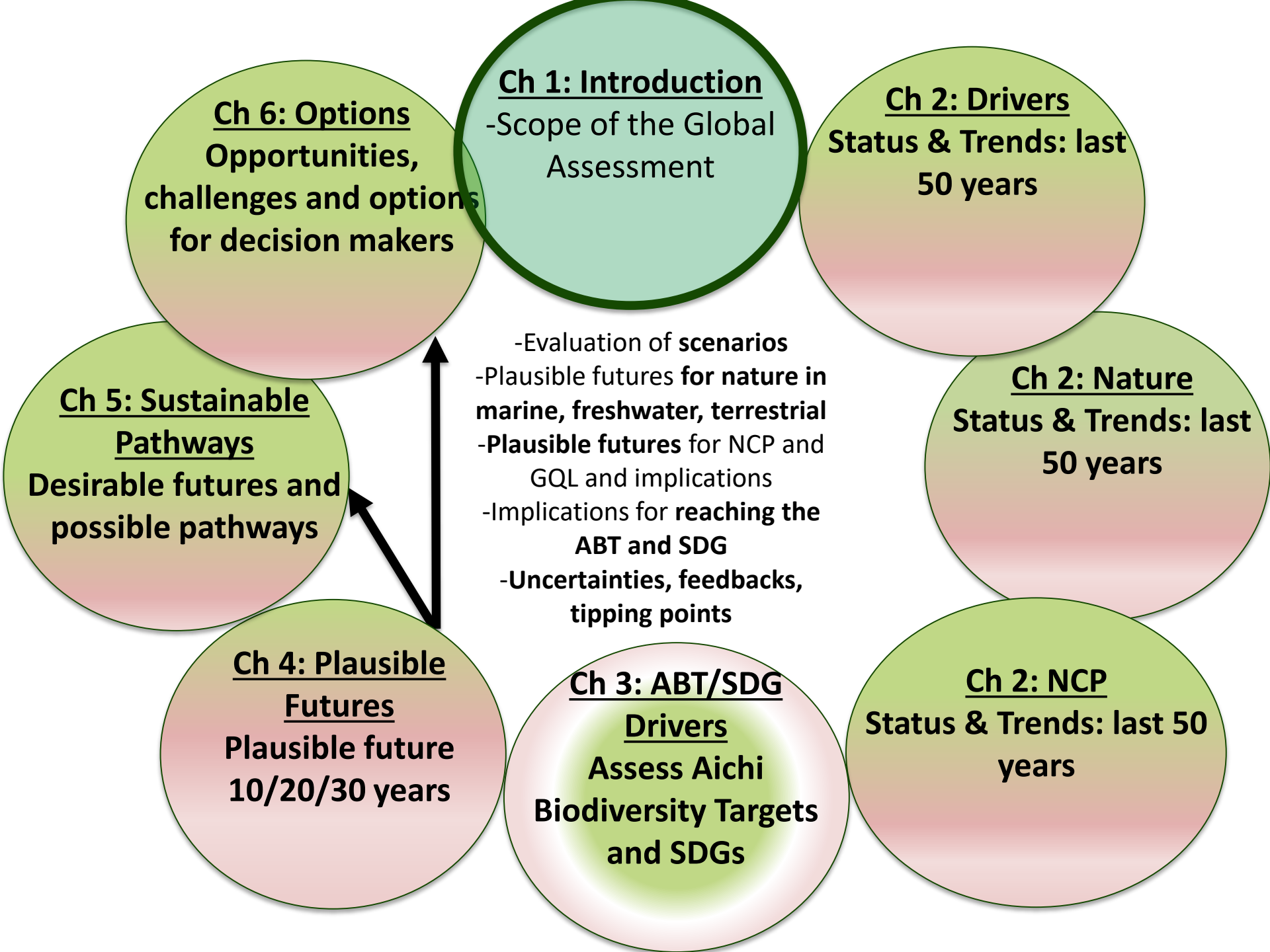
Ch 6: Options
Opportunities, challenges and options for decision makers
-Progress evaluation ABT and SDGs
-Links and implications of ABT/SDGs for IPLC
-Evaluation of major international conventions
-Cross-cutting synthesis and implications new targets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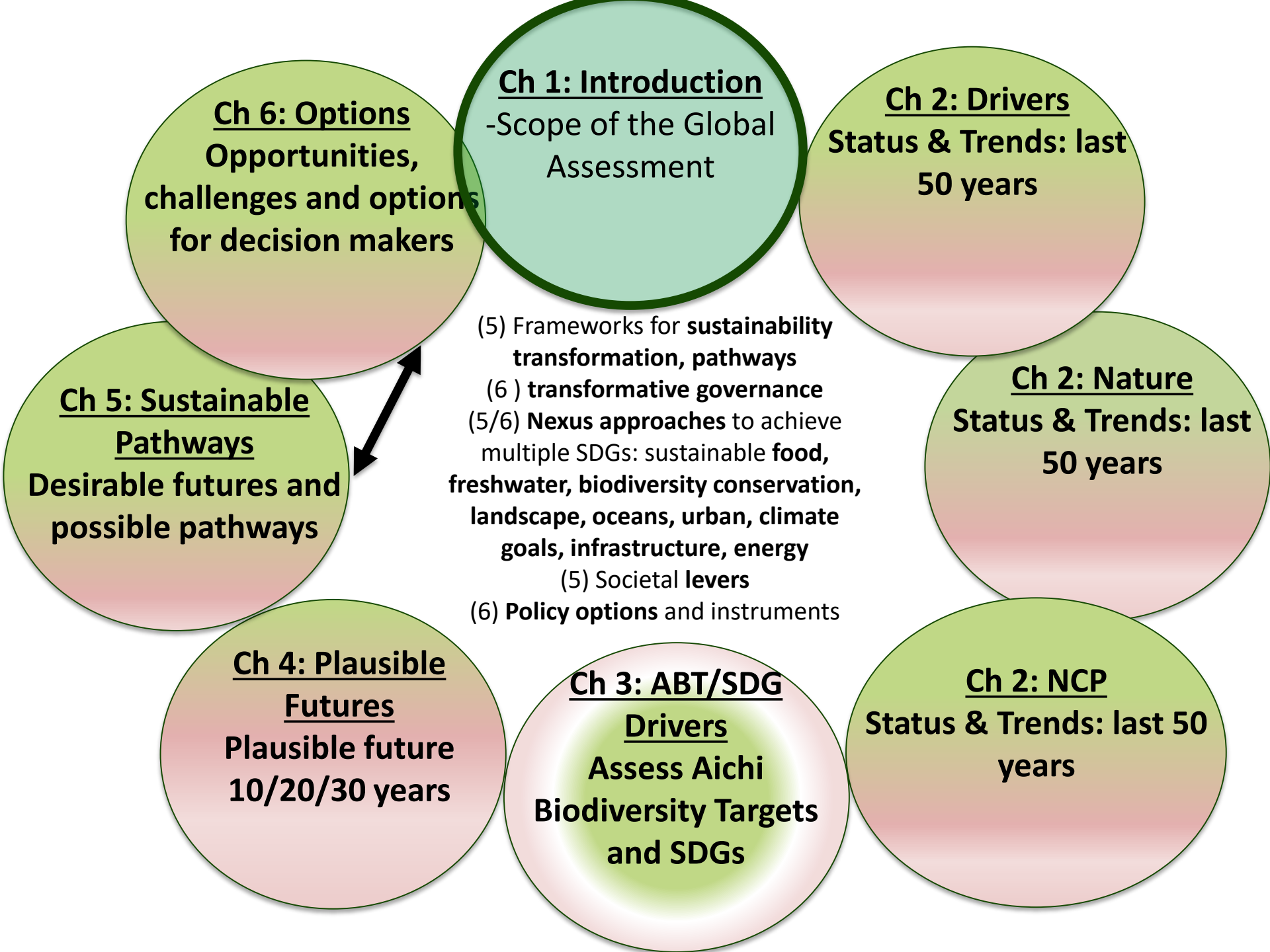
Opportunities, challenges and options for decision makers
-Evaluation of scenarios
-Plausible futures for nature in marine, freshwater, terrestrial
-Plausible futures for NCP and GQL and implications
-Implications for reaching the ABT and SDG
-Uncertainties, feedbacks, tipping points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Ch 5: Sustainable Pathways
Desirable futures and possible pathways
(5) Frameworks for sustainability transformation, pathways
(6) transformative governance
(5/6) Nexus approaches to achieve multiple SDGs: sustainable food, freshwater, biodiversity conservation, landscape, oceans, urban, climate goals, infrastructure, energy
(5) Societal levers
(6) Policy options and instruments
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On-going work (September – December 2018):

-Chapter revisions and responses to review comments

-Cross-chapter alignments and cross-cutting themes

-Preparation of Executive Summaries and Summary for Policy Makers (SPM)

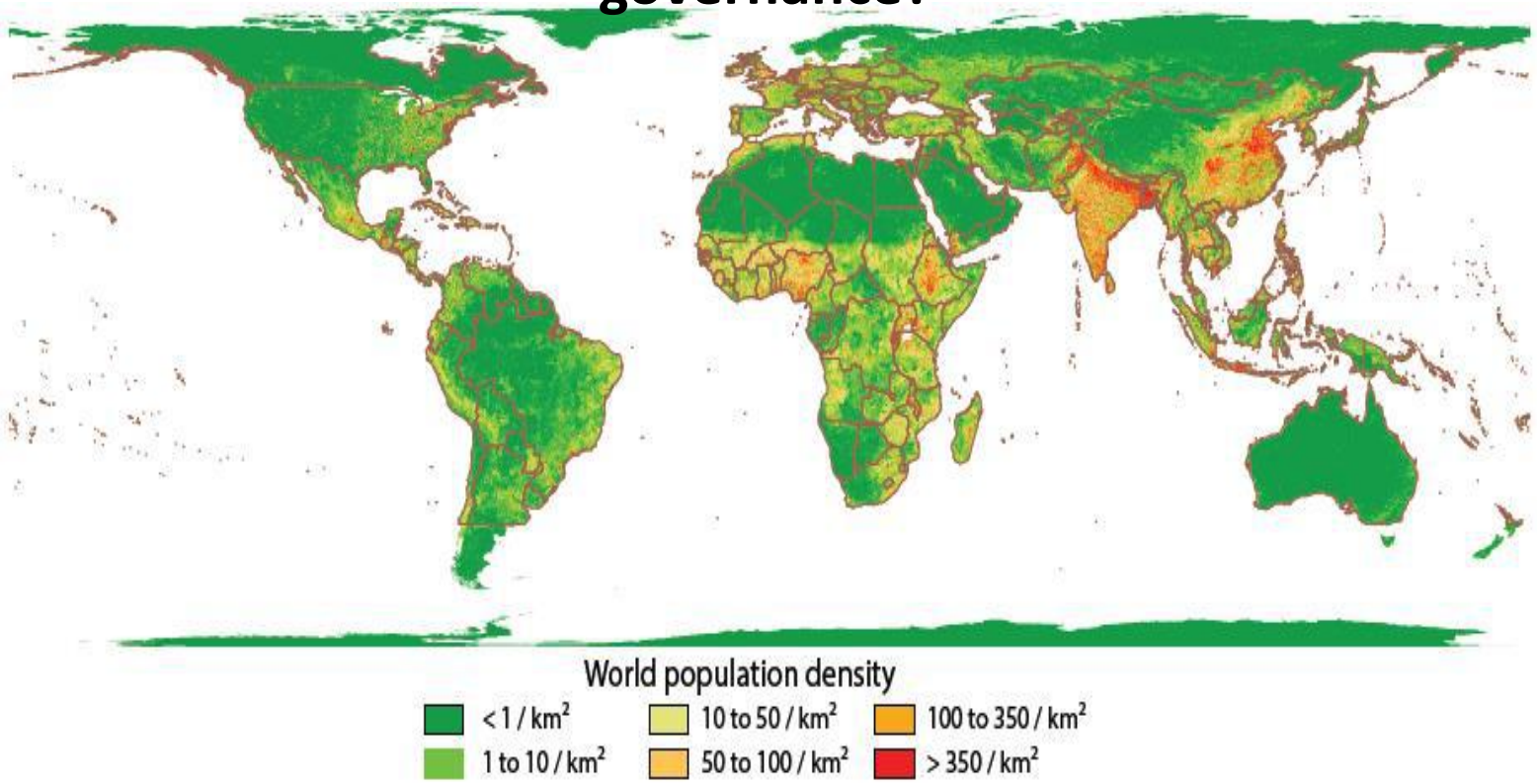
-For approval at the Plenary of IPBES-7 at UNESCO, Paris, May 7, 2019

Comments on the importance of **social-ecological production landscapes and seascapes for the next decade of global biodiversity targets**

Convention of Biological Diversity

2011-2020 – Aichi Biodiversity Targets

An urban planet, yet sparsely populated: What implications for governance?



Population density of <1 person/km2 (equivalent to most of the Sahara desert:
~ 57% of Asia
~ 81% North America
~ 94 of Australia

Figure 1: World population distribution and density, 2010. Map prepared using data at 1km resolution derived from the Landscan Data Platform of the United States Oak Ridge National Laboratory. http://web.ornl.gov/sci/landscan/

Brondizio and Le Tourneau 2016, Science 352(6291): 1272-1273

The Global Relevance of Indigenous Peoples and Local Communities to biodiversity and ecosystem conservation and management

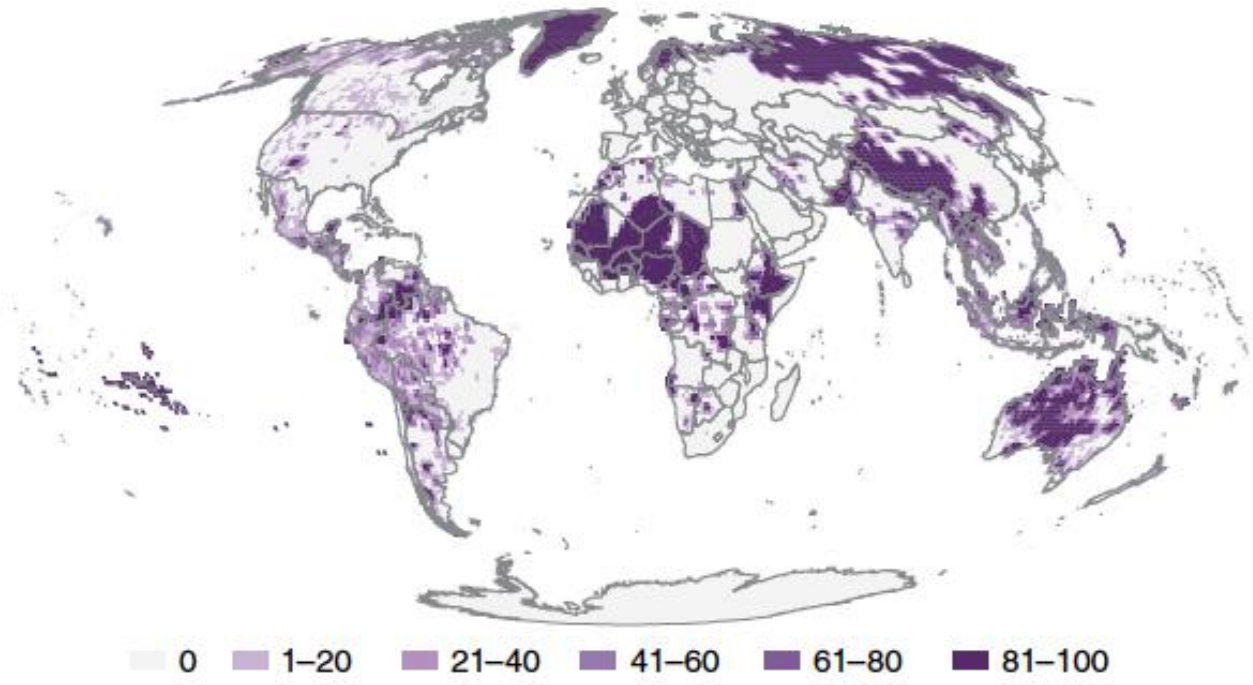


Fig. 1 | Global map of lands managed and/or controlled by Indigenous Peoples (percentage of each degree square mapped as Indigenous in at least one of 127 source documents; Supplementary Information section 2).

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ANALYSIS

https://doi.org/10.1038/s41893-018-0100-6

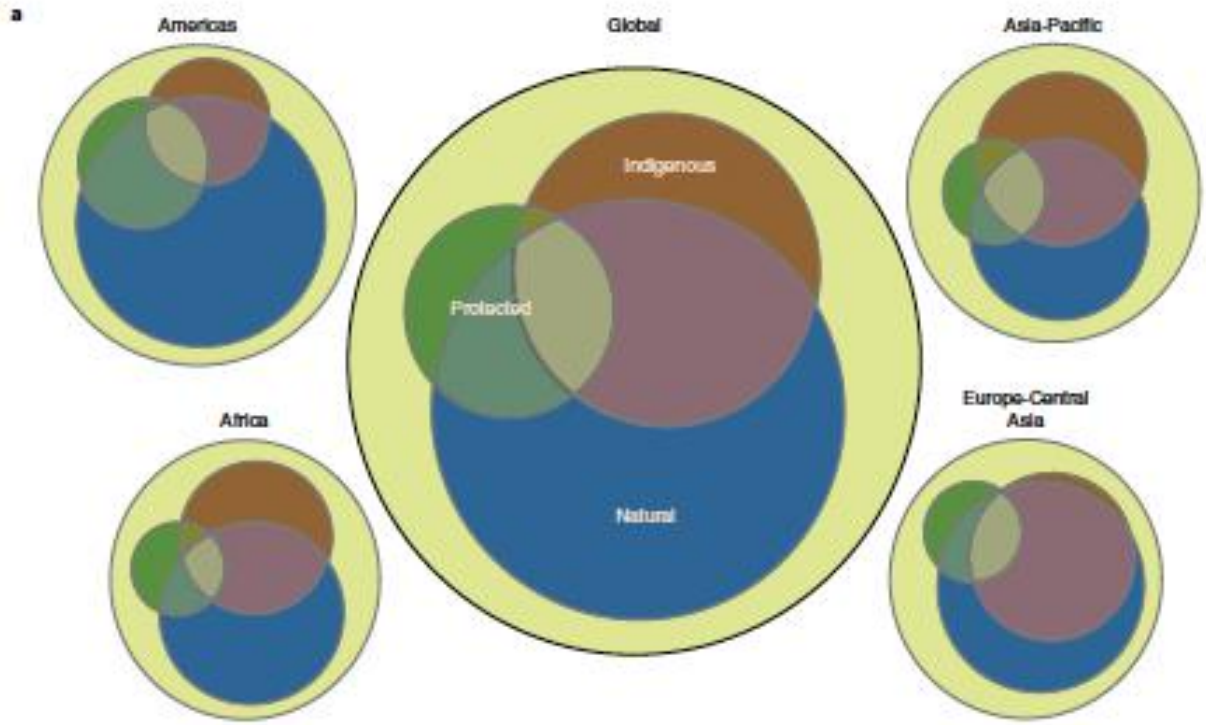
A spatial overview of the global importance of Indigenous lands for conservation

Stephen T. Garnett[1*], Neil D. Burgess[2,3], John E. Fa[4,5], Álvaro Fernández-Llamazares[6], Zsolt Molnár[7], Cathy J. Robinson[8,9], James E. M. Watson[10,11], Kerstin K. Zander[8], Beau Austin[1], Eduardo S. Brondizio[12], Neil French Collier[1], Tom Duncan[1], Erle Ellis[13], Hayley Geyle[1], Micha V. Jackson[14], Harry Jonas[15], Pernilla Malmer[16], Ben McGowan[1], Amphone Sivongxay[1] and Ian Leiper[1]

Indigenous Peoples manage or have tenure rights over at least ~38 million km2 in 87 countries or politically distinct areas on all inhabited continents.

Representing **over > ¼ of the world's land surface.**

… and to local to global conservation strategies



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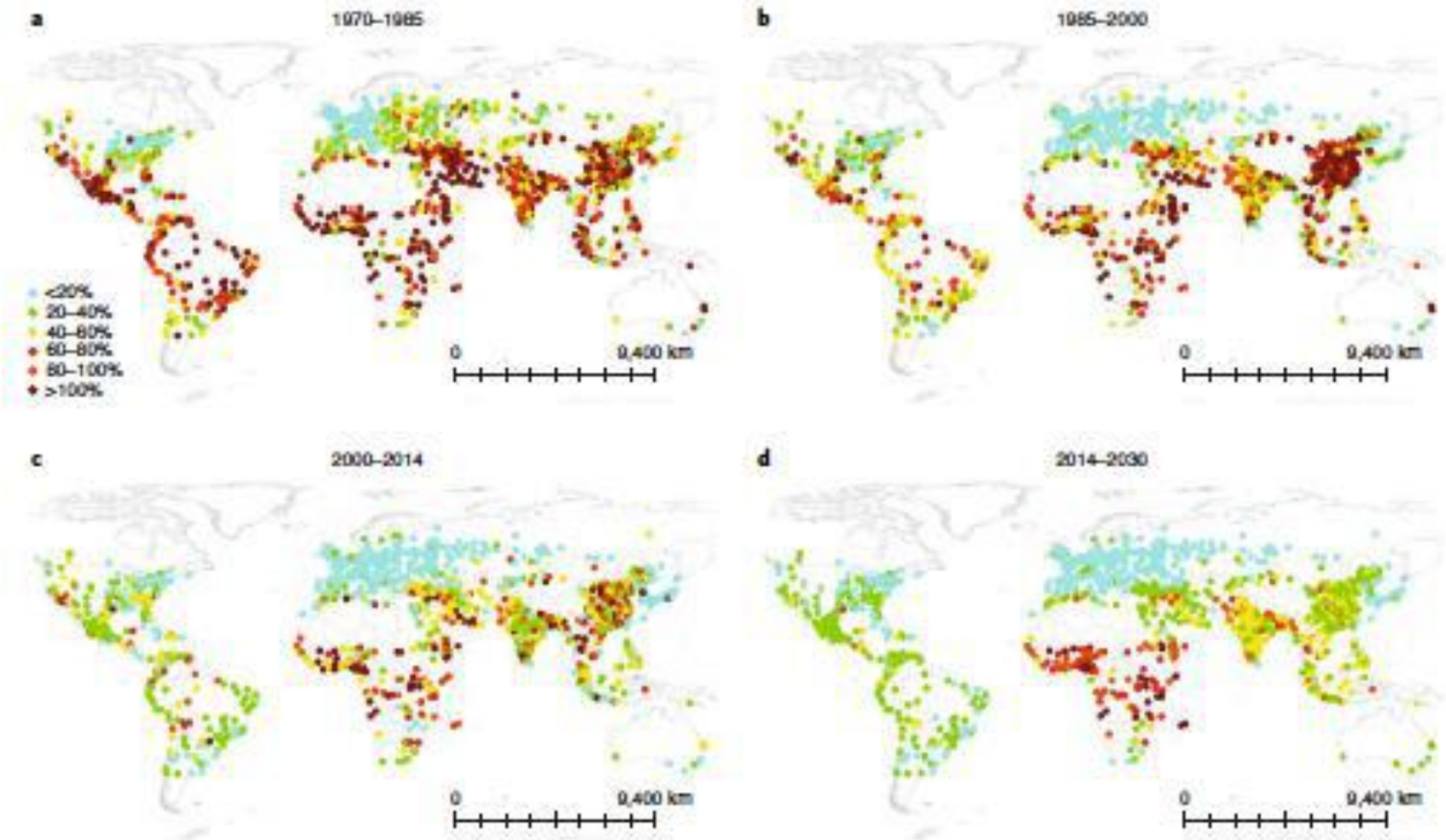
Areas managed and/or held in tenure rights by Indigenous Peoples intersects about **40% of all terrestrial protected areas and ecologically intact landscapes** such as in boreal and tropical primary forests, savannas and marshes.



nature sustainability
PERSPECTIVE
https://doi.org/10.1038/s41893-018-0101-5

The urban south and the predicament of global sustainability

Harini Nagendra[1]*, Xuemei Bai[2,3]*, Eduardo S. Brondizio[4,5] and Shuaib Lwasa[6]

Thanks to all Japanese authors and reviewers and to all of you who are contributing as authors and reviewers of the IPBES Global Assessment!

Thank You! And Congratulations on the many advances of the Satoyama Innitiative!

Thanks to the research team of the project: Predicting and Assessing Natural Capital and Ecosystem Services (PANCES)

Thank you!

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Science and Policy for People and Nature

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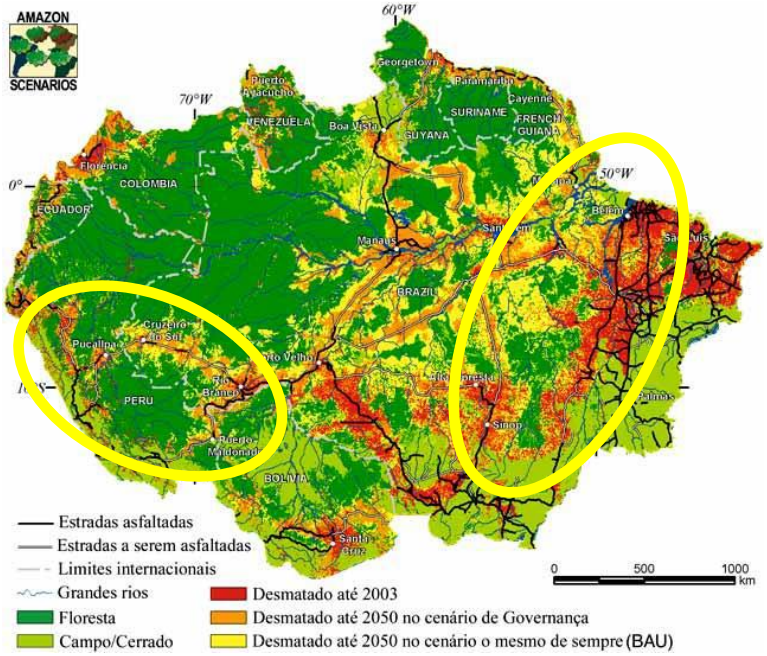
The Dilemma: Island of Contrasting Landscape Governance:

Connectivity and the limits of level specific governance systems…



… understanding the challenges and opportunities for landscape-level governance, enhancing connectivity and conservation of biodiversity and watersheds across diverse groups of agents.