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**Plenary of the Intergovernmental Science-Policy  
Platform on Biodiversity and Ecosystem Services  
Third session**

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Item 5 (b) of the provisional agenda\*

**Initial work programme of the Platform:  
guides on assessments, policy support tools  
and methodologies, and preliminary guides  
on scenario analysis and modelling and the  
conceptualization of values****Information on work related to policy support tools and  
methodologies (deliverable 4 (c))****Note by the secretariat**

In its decision IPBES-2/5, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services requested the Multidisciplinary Expert Panel and the Bureau, supported as necessary by a task-specific expert group, to develop a catalogue of policy tools and methodologies, to provide guidance on how the further development of such tools and methodologies could be promoted and catalysed in the context of the Platform and to submit the catalogue and guidance for review by the Plenary at its third session. Accordingly, the Panel and the Bureau established an expert group, which met twice, in Bonn, Germany, from 6 to 8 May 2014, and in Paris from 13 to 15 August 2014. The annex to the present note provides information on the composition and work of the expert group, as well as a more detailed version of the draft catalogue presented in the note by the secretariat on a draft catalogue and guidance on policy support tools and methodologies (IPBES/3/5). It is presented without formal editing.

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\* IPBES/3/1.

## Annex

### Expert group on policy tools and methodologies

#### I. Composition of the expert group

1. A time-bound and task-specific expert group of 20 experts was selected from a total of 106 nominations received from Governments and other relevant stakeholders. The selection process was performed by members of the Multidisciplinary Expert Panel, with advice from Bureau members, together reviewing all nominations that had been submitted, based on examination of nomination templates and curricula vitae for each nominee. Selections were made on the basis of excellence and relevance of candidates' expertise with respect to various areas of the work programme. Once selected on merit, further selection was focused on balancing disciplinary, regional and gender diversity, as well as sectorial aspects (i.e. 80 per cent of the experts selected from nominations made by governments and 20 per cent from nominations made by non-governmental stakeholders).

2. The expert group selected is evenly balanced with regard to the UN regions (exactly 20 percent for each region), with 80 percent nominations made by Governments and 20 percent by non-governmental stakeholders, and an overall male to female ratio of 55 per cent to 45 per cent. The expert group was co-chaired by Julia Carabias Lillo and Sebsebe Demissew, both members of the Multidisciplinary Expert Panel and eight other members of the Multidisciplinary Expert Panel and Bureau followed the work of this deliverable more closely. The composition of the expert group is presented in annex I. In addition, a larger group of 33 experts was selected from the pool of experts, according to the same criteria, to act as a review panel for the work on policy support tools and methodologies, providing peer review during August and September 2014. The composition of the larger expert group is presented in annex II.

#### II. Process followed

3. At the first meeting, held 6-8 May 2014 in Bonn, Germany, the experts were introduced to the aims and modus *operandi* of the expert group, and discussed the purpose, structure and content of the main outputs of deliverable (4c) addressing: (i) the definition and conceptualization of policy support tools and methodologies in the context of IPBES; (ii) processes and procedures addressing policy support tools and methodologies within/through IPBES; and (iii) presentation and dissemination of policy support tools and methodologies by IPBES (i.e. the online catalogue). Significant progress was made with regard to the definition and conceptualization of policy support tools and methodologies and structuration of the proposal for the online catalogue. Following an agreement on the structure of the zero-order draft for a draft catalogue of policy support tools and methodologies, roles and responsibilities for generating content as well as a time schedule were agreed.

4. At the second meeting, held 13-15 August 2014, in Paris, France, the experts finalised the zero-order draft of the proposal for a catalogue of policy support tools and methodologies, developed intersessionally, and discussed processes and procedures addressing policy support tools and methodologies through other IPBES deliverables. Discussions also took place with the expert group developing guidance for assessments (deliverable 2(a)), meeting in parallel, at the same venue.

5. Following the second meeting, the smaller expert group finalised a zero-order draft of a proposal for a catalogue of policy support tools and methodologies, which was then submitted for peer-review to the larger expert group between 27 August and 10 September 2014. A large number of substantive comments was received and taken into account in the further development of the document. The final draft of a proposal for a catalogue of policy support tools and methodologies is presented in annex III.

6. A shorter version of this proposal, summarizing key elements of this proposal, is presented in annex I to document IPBES/3/5 on policy support tools and methodologies.

## Annex I

### Members of the Multidisciplinary Expert Panel and Bureau dedicated to the work on policy support tools and methodologies

Name	Affiliation	Bureau/MEP
Julia Carabias Lillo	National Autonomous University of Mexico, Mexico	MEP / Co-Chair
Sebebe Demissew	Addis Ababa University, Ethiopia	MEP / Co-Chair
Jay Ram Adhikari	Ministry of Environment, Nepal	Bureau
Ivar Andreas Baste	Norwegian Directorate for Nature Management, Norway	Bureau
Leonel Sierralta	Ministry of Environment, Chile	Bureau
Moustafa Mokhtar Ali Fouda	Egyptian Environmental Affairs Agency, Egypt	MEP
Gunay Erpul	Ankara University Department of Soil Science, Turkey	MEP
Rodger Lewis Mpande	UNU-IAS, Zimbabwe	MEP
György Pataki	Corvinus University of Budapest, Hungary	MEP
Tamar Pataridze	Ministry of Environment Protection, Georgia	MEP

### Selected members of the expert group developing guidance on policy support tools and methodologies

Name	Affiliation	Nominating Country/ Organization
Mialy Andriamahefazafy	Blue Ventures Conservation	Madagascar
Sujata Arora	Ministry of Environment and Forests	India
Ersin S. Esen	UNEP	UNEP
Mary George	University of Malaya	Malaysia
Steve Hatfield-Dodds	CSIRO Ecosystem Sciences	Australia
Howard Hendriks	South African National Parks	South Africa
Claudia Ituarte Lima	Stockholm University	Stockholm Resilience Centre
Tatiana Kluvankova	SPECTRA Centre of Excellence	Slovakia
Ryo Kohsaka	Kanazawa University	Japan
Claudio C Maretti	World Wildlife Fund Brazil	Brazil
Juana L. Marino	Alexander von Humboldt Research Institute for research on Biological resources	Colombia
Emmanuel Munyeneh	Center for Environment and Development	Liberia
Roberto Oliva	Centre for Biodiversity of the Association of Southeast Asian Nations (ASEAN)	ASEAN Centre for Biodiversity
Paul Ongugo	Kenya Forestry Research Institute	Kenya
Unai Pascual	Basque Centre for Climate Change	DIVERSITAS
László Podmaniczky	Szent Istvan University	Hungary
Irene Ring	Helmholtz Centre for Environmental Research	Germany

Azime Tezer	Istanbul Technical University	Turkey
Juliette Young	CEH Edinburgh	United Kingdom
Carlos Ivan Zambrana-Flores	University of Oxford	Bolivia

## Annex II

### Selected members of the review panel on policy support tools and methodologies

Name	Affiliation	Nominating Country/ Organization
Israel Adeniyi	Obafemi Awolowo University	Nigeria
José Antonio Arenas	Terra Aqua Peru SAC	Peru
David N. Barton	Norwegian Institute for Nature Research (NINA) Oslo	Norway
Aletta Bonn	German Centre for Integrative Biodiversity Research	iDiv and Ecological Society of Germany, Austria and Switzerland (GfÖ)
René P. Capote	Ministry of Science, Technology and Environment	Cuba
Kai M.A. Chan	University of British Columbia	WWF Canada
Neville Crossman	Commonwealth Scientific and Industrial Research Organisation (CSIRO) Ecosystem Sciences	Australia
Véronique Dham	Gondwana Biodiversity Development	France
Sam Ferreira	Kruger National Park	South Africa
James Finlay	International Association for the Study of Common Property	Grenada
Prudence Galega	Ministry of Environment, Protection of Nature and sustainable Development	Cameroon
Hedley Grantham	Conservation International	Conservation International
Joyeeta Gupta	University of Amsterdam	Netherlands
Michael Halewood	Bioversity International	Bioversity International
Shizuka Hashimoto	Kyoto University	Japan
Mochamad Indrawan	Universitas Indonesia	Indonesia
Madhav Karki	Institute for Social and Environmental Transition	Nepal
Jong Min Kim Jm	National Institute of Ecology	Republic of Korea
Florian Kraxner	International Institute for Applied Systems Analysis (IIASA)	IIASA
Ying Liu	Ministry of Environmental Protection of China	China
Nicholas Lucas	Instituto Inter-Americano para la Investigación del Cambio Global	Inter-American Institute for Global Change Research
Owen McIntyre	University College Cork	Ireland
Santosh Kumar Mishra	Shreemati Nathibai Damodar Thackersey Women's University	Gujarat Research

		Society
Lydia Olander	Duke University	United States
Eeva Primmer	Finnish Environment Institute	Finland
Marina Rosales	Sustainable Use Livelihoods Specialist Group	Peru
Joyashree Roy	Jadavpur University	International Human Dimension Programme on Global Environmental Change (IHDP)
Carlos Scaramuzza	Ministério do Meio Ambiente	Brazil
Mohamed Talaat	Central Egyptian Environmental Affairs Agency	Egypt
Esther Turnhout	Wageningen University	Netherlands
Tobias Wuenscher	University of Bonn	Center for Development Research
Haigen Xu	Ministry of Environmental Protection of China	China
Masaru Yarime	University of Tokyo	UNESCO

## Annex III

### Proposal for a catalogue of policy support tools and methodologies

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## Introduction

The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) was established in 2012 to “*strengthen the science-policy interface for biodiversity and ecosystem services for the conservation and sustainable use of biodiversity, long-term human well-being and sustainable development*”. To achieve IPBES’s goal, four functions were mandated: 1) to catalyze the generation of new knowledge; 2) to produce assessments of existing knowledge; 3) to support policy formulation and implementation; and 4) to build capacities relevant to achieving its goal. These interconnected functions are realized in the Platform work programme 2014 – 2018 adopted in the second session of Plenary of the IPBES in December 2013. The Conceptual Framework (CF), endorsed in the same Plenary, contributes to provide coherence and coordination in the implementation of these functions.

The mandate of IPBES with regard to support policy formulation and implementation states that:

*“The Platform supports policy formulation and implementation by identifying policy-relevant tools and methodologies, such as those arising from assessments, to enable decision makers to gain access to those tools and methodologies and, where necessary, to promote and catalyze their further development.”*  
(UNEP/IPBES.MI/2/9, Appendix 1, paragraph 1(d))

The work programme adopted by IPBES further:

*“requests the Multidisciplinary Expert Panel and the Bureau, supported as necessary by a task-specific expert group, to develop a catalogue of policy support tools and methodologies, to provide guidance on how the further development of such tools and methodologies could be promoted and catalysed in the context of the Platform and to submit the catalogue and guidance for review by the Plenary at its third session.”*

There is a wide range of policy support tools and methodologies available for different purposes, at different stages of the policy cycle. However, it is often difficult for decision-makers or practitioners to either access information on policy support tools and methodologies, or to identify how relevant they might be.

The IPBES catalogue is proposed as an innovative, dynamic, evolving online platform with two main goals:

- (a) to enable decision makers to gain easy access to tailored information on policy support tools and methodologies to better inform and assist the different scales and phases of policy-making and implementation;
- (b) to allow a range of users to provide input to the catalogue and assess the usability of tools and methodologies in their specific contexts, including resources required and types of outputs that can be obtained, and thus help to identify gaps in tools and methodologies.

The goals will be achieved through the development of an online platform designed around IPBES processes and functions, and with a user-focused approach. Rather than being simply a repository of high quality information on available policy support tools and methodologies, the online catalogue will enable users to add, suggest and rate tools. This will lead to the creation of a community of practice, where diverse decision-makers, practitioners, research scholars and other social groups, including indigenous and local communities, can interact and build networks with peers to refine and develop policy support tools and methodologies. In this context the catalogue should be considered as an ongoing and dynamic activity in the context of IPBES.

To develop the catalogue, this guidance document has been developed to explain the rationale behind the catalogue. This guidance should be used broadly in the context of IPBES as it provides a clear definition/explanation of what ‘policy support tools and methodologies’ are and conceptualizes these in the context of IPBES objectives and functions; suggests how the further development of the policy tools and methodologies could be promoted and catalyzed and recommends how policy tools and methodologies could be more systematically identified, made accessible and disseminated by the Platform.

Taken together, the catalogue and guidance document aim to illustrate and enhance the effectiveness of policy support tools and methodologies in operationalising IPBES’s mandate. These two products seek to serve the needs of a range of social actors, focusing primarily, but not exclusively, on diverse decision-makers and implementing bodies and also information providers and brokers. It also provides elements for IPBES to engage in dialogues with other conventions and initiatives with similar visions and complementary mandates about possible synergies on the use and further development of relevant policy support tools and methodologies.

# 1 Definition and typology of policy support tools and methodologies in the context of IPBES

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## 1.1 A broad definition of policy support tools and methodologies

A broad definition of policy support tools and methodologies is necessary to support the development of a comprehensive catalogue and guide that is useful for policy makers, member states, allied organizations, NGOs, business and other stakeholders. This broad definition seeks to include all tools and methodologies that can contribute to desired outcomes for people and nature in relation to biodiversity and ecosystem services. For the purposes of this guide, policy support tools and methodologies are defined as follows:

*Policy support tools and methodologies are approaches and techniques based on science and other knowledge systems that can inform, assist and enhance relevant decisions, policy making and implementation at local, national, regional and international levels to protect nature, so promoting nature's benefits to people and a good quality of life.*

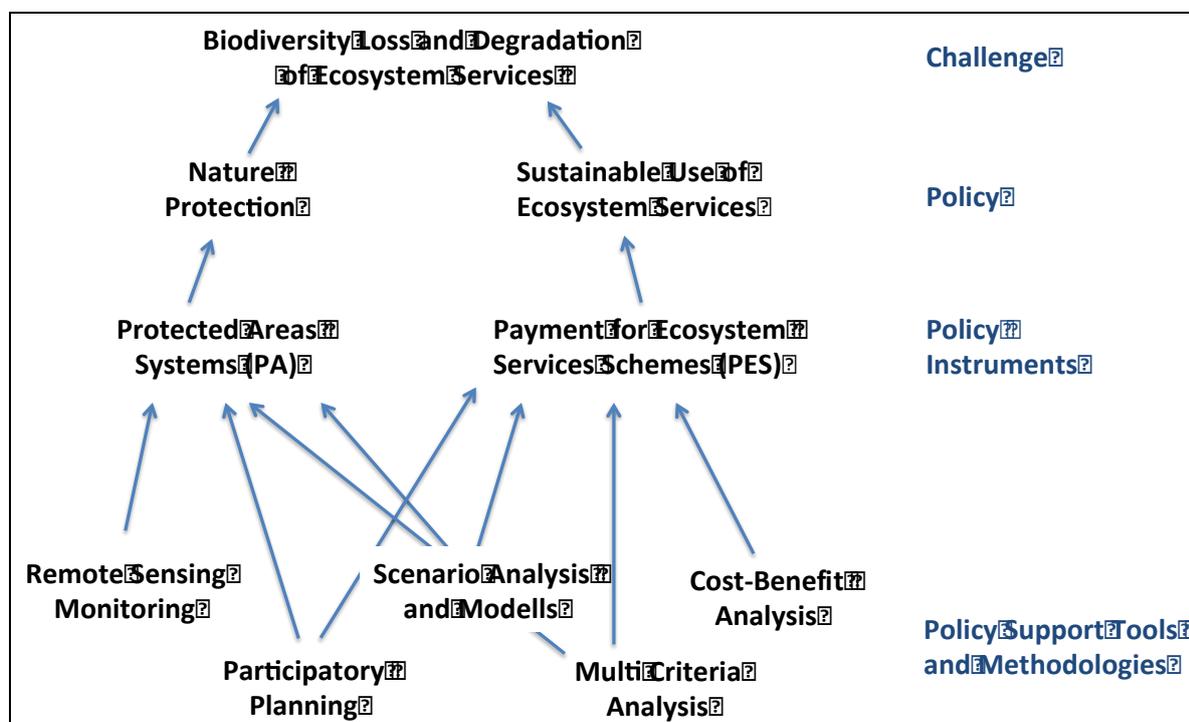
In addition, it is important to understand the context of policy support tools and methodologies in light of varying social, economic and ecological challenges and opportunities, implying that the identification, design and implementation of policy tools and methodologies do not follow a 'one size fits all' approach. Generally, the challenges present themselves either as a threat to the wellbeing of humans and the rest of nature or an endeavor to improve living in harmony with nature. In order to overcome threats decision makers' will to act is expressed through changed behavior or policy. Policies need instruments to be materialized. Different policy instruments might be chosen according to, for instance, the historical context, governance structure or political orientation of a given country or region.

Policy instruments may take the shape of environmental standards and regulation, economic incentives to correct resource allocation failures, education, capacity building and awareness raising activities, monitoring mechanisms, diverse cultural arrangements, among others (in Appendix 1, we provide a non-exhaustive list of policy instruments as they may be relevant in the context of IPBES). Policy instruments are generally used in combination, as a policy mix, which "has evolved to influence the quantity and quality of biodiversity conservation and ecosystem service provision in public and private sectors" (Ring & Schröter-Schlaack, 2011). For example, economic incentives are based on laws; laws are implemented with the support of information instruments and monitoring is frequently needed to guarantee compliance with other instruments. Enforcement mechanisms are also part of the policy toolkit that ought to fit the social and cultural context. Finally, those instruments can be selected, designed, evaluated, implemented, monitored and reviewed through the use of policy support tools and methodologies.

To distinguish policy instruments from policy support tools and methodologies, policy instruments are defined here as:

*Policy instruments are structured activities aimed at supporting by means of which decision-making which attempt to realize or achieve a decision to ensure support and effect (or prevent) social change expressed by a policy addressing (Adapted from Vedung, 2011).*

While policy instruments are often referred to as being designed and implemented by public authorities only (as, for example, in Vedung, 2011), this guide explicitly embraces a broader understanding of policy instruments as well as policy support tools and methodologies: Relevant decision-making institutions include public authorities, but also groups, organizations, entities and stakeholders that undertake activities relevant to biodiversity and ecosystem services. Figure 1 illustrates the interrelation of policy formulation, policy instrument design and implementation, and policy support tools and methodology for biodiversity loss and the degradation of ecosystem services.

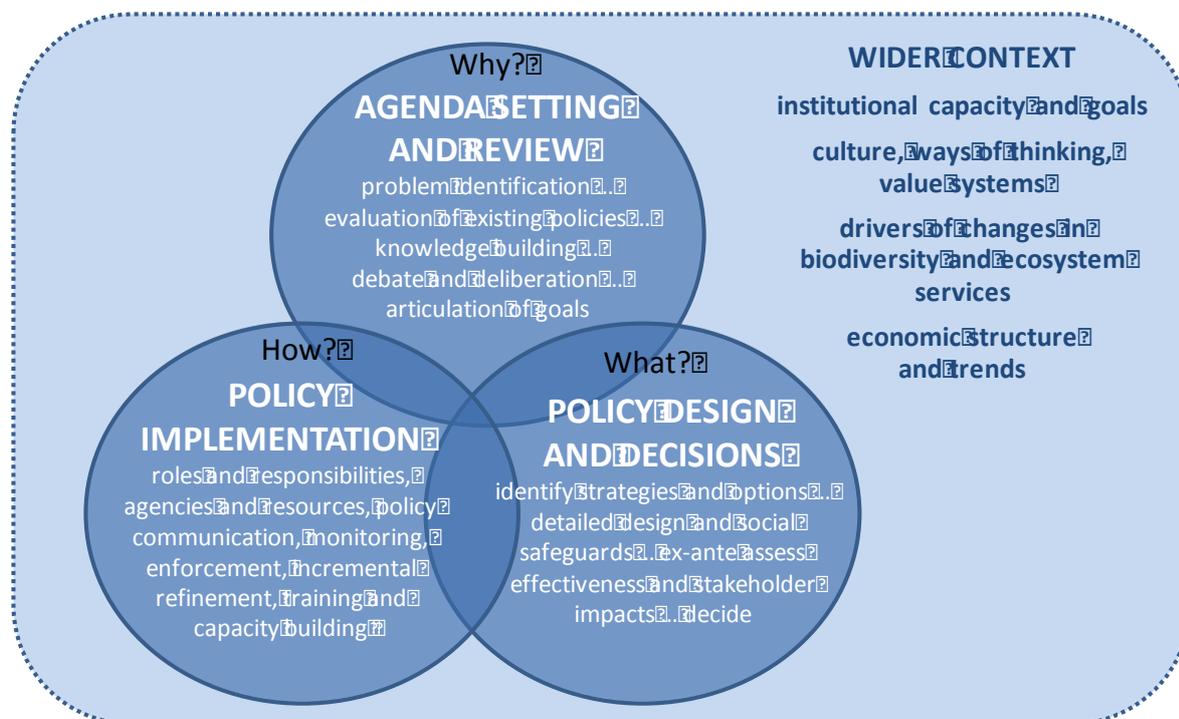


**Figure 1:** An example of the interrelation of policy formulation, policy instrument design and implementation, and policy support tools and methodology for biodiversity loss and the degradation of ecosystem services.

## 1.2 Characterizing the policy process and the elements of the policy cycle

Any comprehensive guide to policy support tools and methodologies needs to articulate a view of the policy development process. For the purposes of this guide, we adopt a simple characterization of the policy process, with three distinct but overlapping elements: agenda setting and review; policy design and decisions; and policy implementation, as shown in Figure 2. This deliberately merges ‘post policy’ evaluation and ‘pre-policy’ problem framing, as problem framing occurs in the context of settings and circumstances that have been influenced by past policies. Presenting the three elements as overlapping further recognizes that in practice the boundary line between elements is often blurred, and that the evolution of policy does not always follow a strict sequence of events (as implied by more distinct multi-stage categorizations of the policy cycle, e.g. UNEP, 2009). In the context of this guide, the overlap between elements suggests that specific tools and methodologies can be used to support multiple elements or stages of the policy cycle, and in some instances it may be difficult or inappropriate to classify a specific policy support tool or methodology as only being associated with or relevant to one element or stage.

The dynamics and operation of the policy cycle may vary depending on the restrictions and opportunities determined by the wider context. In other words, the specific conditions found at a given geographical setting and scale may restrict or ease the suite of policies that may be carried out, according to, for instance institutional capacity, culture, ways of thinking and value systems, historical experience, cultural history.



**Figure 2:** Three key elements of the policy cycle, and illustrative activities associated with these elements, in their wider context.

### 1.3 Identifying families of policy support tools and methodologies

The next step in developing a typology of policy support tools and methodologies is to identify a number of families of approaches and techniques, each of which addresses different types of decisions, decision-making institutions or policy-making cultures in the development, implementation and adaptation of policy, for the benefit of people and nature. A more comprehensive list of policy support tools and methodologies is provided in Appendix 1. The seven proposed families of tools and methodologies, defined in terms of the broad challenges addressed and with examples of tools and methodologies for each, are the following:

**Family 1. Assembling data and knowledge (including monitoring).** Addresses underlying scientific and other type of knowledge gaps by providing the data necessary to understand the function and dynamics of biodiversity, human wellbeing, nature's benefits to people (including ecosystem goods and services), and associated social-ecological systems. Includes data collection efforts, databases and monitoring. This family is relevant to all elements of the policy cycle.

**Family 2. Assessment and evaluation.** Addresses existing scientific and other knowledge by synthesizing and assessing such knowledge types relative to the status, function, determinants/drivers, and outlook for specific aspects of nature, nature's benefits to people, relevant social-ecological systems and outcomes, and connections between these. These include different types of valuation and evaluation tools, based on a variety of methods and diverse conceptualizations of values of nature and nature's benefits to people. This family is relevant to all elements of the policy cycle.

**Family 3. Public discussion, involvement and participatory process.** Contributes to identifying problems and opportunities, setting goals and priorities, meeting agreed principles such as gender and social equity, establishing the case for policy action, and building shared understanding of requirements and consequences. This is achieved by supporting discussion and deliberation about the implications of new knowledge and data, emerging risks and opportunities, and potential societal responses, and the effectiveness and merits of existing and potential institutions and policy settings. This family is relevant to all elements of the policy cycle.

**Family 4. Selection and design of policy instruments.** Supports the identification, evaluation and choice of potential policies and institutional settings, including evaluation and comparisons of past experience or similar experience elsewhere, and outcomes under different policies and circumstances and policy mix analysis. It focuses primarily on choice and design of new and existing policies, keeping in mind that policy instruments are different from policy support tools and methodologies. This family is primarily aligned with Policy Design and Decisions, but it could be relevant to the other two elements of the policy cycle.

**Family 5. Implementation, outreach and enforcement.** Supports practical implementation of policies, including laws, regulations and quasi-regulations, economic instruments and incentives, and information tools, including through monitoring, providing information to stakeholders and through supporting enforcement and compliance activities. It focuses primarily on supporting the implementation of policies that have already been decided and enacted. This family is primarily aligned with Policy Implementation, but could be relevant to the other two elements of the policy cycle.

**Family 6. Training and capacity building.** Identifies and addresses capacity gaps and shortfalls by enhancing the skills and capacity of relevant actors and organizations, including government officials and agencies, communities and representatives, businesses, non-government organizations, advisors, and support services. This family is cross-cutting to all elements and can be applied within each element to enhance capacity and improve outcomes.

**Family 7. Social learning, innovation and adaptive governance.** Addresses gaps and disconnects in the policy process, through identifying opportunities to promote social learning and to strengthen links and feedback mechanisms across elements and activities, supporting improved responsiveness, risk management, and overall performance of policy process as a whole. This family is cross-cutting to all elements, but applied to the links and inter-relationships across elements and activities to influence the dynamics and performance of the policy review, development and implementation process itself.

#### 1.4 Identification of policy support tools and methodologies relevant to IPBES

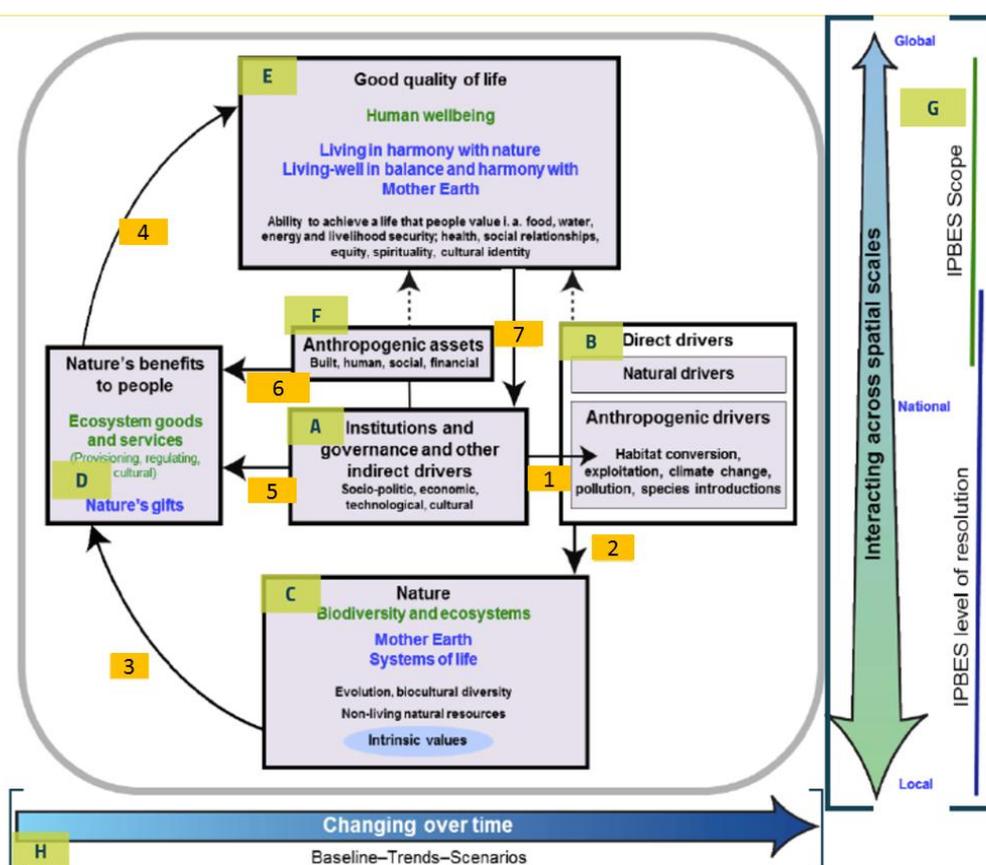
Policy support tools and methodologies can be directly related and reflected according to a wide range of possible application contexts. In the context of the Platform, and within the catalogue of policy support tools and methodologies, the main focus will be:

- (a) The conceptual framework of IPBES and its various components; and
- (b) The Strategic Plan for Biodiversity 2011-2020 and its Aichi Targets.

Other applications include, but are not limited to:

- (a) Phases of the policy cycle (e.g. agenda setting and review, policy design and decisions, policy implementation);
- (b) Geographical or administrative scale of application (global, regional, national, subnational and indigenous and local communities; rural versus urban areas);
- (c) Biological or ecological context (types of ecosystem services, ecosystems or biomes addressed);
- (d) Socio-economic context (e.g. markets and private sector relations, informal economy and livelihood security, state intervention in provision of public goods, civil society, and vulnerable communities);
- (e) Specific problem or challenge addressed (e.g. issues related to perverse incentives, missing information, market failure, lack of appropriate/equitable legal frameworks, absence of risk management options);
- (f) History of use (e.g. tools and methodologies can be categorized based on whether they are in a pilot phase or are already under full implementation);
- (g) Environmental policy and governance context (decision-making process, governance structure, public involvement in decision-making process, etc).

As noted above, the IPBES conceptual framework (CF hereafter) lends itself to identifying relevant policy support tools and methodologies (see Figure 3).



**Figure 3:** Conceptual framework of IPBES adapted for the identification of relevant policy tools and methodologies. Letters indicate the main elements (boxes) and numbers refer to the interactions or linkages across the elements (arrows). **Elements:** A: Indirect drivers, B: Direct drivers, C: Nature, D: Nature’s benefit to people, E: good quality of life, F: Anthropogenic assets, across Scope/scale (G) and Time (H). **Interactions:** 1: Impacts of institutions & governance on anthropogenic drivers as a direct driver; 2: Impacts on nature by direct drivers (nature itself or anthropogenic factors); 3: Impacts of nature on nature’s benefit to people; 4: Impacts of nature’s benefit on the good quality of life; 5: Impacts of indirect drivers on nature’s benefit to people; 6: Impacts of anthropogenic assets on nature’s benefit to people; and 7: Impacts of changes in quality of life on institutions, governance as indirect drivers. Awareness of the spatial (arrow G) and time (arrow H) scales where the policy support tools and methodologies can be applied is necessary in the process of fostering the fit between governance systems and the dynamics of socio-ecological systems. While some policy tools and methodologies are overarching and address several elements of the CF (boxes) and links (arrows), others can be better related to a specific element or link in the CF.

#### 1.4.1 Overarching policy support tools and methodologies that cut across elements of the IPBES Conceptual Framework (CF)

Certain policy support tools and methodologies connect to the central element of the CF, i.e. institutions and governance and other indirect drivers (Box A). For example the “Institutional Analysis and Development Framework” by Ostrom (1990; 2007; 2009) aims to evaluate the role of institutions in shaping social interactions and decision-making processes which can be useful for analyzing the reasons, values and principles behind certain institutional choices or decisions that affect the multiple direct drivers on nature and changes in the perception of nature’s benefits to people (Arrows 1 and 5) (Families 4, 5, and 7, see section 2.3 for the full set of families of policy support tools and methodologies).

Other tools that help identify and assess distinct aspects of governance systems abound. For example, the “UNDP Global Programme on Democratic Governance Assessments” (UNEP 2004) can assist countries in setting appropriate practice guidelines, case studies and indicators about issues such as gender participation and accountability which affect collective action towards addressing key indirect and direct anthropogenic drivers that in turn impact on nature (Arrows 1 and 2) and can enhance nature’s benefit to people and changes in good quality of life (Arrows 5 and 4) (Family 7). Likewise, socially-focused methodologies such as the “Oxfam Doughnut” (Raworth, 2012) (Family 4) and communication strategies that allow bottom-up deliberation models through for instance new IT modes of social

media (Family 3) have been used for generating awareness that global societal challenges such as inequality and widespread poverty as well as environmental deterioration are interrelated and their causes and potential solutions may be found on improving governance systems across scales. Participatory action research and public deliberation tools at the local level can also aid as early warning signals for new global risks derived from changes in the environment such as climate change, both an anthropogenic and natural driver (Family 3).

Since governance and indirect drivers are intrinsically linked with policy support tools, many of these can be interpreted also as tools and methodologies that necessarily cut across key elements in the CF (i.e. elements B, C, D, E in Figure 3). For example, assessments are key to support governance and thus to impact on indirect drivers (Family 2). Assessments with potential impact on governance at many levels, mostly as elements of Family 2 include the Millennium Ecosystem Assessment (MA) and related sub-global assessments with a more general approach, and The Economics of Ecosystems and Biodiversity (TEEB) (2010) and World Ocean Assessment (WOA)<sup>1</sup> with a relatively more specific thematic focus. Legal and economic assessments (Families 2 and 5) provide useful information for identifying institutional drivers such as perverse incentives that impact on human behavior towards overexploiting nature. For example, the OECD-led “Quick scan model, Checklist and Integrated assessment model” aims to identify environmentally-harmful subsidy schemes, to assess the impacts of such schemes, and to evaluate their effectiveness and the impact of their removal (see Valsecchi et al 2009). These types of socio-economic and regulatory assessments are necessary to select and design economic incentives such as payments for ecosystem services, among others.

While the above-mentioned examples address the global level, assessments can also focus on other levels. For example, in Mexico an assessment was developed to capture the value of biodiversity from a societal perspective. This assessment was produced with the participation of academics and professionals. The aim was to compile and evaluate information on the status of knowledge about biodiversity and the effect that human activities, public policies and regulations have on biodiversity and on the provision of ecosystem services.<sup>2</sup>

There are crosscutting tools and methodologies that present interlinkages of the key elements of the CF and target a diverse range of stakeholders from governments to civil society, indigenous peoples and local communities and the private sector. This is for example the case of the Addis Ababa Principles and Guidelines for the Sustainable Use of Biodiversity (CBD-COP Decision VII/12 2004). Internationally agreed targets such as the Aichi Biodiversity Targets and associated PSTM also have an overarching character. More specifically, the Global Initiative on Legal Preparedness for Achieving the Aichi Biodiversity Targets relates to Arrows 1, 2, 5 and 7 in terms of different families of policy support tools and methodologies (Family 1, 3, 4 and 7, respectively).<sup>3</sup> For instance, the Legal Preparedness for Achieving Aichi Biodiversity Target 16 (Cabrera *et al* n/d) concerning the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization can contribute to identify gaps and innovations in laws and regulations (Family 1) for adequately protecting vulnerable genetic resources from direct drivers that negatively affect them (Arrows 1 and 2). This Legal Preparedness tool can also be useful for selecting and designing policy instruments (Family 4) to operationalize the fair and equitable sharing of benefits arising from the utilization of genetic resources, on the basis of prior informed consent and mutually agreed terms thereby protecting the benefits that genetic resources provide to people (Arrow 5). Dialogue among different stakeholders about the outcomes of this Legal Preparedness can serve as a basis for more informed public participation (Family 3) with lessons learned for various countries in developing their own ABS regulation (Family 7).

Policy tools can be broadly categorized into those that help planning, implementation and enforcement. Planning usually requires inventory-related tools and methods such as inventories of soils, species, vegetation cover and ecosystems (Families 1 and 2), as well as those related to social and economic issues, forest resources, tourism potential (Families 1 and 2). Spatial modelling based on Geographic Information Systems (GIS) are often used in overlapping the data gathered through such inventories (Family 1) and can be used for decision support systems through for instance ‘systematic conservation planning’ based on biodiversity/ecosystem targets (Families 1 and 4). Companion support systems (Family 1) that enable participatory processes require tools that foster dialogue and negotiation (Families 3 and 4). In addition, when institutional assessments are required to overcome governance failures, multilevel learning processes can be applied, e.g. based on the “triple-learning loop” framework (Pahl-Wostl, 2009) (Family 7) which identifies structural characteristics of governance regimes that need to be taken into account.

In terms of enforcement tools (Family 5), UNEP has developed “Guidelines on Compliance with & Enforcement of Multilateral Environmental Agreements (MEA)” (UNEP, 2011) which aim at strengthening the implementation of MEAs and enforcement of national laws, regulations and policies. Likewise expert witnesses in court cases and public

<sup>1</sup> The first World Ocean Assessment is to be completed by the end of 2014.  
<http://www.worldoceanassessment.org/>

<sup>2</sup> <http://www.biodiversidad.gob.mx/pais/capitalNatMex.html> and Sarukhán, J., *et al.* (2009).

<sup>3</sup> <http://www.idlo.org/AichiLawsSite/index.html>

inquiries can contribute to providing evidence of, for example, the significant damage to nature (Arrow 2) brought by direct drivers such as pollution, habitat conversion and urbanization (Box B) as well as contribute to highlighting how these direct drivers affect people's rights and livelihoods (Arrow 3) (ICHR 2009 a, b).

Other tools such as consultations, public hearings and government established commissions with non-state organizations (Family 3) are fundamental for the processes of participatory preparation for defining governmental positions in international policy fora. In Brazil, for example, a governmental national commission with non-governmental participation/members was established to define the Brazilian 2010 biodiversity targets (Ministry of the Environment Brazil, 2013). The definition of the Brazilian 2020 biodiversity targets also involved a crosscutting intra-governmental consultation process and was influenced by a series of public-private led debates (government (Ministry of Environment and others) and civil society organizations (IUCN, WWF and Ipê), with representatives of several social sectors). A similar process was followed in France with the French 2020 biodiversity targets, which involved various stakeholders including NGOs, public organizations, the business sector and the associated process of defining its National Biodiversity Strategy 2011-2020.<sup>4</sup>

#### **1.4.2 Policy support tools and methodologies that address the linkages between indirect drivers and direct drivers, and between indirect drivers and nature's benefits to people**

Policies (indirect drivers) that have impacts on direct drivers (e.g. habitat conversion, natural resources exploitation, pollution, and introduction of invasive species, climate change) and aim to modify, inhibit, or promote behaviors (Arrow 1) can be operationalized with different policy support tools and methodologies. These policy support tools and methodologies can contribute to incentivize behavior in a way that reduces anthropogenic drivers of biodiversity and ecosystem loss while fostering ethical values and reasons for reconnecting with systems of life.

Various policies can be put in place when national or sub-national authorities are interested in protecting nature and promoting ecosystem services for enhancing people's quality of life (Arrow 1 and 5). Some of these policies include biodiversity conservation laws and regulations and territorial planning. Policy implementation requires a mix of instruments such as natural protected areas, ecosystem restoration, green infrastructure management in urban and rural areas, indigenous and community conserved areas, wildlife community based management, as well as biological corridors and integrated watershed management. The tools to operationalize these instruments may include those related to participatory and spatial planning (Family 5), assessments of local communities' needs and interests and species and ecological processes (Family 2), and identification of cultural assets (Family 1).

The social-ecological contexts affect the way different policy support tools may be prioritized when selecting and designing policy instruments and policy goals (Family 4). For instance, governments may prioritize the protection of individual large tracks of biodiversity-rich areas vis-a-vis the alternative of spreading smaller ones within an ecological network or mosaic of different protected area categories and recognition of indigenous and community conserved areas.

At the regional level, given the concomitant trans-boundary challenge of nature protection, policy support tools include exchange or collaborative networks (Families 7, 6 and 3). For instance, the Latin American network of national directors of protected areas (Red Parques), has been important in promoting national and regional approaches, institutional synergies and regional shared approaches and action plans, such as the 'Amazon Ecosystem-based Conservation Vision for the Amazon Biome' (Arrow 1). Another example of collaboration networks is the International Partnership for the Satoyama Initiative<sup>5</sup> which has a focus on the conservation and restoration of sustainable human-influenced natural environments (Socio-Ecological Production Landscapes and Seascapes) and locally-based knowledge and practices (Arrow 5). This network has involved collaboration and case studies in Asia, Africa Europe, Oceania and the Americas.

Tools and methodologies can contribute to address direct drivers including anthropogenic and natural drivers (Arrow 1). To measure nature loss due to anthropogenic drivers, certain methodologies can serve to assemble data and create awareness of the linkages between the national and global anthropogenic drivers. For example, the National Ecological Footprint Accounts measure the ecological resource use and associated capacity of nations over time and has the potential to provide comparable ecological footprints towards the development of Global Ecological Footprint Standards (Global Footprint Network, 2009). Global assessments such as the Ecological Footprint of Cities (GEO, Global Footprint Network 2010) and the Cities and Biodiversity Outlook (2010) can serve to understand the linkages between urbanization, biodiversity and ecosystem services key for understanding anthropogenic drivers (Families 1,

<sup>4</sup> [http://www.developpement-durable.gouv.fr/IMG/pdf/1\\_bis\\_-\\_French\\_National\\_Biodiversity\\_Strategy\\_-\\_May\\_2011.pdf](http://www.developpement-durable.gouv.fr/IMG/pdf/1_bis_-_French_National_Biodiversity_Strategy_-_May_2011.pdf)

<sup>5</sup> <http://satoyama-initiative.org/en/partnership/>

2, 3, and 6). Novel ecosystem accounting tools such as the ones developed under the Wealth Accounting and the Valuation of Ecosystem Services initiative (WAVES)<sup>6</sup> can also be used in addressing direct anthropogenic drivers.

Systematically applying conservation status monitoring tools (Families 1 and 2), particularly the ones related to ecosystem conversion, can serve to use policy instruments related to deforestation, or forest conversion to agriculture or other land uses. The systematic release of deforestation data can promote social/public debate and, with it, the conditions for the establishment of deforestation control programs.

Environmental and social safeguards (Family 5) are policy tools that require ex-ante assessments and try to minimize risks that policy instruments may carry. For instance, social and biodiversity safeguards associated with the implementation of programs aiming at Reducing Emissions from Deforestation and Forest Degradation (REDD+) are necessary to avoid carbon leakage and non-desirable tradeoffs between climate regulation and biodiversity conservation (Arrow 1) while also aiming at a “do-no-harm” social approach when indigenous peoples and local communities may disproportionately be burdened with such environmental policies (Ituarte-Lima *et al* 2014). This requires locally-focused tools such as community monitoring and information systems (TEBTEBBA, 2014;) (Families 1 and 2) including eco-cultural calendars and eco-cultural mapping (Di Gessa *et al* 2008; Crawhall, 2010)(Family 1). Locally-focused tools can also be complementary to those addressing disaster risk prevention, such as the Disaster Risk Index (Family 1) designed for UNEP (Peduzzi *et al.* 2009). For instance the South African Risk and Vulnerability Atlas (2008) developed within UNEP’s Proecoserv project also helps decision makers to share information on risk mitigation.

### 1.4.3 Policy support tools and methodologies that link Nature, Nature’s benefit to people and Good quality of life

To assemble data and knowledge about elements and functions of nature, a mix of tools can be used (Box C). Qualitative and quantitative indicators (Family 1) as well as status of life systems’ baselines and scenarios of nature trends (Families 1 and 4) can contribute to better understand the evolving status of biodiversity across spatial scales. There are diverse sets of information sources, e.g. the Living Planet Index (2006), the Biodiversity Indicators Partnership (2007), the Wild Commodities Index (2007) and the City Biodiversity Index (2009) that assess the status and use of biodiversity (Family 1). The Biocultural Index (Families 1 and 3) aims to identify and measure the variety of natural and cultural systems, and the relationships between cultural values and biodiversity, as well as a diverse array of nature values according to different cultural approaches (Box C). Other initiatives such as the Norwegian Nature Index (2010) provides an example of a methodology for national level mapping of biodiversity status across major ecosystems using available data and expert knowledge. Co-production of knowledge including tools such as focus groups that build on indigenous and local knowledge systems as well as practitioners’ knowledge can contribute to our understanding of biodiversity and ecosystems for human wellbeing (Tengö *et al* 2014; Danielsen 2014).

In terms of nature dynamics and its effects on the provision of benefits to people (Arrow 3), tools such as databases (e.g. land and water datasets as well as economic values databases) can support the process of assembling data and knowledge (Family 1). This systematized data can be then disseminated to various stakeholders. For example, the Ecosystem Service Visualisation Tool<sup>7</sup> allows viewing and sharing of spatial data of ecosystem services and natural capital.

Tools may be needed to address trade-offs which may arise between different ecosystems goods and services (Box D and Arrows 4 and 6). This is often done through mapping and valuing the goods and services provided by nature. Software for hydrological applications and the determination of the water balance on different vegetations such as Visual BALAN (see Samper *et al* 1999) and frameworks such as the Ecosystem Services Bundles TESSA (Toolkit for Ecosystem Service Site-based Assessment) (Family 2) can be useful tools. The toolkit ARIES redefines ecosystem services assessment and valuation in decision-making and allows the mapping of benefits, beneficiaries, and service flows. Likewise, cost benefit analysis and multi-criteria analysis tools and methodologies can contribute to assess how biodiversity elements and ecosystems functions contribute to the wellbeing of people from an economic but also from a more inclusive perspective (Wegner and Pascual, 2011) (Arrow 4). At the national and sub-national level, the use of participatory tools and methodologies (Family 4) in governmental inquiries, involving the views of various stakeholders can help provide relevant information on different values of ecosystem services (Box D), as was the case of the Swedish Inquiry “Making the value of ecosystem services visible” (Schultz *et al* 2013).

<sup>6</sup> WAVES Reports. Available at <https://www.wavespartnership.org/>

<sup>7</sup> [www.esp-mapping.net](http://www.esp-mapping.net)

In many societies there are strong inter-linkages between nature and quality of life through relational values designing and implementing legally binding instruments and policy support tools that go beyond instrumental benefits. For instance, the Akwé: Kon Guidelines (Voluntary guidelines for the conduct of cultural, environmental and social impact assessments regarding developments proposed to take place on, or which are likely to impact on, sacred sites and on lands and waters traditionally occupied or used by indigenous and local communities) (Family 5) can contribute to the use and protection of collective and public natural resources.

Policy support tools and methodologies are needed to assess how ecosystems goods and services contribute to a good quality of life of different people (Box E). Cost benefit analysis can put this perspective into an economic framework where wellbeing is associated with welfare. Additionally, when distribution also matters, Equity Assessments (Family 2) can help understand how the distribution of benefits, costs and burdens of ecosystem management change (see Pascual et al., 2014) where distinct dimensions of equity are included that limit or facilitate access to nature's benefits to people. Equity Assessments can also contribute to understand procedural equity dimensions which entail the opportunities for participation of distinct groups in decision-making processes as well as to identify contextual equity dimensions which refers to the social dynamics of access and power that shape the capabilities to effectively participate and benefit from ecosystems goods and services (McDermott et al., 2012).

Biocultural Community Protocols are tools that aim to foster equity in terms of nature's benefits to indigenous peoples and local communities (Family 5). This tool is based on statements about a local population's values and priorities that inform a good quality of life and outline the local procedures and conditions for engaging with governments and other stakeholders concerning their biocultural resources. Tools for fostering equity and non-discrimination need to be articulated with capacity building tools (Family 6) such as manuals identifying socio-ecological indicators relevant for indigenous peoples and traditional knowledge.

Good quality of life can be better understood with tools and methodologies that address distinct dimensions and scales. For example, the UNDP Human Development Index, which is a composite measure including health, education and income criteria, has been adapted for national use by many countries. The OECD Better Life Index (Families 1 and 2) allows comparisons between countries and shows differentiated notions of well-being. The Oxford Poverty and Human Development Initiative created the Women's Empowerment in Agriculture Index<sup>8</sup> (Family 1). The Bhutan Gross Happiness Index was created as a local-contextualized tool for measuring well-being in the country (Families 1 and 2). At a more aggregate scale, there is also the Genuine Progress Indicator<sup>9</sup> (Families 1 and 2) that measures progress through improvements in well-being, not expansion of the scale and scope of market economic activity. Participatory Modelling of Wellbeing Trade-offs (Families 2 and 3) constitutes a novel approach to explore and understand trade-offs in human wellbeing and has been used in Coastal Kenya related to a fisheries and forestry systems (ESPA P-Mowtick project, 2012).

Loss of good quality of life caused by drastic changes in socio-ecological systems can have significant implications for institutions, governance and other indirect drivers (Arrow 7). One of the important characteristics of a system is its adaptive capacity to cope with uncertainty and drastic changes. Methodologies such as the Adaptive Capacity Wheel (Gupta *et al* 2010) (Family 7) are designed to assess the inherent characteristics of institutions to enable the adaptive capacity of society.

## 2 A catalogue of policy support tools and methodologies by IPBES

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### 2.1 Rationale for the IPBES catalogue on policy support tools and methodologies

The IPBES catalogue is proposed as an innovative, dynamic, evolving online platform with two main goals:

- (a) to enable decision makers to gain easy access to tailored information on policy support tools and methodologies to better inform and assist the different phases of policy-making and implementation;
- (b) to allow a range of users to provide input to the catalogue and assess the usability of tools and methodologies in their specific contexts, including resources required and types of outputs that can be obtained, and thus help to identify gaps in tools and methodologies.

The outcomes of the catalogue reinforce the general rationale for IPBES namely to promote a functional dialogue among parties and relevant stakeholders in their efforts to conserve biodiversity and enhance ecosystem services for the benefit of people; provide the biodiversity community and other relevant stakeholders with a set of policy support

<sup>8</sup> <http://www.ophi.org.uk/policy/national-policy/the-womens-empowerment-in-agriculture-index/>

<sup>9</sup> <http://genuineprogress.net/>

tools and methodologies to achieve the best policy outcomes and track indicators for monitoring of policy objectives and functions; and encourage government organizations, NGOs, policy communities, knowledge holders and local communities to actively engage in devising policies and programmes that address the issues of conservation and sustainable use of biodiversity and ecosystem services with scientific and credible data and information in place.

This chapter starts by explaining the role of the catalogue in the context of IPBES and other processes, before describing some considerations for the design, use and population of the catalogue and different options for its implementation.

## **2.2 Role of the catalogue in the context of IPBES and relevant processes and initiatives**

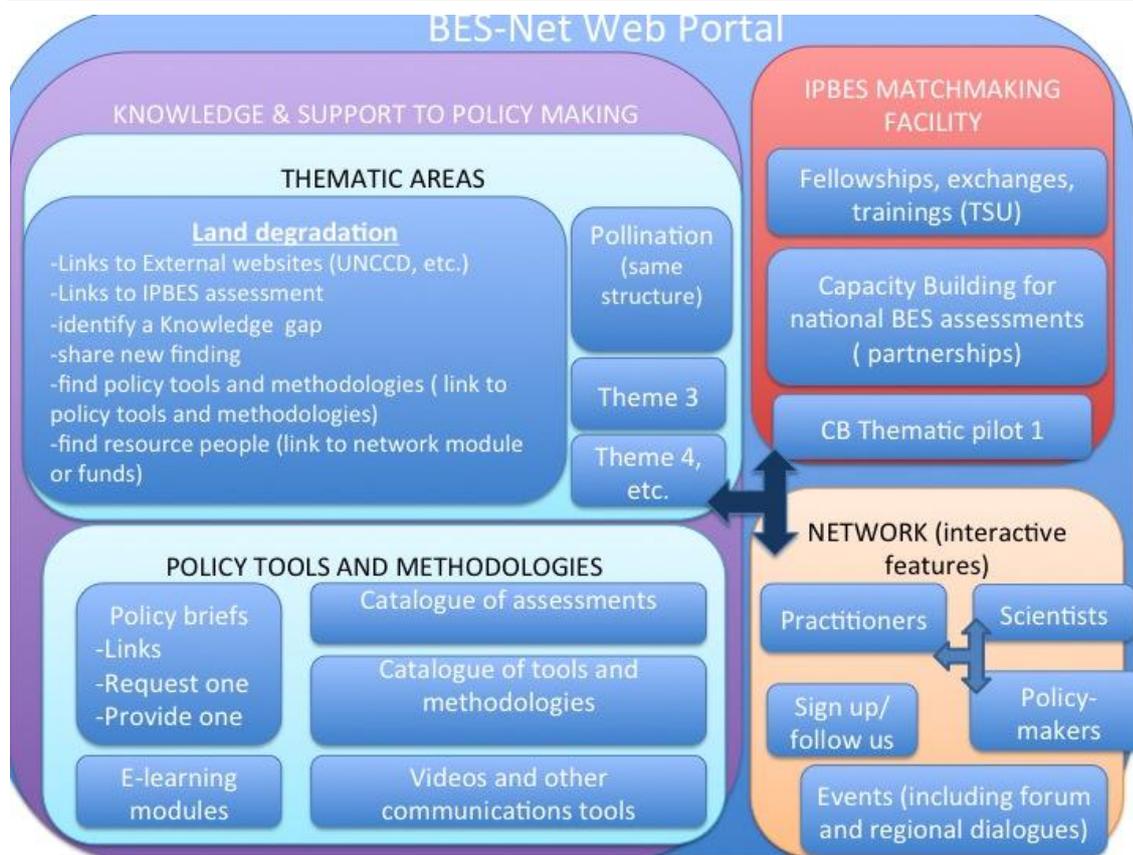
The proposed catalogue is consistent with the mandate and functions of IPBES. Therefore, the catalogue should be relevant and useful for policy-making processes that are related to IPBES. These requirements are explored below, where we outline the interrelations between the catalogue and IPBES and other related policy-making processes relevant to biodiversity and ecosystem services.

### **2.2.1 Interrelations with IPBES**

This section describes different approaches to identify relevant policy support tools and methodologies in IPBES processes (implementing the first part of the mandate on policy support tools and methodologies), including considerations of the roles and responsibilities of the IPBES plenary, its subsidiary bodies, its secretariat and its partners at all scales. Possible options, not mutually exclusive, include:

- Ensuring that all IPBES assessments identify and assess the availability, effectiveness, practicability and replicability of current and emerging policy support tools and methodologies, and to identify related gaps and needs.
- Identifying gaps and needs and enabling IPBES to present the different options available to decision makers with their related limitations.
- Undertaking scoping meetings or horizon scanning among policy tools and methodologies assessing their availability, effectiveness, practicability and replicability at all levels especially at national level.

A suggestion that emerged from the September 2014 meeting of the IPBES Task Force on Capacity Building was that the new UNDP-managed BES-Net web portal could host the catalogue online, clearly branded as a standalone IPBES product within the broader portal. (See Figure 4 below for an indicative portrayal of how both this catalogue and the assessment catalogue might be hosted within the portal and the background note on IPBES and BES-Net). The proposed interactive features of the BES-Net portal could be used to help the identification of new and missing policy support tools provided by all catalogue users, in particular policy-makers. The portal would put in place a process to ensure that these suggestions and requests would be directed to the appropriate IPBES bodies for review and assessment before any action is taken, such as uploading, thereby maintaining IPBES quality control over the content of the online catalogue. Building upon the large community of users that the web portal plans to develop across all scales and disciplines, using the web portal would help to ensure appropriate scanning and ease the assessment process for tools and methodologies.



**Figure 4:** Indicative proposal for the structure of BES-Net we portal including IPBES catalogues.

The table below outlines interrelations between the catalogue and other IPBES deliverables. This table should be updated on a regular basis, taking account of any developments in the IPBES Work Programme.

**Table 1.** Interrelations between the catalogue of policy support tools and methodologies and other IPBES deliverables.

How other IPBES deliverables should input into the catalogue	How the catalogue should contribute to other deliverables
<p><b>Capacity building</b> (deliverables 1a and 1b): The Task force on Capacity Building should take into account capacity building needs as it relates to the development and up-take of new policy support tools and methodologies as well as to the use of existing ones which are particularly suitable for wider replication and or up-scaling. Ways and means need to be elaborated to identify and prioritize capacity building needs related to policy support tools and methodologies, as well as to provide and call for financial and other support for the highest priority needs.</p> <p>The catalogue on policy support tools and methodologies should help provide relevant scientific and technical information and guidance needed to build the required capacity.</p>	<p>The catalogue on policy support tools and methodologies should help provide relevant material and guidance needed to build the required capacity.</p> <p>The BES-Net web portal could be used present the tools and methodologies in a user-friendly way that supports capacity building. The BES-Net portal allows for creating new content such as e-learning modules, as needed, and uploading short videos, leaflets, and presentations from users in a moderated fashion, which supports self learning and capacity building through a network approach.</p>

<b>How other IPBES deliverables should input into the catalogue</b>	<b>How the catalogue should contribute to other deliverables</b>
<p><b>Indigenous and local knowledge systems</b> (deliverable 1c): The Task force on Indigenous and Local Knowledge Systems (ILK) should actively contribute to identifying policy support tools and methodologies that exist in indigenous and local knowledge systems with the view to include them in the guide and the catalogue of policy support tools and methodologies.</p> <p>The guide and in particular the catalogue should provide the means to better understand the importance to consider indigenous and local knowledge systems to build policy support tools and methodologies.</p>	<p>The guide and in particular the catalogue should provide the means to better understand and to provide access to such policy support tools and methodologies.</p> <p>The BES-Net portal will include Indigenous Peoples and Local Communities as users and contributors, as well as ILK practitioners and experts. They would be used as resource people to provide access to existing tools and share them with a wide audience through outreach tools.</p>
<p><b>Generation, access and management of knowledge and data (deliverable 1d):</b> The Task Force on Knowledge and Data would need to provide guidance on the use of indicators and as to be used in the context of policy support tools and methodologies relevant to IPBES. The Task force on Knowledge and Data may further consider providing access and/or management of knowledge and data needed to apply policy support tools and methodologies that are promoted by the Platform through the Catalogue. The task force could also provide guidance on data standards to be used.</p>	<p>The catalogue should provide the means to better organize, store, manage and disseminate data and knowledge provided by the Task Force on Knowledge and Data in order to make it available for different users.</p> <p>The BES-Net web platform plans to act as a gateway to data in specific thematic areas, tools and methodologies as well as communication products through linking to the websites and databases of a wide range of government and stakeholder partners. Data to be housed on the portal itself will be managed through a Content Management System, an integrated taxonomy and tagging system or ITTS to classify and link information, and appropriate storing arrangements.</p>
<p><b>Regional/sub-regional assessments (deliverable 2b) as well as global assessments (2c)</b> The expert groups on these assessments should address and include assessments of policy support tools and methodologies. These assessments can play a major role identifying and assessing the availability, effectiveness and replicability of current and emerging policy-relevant tools and methodologies relevant to the scope of the assessments. Guidance on how to address the dimension of policy support tools and methodologies with these assessments should be included in the Assessment Guide (deliverable 2a).</p>	<p>Relevant work done by an assessment should be included in and made available through the catalogue of policy support tools and methodologies.</p> <p>BES-Net could host the catalogues of assessments online and plans to host/provide links to any relevant information accompanying the catalogue (meeting reports, guides, policy briefs and other training material).</p>
<p><b>Thematic assessments, such as those on pollination (deliverable 3a), land degradation and restoration (3bi), invasive alien species (3bii) or sustainable use (3biii):</b> expert groups on thematic assessments should address or include policy support tools and methodologies. These assessments can play a major role identifying and assessing the availability, effectiveness and replicability of current and emerging policy-relevant tools and methodologies relevant to the specific scope of the assessments. The consideration of policy support tools and methodologies should therefore also be addressed during the scoping of an assessment. Guidance on how to address the dimension of policy support tools and methodologies with these assessments should be included in the Assessment Guide (deliverable 2a).</p>	<p>Relevant work done by an assessment should be included in and made available through the catalogue of policy support tools and methodologies, including information on use possibilities and difficulties, gaps and needs for new tools, as well as information on existing tools not included so far in the catalogue.</p> <p>BES-Net plans to host/provide links to any relevant information accompanying the catalogue (meeting reports, guides, policy briefs and other training material). If the catalogue of policy tools is housed on BES-Net, it is critical there is absolute clarity in terms of who provides content to the relevant sections, given the different processes to produce the information (peer-reviewed IPBES processes versus a moderated approach by BES-Net staff for specific outreach products suggested by users or developed by BES-Net itself.) Having dedicated pages with a very clear look and feel and the IPBES logo together with a short introduction could be an option to clarify this.</p>

How other IPBES deliverables should input into the catalogue	How the catalogue should contribute to other deliverables
<p><b>Deliverables such as the one on scenario analysis and modelling (deliverable 3c) and on diverse conceptualizations of value (deliverable 3d)</b>, both comprise a methodological assessment, and the anticipated promotion and catalyzation of the further development of relevant methodologies, are the most specific implementation mechanism of the policy support function of IPBES.</p>	<p>This guide and the catalogue will promote and facilitate the processes and procedures for the anticipated promotion and catalyzation of the further development of relevant methodologies. 3(c) and 3(d) should be considered as providing significant contributions to the catalogue of policy support tools and methodologies.</p>

### 2.2.2 Interrelations with relevant processes and initiatives

Opportunities to link with relevant processes and initiatives should be identified and should involve a two-way exchange of information. Taking the example of interrelations with the CBD, those responsible for the catalogue could:

- inform the CBD on the work on deliverable 4c and seek ways to further collaborate.
- draw on outputs of SBSTTA 17 when populating the catalogue of policy support tools and methodologies.
- include information on the relevance of specific tools and methodologies to the Aichi Targets and have the Aichi Targets as a potential search filter/entry point in the catalogue.
- explore the possibility of COP side-events<sup>10</sup>.

Additional processes and initiatives that could be explored further include other MEAs such as the Ramsar Convention, the United Nations Convention to Combat Desertification (UNCCD) and the United Nations Framework Convention on Climate Change (UNFCCC). Suggestions on possible interrelations include the options to:

- inform other relevant MEAs on the work on deliverable 4c and seek ways to further collaborate.
- draw on tools and methodologies that these conventions promote.
- organize a side-event at relevant COPs to present the catalogue once it has been developed and obtain feedback on its relevance to different MEAs.

## 2.3 Considerations for the design, use and population of the catalogue

In this section we outline some considerations for the design, use and population of the catalogue of policy support tools and mechanisms based on the beneficiaries/contributors to the catalogue, the goals and functions of the catalogue.

### 2.3.1 Beneficiaries of and contributors to the catalogue

Users of the catalogue will have a dual role as beneficiaries of and contributors to the catalogue. As mentioned earlier, the different users of the catalogue are not only decision-makers, but also practitioners and other social groups. In order to define the functionality of the catalogue in relation to the different users, different "target groups" based on the following general criteria are proposed:

- More than an inert depository of tools and methodologies, the catalogue should be a "living" dynamic and interactive system with which all users have, to a greater or lesser degree, a two-way relation as beneficiaries and contributors;
- The catalogue should be useful both to the technical and managerial bodies of IPBES and external beneficiaries, depending on their function within the platform or relationship to it.

Based on the above general criteria, five main "target groups" of users of the catalogue are proposed, each of which have different roles relating to the catalogue, and some of which may be part of more than one target group.

<sup>10</sup> BES-Net and IPBES will host a side event at COP 12: "Bridging the Divide Between Science, Policy and Practice to Achieve the Aichi Targets", the CBD Secretariat and the UNCCD Secretariat are currently being invited to participate.

**(a) Target Group 1** – IPBES (Plenary, Bureau, MEP and Secretariat, task forces and expert groups): IPBES governing and administrative bodies are "internal users" as well as general administrators of the catalogue. In order to fulfill the above functions, this target group will oversee continued monitoring and updating of the catalogue. As such their roles include, amongst others, to:

- (i) Approve and adopt the catalogue, and support the implementation strategy; receive, evaluate, refine and systematize the information generated at various stages, and update the catalogue;
- (ii) Establish the internal links, via a business plan, to other functions of IPBES and to the specific actions and deliverables that are decided each year for IPBES based on a yearly review of the catalogue and its results;
- (iii) Decide on assessments on tools and methodologies for specific decision-making processes, ecosystems, regions, knowledge systems, users groups, stakeholders or topics.

In order to fulfil these roles, IPBES needs to define a permanent follow up strategy that allows the directory bodies to gain analyzed information from the catalogue and to use it to update and improve its policy support function as well as the other functions of the Platform.

The roles of Task Forces, expert groups and ad hoc groups developing IPBES deliverables (see also section 4.2.1) will be to:

- Analyze and evaluate the catalogue towards final version (trial group);
- Provide examples of applications in different decision-making processes;
- Supplement the catalogue with tools not yet identified by expert group 4c., especially ones identified or recommended in the context of the Assessments;
- Propose new tools and methodologies;
- Identify needs in terms of communication, capacity building and knowledge systems required for successful use of the catalogue and its tools and methodologies.

**(b) Target Group 2** – Strategic Institutional partners of IPBES (e.g. CBD, UN system): Their main function will be to provide feedback on the catalogue and promote its use in their respective constituencies, through processes as defined by the organizations/conventions.

**(c) Target Group 3** – Knowledge holders on policy-support tools and methodologies (Expert groups under IPBES, universities, scientists and scientific organizations, indigenous and local knowledge-holders). Their main function will be to develop, update and populate the tool pages of the catalogue to ensure the credibility and relevance of the information available in the Catalogue. Group 3 will use the catalogue as a platform for broader networking.

**(d) Target Group 4** - Member Countries: The member and observer countries of the IPBES, and their national, regional and local authorities, are anticipated to be the main users of the catalogue, as they have direct responsibility for the policies that aim to ensure conservation of biodiversity and related ecosystem services conservation and sustainable use. Member countries will use the catalogue actively in the context of specific political and administrative frameworks, help customize it and communicate and encourage its use. They will also support the Platform by providing regular feedback on the content and use of the catalogue.

Member countries have, among others, the following roles in relation to the catalogue:

- Analyze and evaluate the catalogue towards final version (trial group suggested) in the context of specific political and administrative frameworks, to help differentiate and customize the functionalities of the catalogue;
- Communicate and encourage the use of the catalogue by various public and private users, in different levels and decision-making processes, including national users of Target Group 5;
- Support the Platform in follow-up and monitor the use of the catalogue;
- Provide examples of applications;
- Identify opportunities, challenges and requirements for the use of the tools and methodologies;
- Suggest adjustments to the structure and functionality of the catalogue;
- Supplement the catalogue with tools not yet identified by expert group 4c.

**(e) Target Group 5** – Other (potential) users: This group includes a wide variety of users (NGOs, conservation and development practitioners, indigenous and local communities, youth groups, businesses, local authorities, media etc) whose main roles will be to use, evaluate and provide feedback on the catalogue.

### 2.3.2 Functions of the catalogue

This catalogue serves two sets of functions. The first goal, namely to give decision makers and those implementing the decisions easy access to information on policy support tools and methodologies, is considered the essential goal of the catalogue. For this goal, a number of functions are needed including to:

- Allow users to browse, search, identify and retrieve relevant policy support tools and methodologies, and information on them

The catalogue will act as a “one-stop-shop” for information on policy-support tools and methodologies. All policy support tools and methodologies will be listed in the catalogue and made accessible to users. In addition, users will be able to search for specific policy support tools according to their individual needs and requirements using different entry points or filters (see function below). Information in all policy support tools and methodologies will include to general information on the type of tool, its applicability and functions, but also information on the usability (according to other users themselves) of the policy support tool. If the catalogue were hosted on the BES-Net web portal, it could draw on the portal’s objective to *facilitate access to the work of network participants who are developing capacity in the interface between science, policy and practice – to support the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) and to enable effective management of biodiversity and ecosystems worldwide, implementing the three Rio Conventions and related multilateral agreements in a way that contributes to long-term human well-being and sustainable development*. Housing the catalogue within the portal will build on the principle of the planned BES-Net portal not to duplicate effort, but to provide a “one-stop shop” that harnesses the energy generated by the new IPBES Platform, and creates synergy between the efforts and online work of all participants in a capacity building network, building on the proposed approach to networking outlined in the Draft Work Programme.

- Allow the design of online functionality for the target groups

The catalogue will be designed from the perspective of user’s needs and requirements. The aim is to make the catalogue as accessible as possible in order to ensure its use by decision-makers, thereby potentially improving the quality of ensuing decisions.

- Strengthen networking of users

The catalogue will have a strong networking function, allowing for users working with policy support tools and methodologies to identify each other more readily and share experiences of developing or using policy support tools with peers. Part of the networking function of the catalogue will be to enable users to find peers, and discover the policy support tools they are using in their work. This will allow users to better understand existing tools, and how new tools could be needed or applied in their work. Contact information could be made available on the catalogue tool information sheets to allow exchanges between peers.

The second goal of the catalogue is to allow users to input tools and methodologies from their specific contexts, for others to assess their usability. It also is to help identify gaps in tools and methodologies in order to spark the development of new ones. To achieve this goal, the catalogue should:

- Allow for submission of information on policy support tools and methodologies

Users of the catalogue will be able to submit information on policy support tools. This information will be two-fold: content relating to policy support tools (by suggesting new policy support tools that should be integrated into the catalogue, or adding content to existing policy support tools); and experience of policy support tools (see below).

- Share lessons learned

Users of the catalogue will be encouraged to assess policy support tools by sharing their experience of and identifying lessons learned from using policy support tools and methodologies. Their experience will include feedback on the context within which the policy support tool was used, the scale of application (both spatial and governance scale) and the history of use of the policy support tool and methodology. Each lesson learned will provide both quantifiable and in-depth and information relating to the policy support tool. Lessons learned will relate to cost-effectiveness; adaptability to different contexts; equity and user-friendliness.

- Allow for ongoing monitoring and evaluation of the catalogue

Mechanisms will be put in place to monitor and evaluate knowledge products and track the effectiveness of the catalogue in meeting its objectives, particularly its effectiveness in bridging the gaps between science, policy and practice. In particular it will be important to find ways of measuring the impact of participation in the portal on users’ capacity – at the individual level, but also at the level of the organizations and institutions to which they belong, and in turn on the larger processes of which they are a part. One potential tool for monitoring could be the use of annual surveys, distributed through the email network of registered users. Such surveys could provide

space for qualitative as well as quantitative feedback on the use and impact of the site on individual users' and network participants' capacity. Question for ongoing evaluation would include:

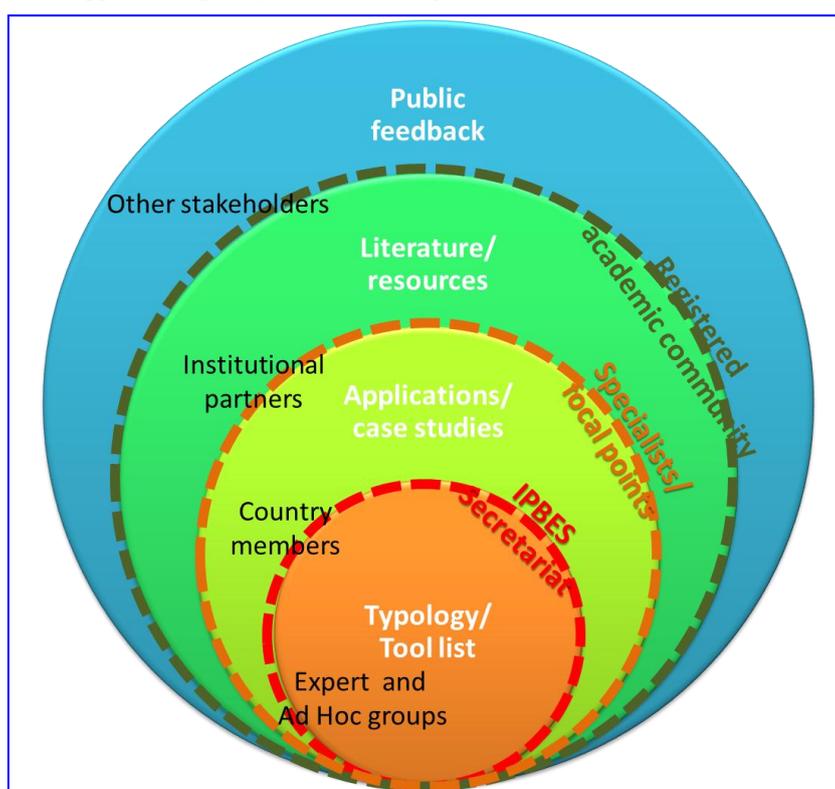
- To what extent is the catalogue's operation helping to bridge the gaps between science, policy and practice?
- To what extent is the catalogue providing support to the work of the IPBES Platform in building Member states' and other stakeholders' capacity to generate knowledge and contribute to assessments?
- To what extent has the portal facilitated access by network participants to each other's information, data, knowledge, publications, assessments, policy-relevant tools and methodologies, and to fill specific knowledge gaps?

- Provide information to the IPBES plenary

Annual reports to Plenary will outline the results of the lessons learned and progress with the catalogue. This will allow IPBES to identify gaps in tools and methodologies and develop new ones.

### 2.3.3 Contents and quality control

The catalogue will be an evolving facility helping to achieve the Platform's objective, capable of adapting to an ever-changing context. This will be achieved by designing the catalogue to facilitate collaborative content creation, maintenance, support and quality control (see Figure 5).



**Figure 5.** A dynamic representation of content and inputs to the catalogue

The catalogue has four different layers (see Figure 5) of content, each of which should be maintained by relevant stakeholders. At the core, there is a policy support tool list created and organized according to the seven families of policy support tools and methodologies, administered and periodically revised by the IPBES Secretariat and its permanent team of experts (Target Group 1). Each tool will be presented in detail in the catalogue, including: its purpose and function(s), the match between the tool and the IPBES framework, the resources and skills needed for its application, the stage of the policy cycle at which the tool could be applied, the context(s) in which the tool has been or could be used, and supporting literature or resources (see Figure 6, Appendix 2 for the template for adding a new policy support tool or instrument, and Appendix 3 for examples of specific policy support tool screenshots).

The applications/case studies represent practical examples of how a given tool or methodology can be applied, and are to be administered by knowledge holders specialized in designing or applying it (Target Group 3 and 4). The catalogue will not be complete if it is deprived of ways of receiving input and feedback from users belonging to the broader community (Target Group 5). This public feedback layer has the highest degree of permeability and allows

any registered users of the catalogue to assess, comment, and propose new content regarding specific policy support tools or methodologies.

Since stakeholders may have diverse expertise, contributions from different sources have to be assessed using a simple registration form for all users, asking for contact details and the rationale for wanting to provide input. Each of the content levels of the catalogue (tool list, applications/case studies, resources and/or feedback) should have at least one content moderator, content contributor, content proposer and content user, as defined below:

- **Content moderator.** Any user that is entrusted to moderate the material include in a given level of the catalogue. Such content moderators should be selected through a nomination process overseen by MEP members. They are allowed to add, delete or modify material in outer levels of the catalogue, and to accredit content contributors. The catalogue will be moderated using a common set of criteria to determine whether suggested input can be added to the catalogue.
- **Content contributor.** Any accredited user that is capable of submitting new material and edit material that has been previously submitted by the same user. Content contributions may be modified by a content moderator.
- **Content proposer.** Any user that wants to propose material to be included in the catalogue. The inclusion of this material may ultimately be decided by a content contributor or a content moderator.
- **Content user.** Any registered user that is able to search, see, and make use of any material held in the catalogue.

Among the different content levels and user categories, a flexible, adaptable and self-correcting living catalogue will develop, both internally consistent and open to improvement.

### 2.3.4 Proposed structure of the catalogue

The policy support tools and methodologies will be accessed in the catalogue through different entry points or filters that can be used individually or collectively, to refine the level of the search, include the type of user, the stage of the policy cycle at which the policy support tool or methodology is required, the fit with the IPBES conceptual framework, the policy goal pursued by user, the context in which the policy-support tools and methodologies can be applied and the corresponding Aichi targets (see Figure 6).

**IPBES POLICY SUPPORT TOOLS CATALOGUE**

BACKGROUND    FIND TOOLS    PARTNERS

REGISTER    LOGIN

Find a tool by name, subject or theme

**Refine Your Search**

**Family of Tools**  
*Assembling data and knowledge*  
*Assessments and evaluation*  
*Public discussion, involvement and participatory process*  
*Selection and design of policy instruments*  
*Implementation, outreach and enforcement*  
*Capacity building*  
*Social learning, innovation and adaptive governance*

**Elements of the policy cycle**  
*Agenda setting*  
*Policy design and decisions*  
*Policy implementation*

**IPBES conceptual framework**  
*(A) Institutions and governance systems and other indirect drivers of change*  
*(B) Direct drivers of change*  
*(C) Nature*  
*(D) Nature's benefits to people*  
*(E) Good quality of life*  
*(F) Anthropogenic assets*  
*(A.1) Institutions to Drivers*  
*(B.2) Drivers to Nature*  
*(C.3) Nature to Nature's Benefits*  
*(D.4) Nature's Benefits to Quality of Life*  
*(A.5) Institutions to Nature's Benefits*  
*(F.6) Anthropogenic Assets to Nature's benefits*  
*(E.7) Quality of Life to Institutions*

**Intergovernmental Platform on Biodiversity & Ecosystem Services**  
 Science and Policy for People and Nature

**About IPBES**  
 Work Programme  
 Resources

**Featured Tools**

**Integrating Ecosystem Services in Strategic Environmental Assessment**  
 Uploaded by: UNEP  
 Uploaded on: 30 October 2014

**Global Forest Watch**  
 Uploaded by: WRI  
 Uploaded on: 30 October 2014

**Integrated Valuation of Environmental Services and Tradeoffs (InVEST)**  
 Uploaded by: Stanford Univ.  
 Uploaded on: 30 October 2014

**Integrating Ecosystem Services in Strategic Environmental Assessment**  
 Uploaded by: UNEP  
 Uploaded on: 30 October 2014

**Integrating Ecosystem Services in Strategic Environmental Assessment**  
 Uploaded by: UNEP  
 Uploaded on: 30 October 2014

**Integrating Ecosystem Services in Strategic Environmental Assessment**  
 Uploaded by: UNEP  
 Uploaded on: 30 October 2014

Figure 6. Catalogue entry points and filters

## 2.4 Strategy for implementation of the catalogue

The implementation of an initiative, such as the catalogue proposed here, that aims to bridge the gaps between science, policy and practice should be conducted through active two-way communication between providers of information and beneficiaries of this information (Young et al., 2014). Based on the above considerations on the design, use and population of the catalogue, below is a summary of the key elements needed to ensure this continued two-way exchange.

The content of the online catalogue will enable beneficiaries to re-use the available knowledge. Generation of content should serve the main purpose of the catalogue which is supporting learning. Knowledge management systems usually fulfil two types of learning goals: (i) knowledge re-use and (ii) knowledge creation (Aggestam, 2007). These include knowledge of different knowledge systems, including the ILCs. The knowledge production as such is not the purpose of the catalogue but the synthesis and information exchanges for the policy-makers, practitioners and other potential users are the primary target of the catalogue.

Content generation needs to be linked to IPBES and other relevant process to access knowledge effectively and sustainably. The knowledge available in the catalogue has to be up-to-date to serve the users. The inputs are expected from the deliverables of regional and thematic assessments in different contexts and at various scales. Knowledge holders all around the world have to continuously improve the available policy support tools and methodologies or add new tools. Therefore, content generation is not a one-time process but a continuous one. Feeding into the catalogue with current available knowledge therefore has to be linked with IPBES work programme as well as the eventual adaptation of the conceptual framework to ensure continued input of relevant knowledge generators. Synergies are expected from catalogues of other relevant processes including the CBD, IPCC and other MEAs.

Different groups will have different roles in content generation. To ensure the robustness of the catalogue, the IPBES secretariat will administer the catalogue. The knowledge holders within and outside of the IPBES community should be the main actors in maintaining the quality of the information submitted. Policy makers and other stakeholders are to play a critical role in updating the catalogue, providing applications, case studies, resources to and feedback of the catalogue. Lastly, the catalogue system will allow public feedback and inputs which will be open to all users. Such inputs will not be peer reviewed but may be flagged and moderated accordingly.

Capturing of knowledge should be added to the catalogue by the knowledge holder. The knowledge captured in the catalogue should have sufficient clarity for someone else to repeat the same processes. The knowledge holder is the key actor for inputting the information because s/he can document the tacit knowledge or know-how that makes the tool useable for the policy makers. Collection of the knowledge from the first-hand user will also shorten the learning

curve of the catalogue users by outlining the most effective way of using the tool or methodology. The deliverables from knowledge generations are an integral part of such processes.

The knowledge storage system will be flexible enough to allow various kinds of tools and methodologies to be added into the catalogue. The structure of the catalogue will be in line with the typology of policy support tools and methodologies defined in Chapter 2. The catalogue's storage system will support the conceptual framework of IPBES (see Chapter 2). Thus, the policy tools and methodologies stored in the catalogue will be relevant to IPBES. This link between the structure of the catalogue and the IPBES conceptual framework will enable distinct stakeholders to benefit from the catalogue, and include different types of tools and methodologies in the catalogue. Finally, the catalogue should be user friendly, simple and widely accessible to different types of users, with special consideration to those with limited internet access.

Based on the above considerations, the most feasible option for the implementation of the Catalogue is to nest it within the Biodiversity and Ecosystem Services Network (BES-Net) web portal currently being developed by UNDP. This portal aims to facilitate access to the work of network participants who are developing capacity in the interface between science, policy and practice to support IPBES and to enable effective management of biodiversity and ecosystems worldwide, implementing the three Rio Conventions and related multilateral agreements in a way that contributes to long-term human well-being and sustainable development. The proposed catalogue of policy tools and methodologies could be an integral part of the BES-Net web portal, but managed as a separate module, following the required IPBES processes and principles, and clearly visible as an IPBES product (logo and overall branding). This could help BES-Net to develop deeper layers of content with input from the expert groups of IPBES. As potential areas for collaboration emerge, options for structure, management and monitoring of the BES-Net web portal would need to be refined to suit the needs of IPBES. Relevant provisions have been included in the Terms of Reference for the web-portal (see information document on BES-Net).

Once the catalogue is nested on the BES-Net portal, population of the catalogue would involve a step-wise approach. Initially, communication will be among a core team of experts from within IPBES (Target Group 1), who will be responsible for inputting initial content, and evaluating the catalogue structure and content. Following on from this, there will be a trial and error stage with a broader range of users (Target Group 3) and a presentation of the Catalogue in intergovernmental meetings (Target Group 2). The feedback received in these meetings will be incorporated into the catalogue development, and discussed within the core group of experts (Target Group 1). Once the catalogue is deemed fit for purpose, a longer period aligned with the timeline for the other IPBES deliverables will be set aside to provide induction and training for the use and feedback of the catalogue by "specialized" types of stakeholders, reflecting the users targeted in the catalogue (Target Groups 4 and 5). Continual efforts will be made to interface with other IPBES Expert Groups and Task Forces to ensure synergies between all inter-related IPBES deliverables.

To ensure the above step-wise approach for population of the catalogue, and the updating and support of the catalogue, it is proposed to continue the work of the expert group on the catalogue of policy support tools and methodologies in 2015/2016.

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## Appendix 1. Non-exhaustive list of policy instruments as they may be relevant in the context of IPBES

### List of Tools

Tool Name
Action Research
Adaptive Capacity Wheel
Addis Ababa Principles and Guidelines for The Sustainable Use of Biodiversity
Aries Project
Assessing State and Trends of Biodiversity. Indicator Production
Attitudes and Social License Research
Audits
Bhutan Gross Happiness Index
Biocultural Diversity Index
Biocultural Protocols
Biodiversity Safeguards
Census Data
Cost Benefit Analysis / Non-Monetary Valuation
Cultural Mapping and Implications for Policy Goals and Criteria
Databases and Information Clearing House Mechanism (CHM)
Designing of Individual, Territorial Sets Networks Protected Areas
Dialogue and Mediation
Disaster Risk Index
Eco-cultural Maps and Calendars (Community Monitoring and Information Systems)
Economic Valuation of Ecosystem Services
Economic Valuation of Environment and Natural Resources
Ecosystem Services Bundles
Ecosystem-Based Management (EBM) Tools
Education
E-learning Resources
Equity Assessment
Ex-Ante Evaluation of Options and Scenarios – (Efficiency, Effectiveness, Distribution, Social Impact, Statutory (Justice) and Customary (Legitimacy))
Expert Interviews (Delphi Technique)
Expert Witness in Human Rights Court Decisions
Focus Groups
Framework for Managing Trade-offs Between Regulating and Provisioning Services
Geospatial Analysis
Global Forest Watch
Global Initiative on Legal Preparedness for Achieving The Aichi Biodiversity
Global Programme On Democratic Governance Assessments
Guiding Principles for The Application of The Equity Principle
Handbooks, Manuals and Guides
Human Development Index
Inclusive Wealth Index
Incorporation of Biodiversity and Ecosystem Services into Strategic Environmental Assessment
Indicators

Indigenous and Community Conserved Areas (ICCAS) Identification and Assessment
Information Dissemination Through Social Networks
Institutional Analysis and Development (IAD) Framework
Institutional and Conflict Analysis Tools
Instrument Impact Evaluation
Integrated Coastal Zone Management (ICZM)
Invest Software
Knowledge Sharing
Long-Term Ecological and Socio-Ecological Research and Monitoring (LTSER-Sites)
Macroeconomic Models with Dynamic Natural Capital Components
Management Effectiveness
Management Using Threshold of Potential Concern (TPC)
Mapping of Ecosystem Services
Marine Spatial Planning
MARXAN
Media Training and Campaigns
Millennium Ecosystem Assessment and Ecosystems and Human Wellbeing: A Manual for Assessment Practitioners
MIRADI
Monitoring, Reporting and Verification (MRV)
Multidimensional Poverty Index
National Footprint Accounts and National Footprint Standards
OECD Better Life Index
Oral History
Outcome Prediction
Oxfam Doughnut
Participatory Deliberation Assembly
Participatory Modelling of Wellbeing Trade-offs
Planetary Boundaries
Population Dynamics
Process Standards (Eg ISO)
Protected Area Management Effectiveness (PAME) Methods
Public Hearings, Consultations, Governmental-Established Commissions Including Non-State Organizations
Punctuated Equilibrium
Quantitative Modelling
Response Options
Risk Analysis
Risk-Based Enforcement Effort
Roundtable Process
Scenario Analysis
Social Learning Theory
Social Media Tools
Stakeholder Analysis
Stakeholder Consultation
Stakeholder Engagement (Including Forms, Government Agencies)
Strategic Adaptive Management

Sub Global Integrated Ecosystem and Human Well-Being Assessments (SGA)
Tender Processes
The Triple-Learning Loop Framework
Trade-off Analysis
Traditional Media Tools
Training
Trend Analysis
Valuation Tools
Well-Being and Resilience Measure

## Family of Tools

### 1. Assembling data and knowledge (including monitoring)

Assessing State and Trends of Biodiversity. Indicator Production  
 Census Data  
 Databases and Information Clearing House Mechanism (CHM)  
 Indicators  
 Long-Term Ecological and Socio-Ecological Research and Monitoring (LTSER-Sites)  
 Mapping of Ecosystem Services  
 MARXAN  
 Oral History  
 Population Dynamics

### 2. Assessments and evaluation

Attitudes and Social License Research  
 Cost Benefit Analysis / Non-Monetary Valuation  
 Geospatial Analysis  
 Indigenous and Community Conserved Areas (ICCAS) Identification and Assessment  
 Management Effectiveness  
 Outcome Prediction  
 Quantitative Modelling  
 Risk Analysis  
 Scenario Analysis  
 Stakeholder Analysis  
 Trade-off Analysis  
 Trend Analysis  
 Incorporation of Biodiversity and Ecosystem Services into Strategic Environmental Assessment

### 3. Public discussion, involvement and participatory process

Action Research  
 Cultural Mapping and Implications for Policy Goals and Criteria  
 Dialogue and Mediation  
 Expert Interviews (Delphi Technique)  
 Focus Groups  
 Information Dissemination Through Social Networks  
 Participatory Deliberation Assembly  
 Public Hearings, Consultations, Governmental-Established Commissions Including Non-State Organizations

Roundtable Process
Social Media Tools
Stakeholder Consultation
Stakeholder Engagement (Including Forms, Government Agencies)
Traditional Media Tools
Integrated Coastal Zone Management (ICZM)
Marine Spatial Planning
<b>4. Selection and design of policy instruments</b>
Designing of Individual, Territorial Sets Networks Protected Areas
Ex-Ante Evaluation of Options and Scenarios – (Efficiency, Effectiveness, Distribution, Social Impact, Statutory (Justice) and Customary (Legitimacy))
Instrument Impact Evaluation
MIRADI
<b>5. Implementation, outreach and enforcement</b>
Audits
Ecosystem-Based Management (EBM) Tools
Management Using Threshold of Potential Concern (TPC)
Monitoring, Reporting and Verification (MRV)
Process Standards (Eg ISO)
Protected Area Management Effectiveness (PAME) Methods
Risk-Based Enforcement Effort
Tender Processes
<b>6. Training and capacity building</b>
Education
E-learning Resources
Handbooks, Manuals and Guides
Knowledge Sharing
Media Training and Campaigns
Training
<b>7. Social learning, innovation and adaptive governance</b>
Social Learning Theory
Strategic Adaptive Management
<b>ALL</b>
Economic Valuation of Environment and Natural Resources
Global Forest Watch
Sub Global Integrated Ecosystem and Human Well-Being Assessments (SGA)
Economic Valuation of Ecosystem Services
Adaptive Capacity Wheel
Addis Ababa Principles and Guidelines for The Sustainable Use of Biodiversity
Aries Project
Bhutan Gross Happiness Index
Biocultural Diversity Index
Biocultural Protocols
Biodiversity Safeguards
Disaster Risk Index
Eco-cultural Maps and Calendars (Community Monitoring and Information Systems)

Ecosystem Services Bundles

Equity Assessment

Expert Witness in Human Rights Court Decisions

Framework for Managing Trade-offs Between Regulating and Provisioning Services

Global Initiative on Legal Preparedness for Achieving The Aichi Biodiversity

Global Programme On Democratic Governance Assessments

Guiding Principles for The Application of The Equity Principle

Human Development Index

Inclusive Wealth Index

Institutional Analysis and Development (IAD) Framework

Institutional and Conflict Analysis Tools

Invest Software

Macroeconomic Models with Dynamic Natural Capital Components

Millennium Ecosystem Assessment and Ecosystems and Human Wellbeing: A Manual for Assessment Practitioners

Multidimensional Poverty Index

National Footprint Accounts and National Footprint Standards

OECD Better Life Index

Oxfam Doughnut

Participatory Modelling of Wellbeing Trade-offs

Planetary Boundaries

Punctuated Equilibrium

Response Options

The Triple-Learning Loop Framework

Valuation Tools

Well-Being and Resilience Measure

### Tools According to IPBES Conceptual Framework

#### (A) Institutions and governance systems and other indirect drivers of change

Integrated Coastal Zone Management (ICZM)

Marine Spatial Planning

Public Hearings, Consultations, Governmental-Established Commissions Including Non-State Organizations

#### (A.1) Institutions to Drivers

Outcome Prediction

#### (B) Direct drivers of change

Action Research

Addis Ababa Principles and Guidelines for The Sustainable Use of Biodiversity

Attitudes and Social License Research

Audits

Biocultural Diversity Index

Biodiversity Safeguards

Census Data

Cost Benefit Analysis / Non-Monetary Valuation

Cultural Mapping and Implications for Policy Goals and Criteria

Databases and Information Clearing House Mechanism (CHM)

Designing of Individual, Territorial Sets Networks Protected Areas

Dialogue and Mediation

Disaster Risk Index

Eco-cultural Maps and Calendars (Community Monitoring and Information Systems)

Education

E-learning Resources

Ex-Ante Evaluation of Options and Scenarios – (Efficiency, Effectiveness, Distribution, Social Impact, Statutory (Justice) and Customary (Legitimacy))

Expert Interviews (Delphi Technique)

Expert Witness in Human Rights Court Decisions

Focus Groups

Geospatial Analysis

Global Initiative on Legal Preparedness for Achieving The Aichi Biodiversity

Global Programme On Democratic Governance Assessments

Guiding Principles for The Application of The Equity Principle

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Incorporation of Biodiversity and Ecosystem Services into Strategic Environmental Assessment

Indicators

Indigenous and Community Conserved Areas (ICCAS) Identification and Assessment

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Institutional Analysis and Development (IAD) Framework

Instrument Impact Evaluation

Knowledge Sharing

Long-Term Ecological and Socio-Ecological Research and Monitoring (LTSER-Sites)

Macroeconomic Models with Dynamic Natural Capital Components

Management Effectiveness

Management Using Threshold of Potential Concern (TPC)

Mapping of Ecosystem Services

Media Training and Campaigns

Millennium Ecosystem Assessment and Ecosystems and Human Wellbeing: A Manual for Assessment Practitioners

MIRADI

Monitoring, Reporting and Verification (MRV)

National Footprint Accounts and National Footprint Standards

Oral History

Oxfam Doughnut

Participatory Deliberation Assembly

Planetary Boundaries

Population Dynamics

Process Standards (Eg ISO)

Quantitative Modelling

Risk Analysis

Risk-Based Enforcement Effort

Roundtable Process

Scenario Analysis

Social Learning Theory

Social Media Tools

Stakeholder Analysis

Stakeholder Consultation
Stakeholder Engagement (Including Forms, Government Agencies)
Strategic Adaptive Management
Tender Processes
Trade-off Analysis
Traditional Media Tools
Training
Trend Analysis
<b>(B.2) Drivers to Nature</b>
Ecosystem-Based Management (EBM) Tools
MARXAN
Protected Area Management Effectiveness (PAME) Methods
<b>(C) Nature</b>
Aries Project
Response Options
<b>(D) Nature's benefits to people</b>
Biocultural Protocols
Ecosystem Services Bundles
Equity Assessment
Framework for Managing Trade-offs Between Regulating and Provisioning Services
Invest Software
OECD Better Life Index
Well-Being and Resilience Measure
<b>(E) Good quality of life</b>
Adaptive Capacity Wheel
Bhutan Gross Happiness Index
Human Development Index
Inclusive Wealth Index
Institutional and Conflict Analysis Tools
Multidimensional Poverty Index
Participatory Modelling of Wellbeing Trade-offs
Punctuated Equilibrium
The Triple-Learning Loop Framework
<b>ALL</b>
Economic Valuation of Environment and Natural Resources
Sub Global Integrated Ecosystem and Human Well-Being Assessments (SGA)
Economic Valuation of Ecosystem Services
Assessing State and Trends of Biodiversity. Indicator Production
Global Forest Watch
Valuation Tools

## Appendix 2. Template for adding a new tool

## IPBES POLICY SUPPORT TOOLS CATALOGUE

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### IPBES POLICY SUPPORT TOOL

#### NEW ENTRY FORM

About IPBES

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Name:

Description:

Upload Image

**Please Select the Applicable Boxes**

**Elements of the policy cycle**

Agenda setting;

Policy design and decisions;

Policy implementation;

ALL

**Family of tools**

1. Assembling data and knowledge (including monitoring)

2. Assessments and evaluation

3. Public discussion, involvement and participatory process

4. Selection and design of policy instruments

5. Implementation, outreach and enforcement

6. Capacity building

7. Social learning, innovation and adaptive governance

ALL

**Type of user**

1. IPBES central institutions

2. Expert groups and ad hoc groups developing IPBES deliverables

3. IPBES Member Countries

4. IPBES Institutional partners (IPCC, CBD etc)

5. Scientific and academic community;

6. Stakeholders in general

7. ALL

**Biological or ecological context of application**

Marine

Coastal

Island

Inland water

Forest and woodland

Cultivated/Agricultural land

Grassland

Wetlands

Heathlands

Mountain

Dryland

Polar

Urban

ALL

**IPBES conceptual framework**

(A) Institutions and governance systems and other indirect drivers of change

(B) Direct drivers of change

(C) Nature

(D) Nature's benefits to people

(E) Good quality of life

(F) Anthropogenic assets

(A.1) Institutions to Drivers

(B.2) Drivers to Nature

(C.3) Nature to Nature's Benefits

(D.4) Nature's Benefits to Quality of Life

(A.5) Institutions to Nature's Benefits

(F.6) Anthropogenic Assets to Nature's benefits

(E.7) Quality of Life to Institutions

ALL

**Scale of application**

Global

Regional

Sub-regional

National

Sub-national

Set of sites

Single site

ALL

**Challenge addressed**

Perverse incentives

Missing information

Lack of supportive markets or rights

High transaction cost

Lack of risk management options

ALL

**Socio-economic context of application**

**Examples**

Cases or examples should mention the country, and the year of application.

**Related Aichi Targets**

Please select the related Aichi Targets from the following list

- Target 1 By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
- Target 2 By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting, as appropriate, and reporting systems.
- Target 3 By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.
- Target 4 By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.
- Target 5 By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
- Target 6 By 2020 all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species, fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.
- Target 7 By 2020 areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.
- Target 8 By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.
- Target 9 By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated, and measures are in place to manage pathways to prevent their introduction and establishment.
- Target 10 By 2015, the multiple anthropogenic pressures on coral reefs, and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized, so as to maintain their integrity and functioning.
- Target 11 By 2020, at least 17 per cent of terrestrial and inland water, and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services, are conserved through effectively and equitably managed, ecologically representative and well connected systems of protected areas and other effective area-based conservation measures, and integrated into the wider landscapes and seascapes.
- Target 12 By 2020 the extinction of known threatened species has been prevented and their conservation status, particularly of those most in decline, has been improved and sustained.
- Target 13 By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.
- Target 14 By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.
- Target 15 By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks has been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.
- Target 16 By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.
- Target 17 By 2015 each Party has developed, adopted as a policy instrument, and has commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.
- Target 18 By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant to the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully integrated and reflected in the implementation of the Convention with the full and effective participation of indigenous and local communities, at all relevant levels.
- Target 19 By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.
- Target 20 By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources, and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization, should increase substantially from the current levels. This target will be subject to changes contingent to resource needs assessments to be developed and reported by Parties.

**URL for more information**

Please enter the web address

Source Person:

[Use Login Information](#)

[New Source Person](#)

Appendix 3. Examples of individual tool or methodology pages

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### Invest Software

## InVEST

integrated valuation of environmental services and tradeoffs

**Elements of the policy cycle**  
Policy design and decisions;

**Family of tools**  
1. Assembling data and knowledge (including monitoring)  
2. Assessments and evaluation  
4. Selection and design of policy instruments

**Type of user**  
3. IPBES Member Countries  
5. Scientific and academic community;  
6. Stakeholders in general

**Biological or ecological context of application**  
Marine  
Coastal  
Island  
Inland water  
Forest and woodland  
Cultivated/Agricultural land  
Grassland  
Wetlands  
Mountain  
Dryland  
Urban

**Socio-economic context of application**

**Examples**

**Related Aichi Targets**

**Description, references and availability**

**URL for more information**

**Integrated Valuation of Environmental Services and Tradeoffs (Natural Capital Project):** software models, which are used to map and value the goods and services from nature that sustain and fulfill human life. Available at: <http://www.naturalcapitalproject.org/InVEST.html>

**IPBES conceptual framework**  
(B) Direct drivers of change  
(C) Nature  
(D) Nature's benefits to people  
(B.2) Drivers to Nature  
(D.4) Nature's Benefits to Quality of Life

**Scale of application**  
Regional  
Sub-regional  
National  
Sub-national  
Set of sites  
Single site

**Challenge addressed**  
Perverse incentives  
Missing information

**Contact to Source Person**

**Similar Tools**



**People Also Viewed**



**I used this tool for**

- Nation
- Assessments
- Capacity Building
- Policy Design
- Sub-regional
- Public Decision
- Outreach
- Agenda
- ALL
- Single Site

**Assessment of the policy tool**  
1-10 (1=very bad; 10=excellent)  
XX number of users have assessed this tool  
*Cost-effectiveness: 8*  
*Adaptability to different contexts: 9*  
*Equity: 8*  
*User-friendliness: 8*

IPBES POLICY SUPPORT TOOLS CATALOGUE

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Global Forest Watch



The World Resources Institute and over 40 partners launched Global Forest Watch (GFW) in February 2014 to tackle the global challenge of poor quality data on forests for policy makers. GFW leverages big data and breaking technology to guarantee access to reliable information about forests, often in near real time. Equipped with this information, policymakers, companies, NGOs, and the public are able to develop better forest policies, establish protected areas, enforce laws, and improve forest management like never before.

GFW features scores of different data sets, all of which have a different period of data collection. GFW gives priority to "real time" or "near real time" data that is collected on an ongoing basis. GFW is an ongoing operational project – our vision is for a living and evolving platform that continues to provide the best data about forests and forest carbon for years and decades to come. The methodology and validation vary for each of the many datasets featured on the GFW website. They are mentioned in the "Data" section above, summarized in greater detail on the GFW data page, and published (when applicable) in peer-reviewed journals.

Broadly speaking, the "forest change" data sets use sophisticated algorithms to crawl over feeds or archives of satellite imagery and identify where and when forest are changing. Data on "land use", such as national parks or concessions, are produced by governments, companies, or NGOs through various methods. The GFW team evaluates the methods for each dataset, as available information allows, to include only data produced through the most rigorous methods possible.

Raw data sources include satellite imagery, company and government maps, stories from journalists, and on the ground reports from concerned citizens. The derived data products released as part of GFW have been published in peer reviewed journals, such as Science and the International Journal of Applied Earth Observation and Geoinformation. Global Forest Watch (GFW) is a dynamic online forest monitoring and alert system that empowers people everywhere to better manage forests. For the first time, Global Forest Watch unites satellite technology, open data, and crowdsourcing to guarantee access to timely and reliable information about forests. Already, within the first three months, GFW has generated over one million pageviews from visitors across 260 countries or territories and been profiled in over 750 individual media stories. The platform has catalyzed on the ground action, halting undue deforestation in Indonesia and changing the discussion around forest data worldwide; and through energetic outreach the GFW data is being integrated into operational decisions of governmental, advocacy, research, and businesses. The simple, web based maps are the result of a massive data mining effort, amounting to hundreds of times more information than the printed collection in the US Library of Congress. The World Resources Institute and partners, including Google and UNEP, have designed innovative algorithms to process billions of pixels of satellite imagery to identify deforestation in near-real time, making it available to users on an easy to understand platform. And the initiative is growing. GFW will soon feature expanded crowdsourcing of forest clearing activity, a dynamic mobile application, and many other features to remain at the very forefront of technology in service of global forests and the climate.

Note: All GFW data (with sources, permissions, and greater detail) are listed in an accessible format here: [http://www.globalforestwatch.org/sources/forest\\_change](http://www.globalforestwatch.org/sources/forest_change)

**Elements of the policy cycle**  
Policy design and decisions;

**Family of tools**  
1. Assembling data and knowledge (including monitoring)  
2. Assessments and evaluation  
3. Public discussion, involvement and participatory process  
4. Selection and design of policy instruments  
5. Implementation, outreach and enforcement  
6. Capacity building  
7. Social learning, innovation and adaptive governance

**Type of user**  
1. IPBES central institutions  
2. Expert groups and ad hoc groups developing IPBES deliverables  
3. IPBES Member Countries  
4. IPBES Institutional partners (IPCC, CBD etc)  
5. Scientific and academic community;  
6. Stakeholders in general

**Biological or ecological context of application**  
Forest and woodland  
Cultivated/Agricultural land

**Socio-economic context of application**

Across the social economic spectrum, GFW has been used in almost every country in the world. We are currently developing tools to allow for offline use for those without internet access in poorly connected rural areas.

**Examples**

Since its launch on February 20, 2014, GFW has already has a huge impact on the way monitor forests. Nearly half a million people have visited the site within the three months since its public launch. It has received strong endorsements from current and f

**IPBES conceptual framework**  
(B) Direct drivers of change  
(C) Nature  
(A.1) Intitutions to Drivers  
(D.4) Nature's Benefits to Quality of Life

**Scale of application**  
Global  
Regional  
Sub-regional  
National  
Sub-national  
Set of sites  
Single site  
ALL

**Challenge addressed**  
Missing information  
Lack of supportive markets or rights  
High transaction cost

**Contact to Source Person**

James Anderson, Communications Officer, Forests Program, World Resources Institute

**Similar Tools**



**People Also Viewed**



**I used this tool for**



**Assessment of the policy tool**

1-10 (1=very bad; 10=excellent)  
XX number of users have assessed this tool  
Cost-effectiveness: 8  
Adaptability to different contexts: 9  
Equity: 8  
User-friendliness: 8

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**MARXAN**



Software designed to aid systematic reserve design on conservation planning. With the use of stochastic optimisation routines (Simulated Annealing) it generates spatial reserve systems that achieve particular biodiversity representation goals with reasonable optimality. (Ref: Watts et al., 2009. Marxan with Zones: Software for optimal conservation based land and sea use zoning)

**Elements of the policy cycle**  
Agenda setting

**IPBES conceptual framework (B)**  
Direct drivers of change

**Family of tools**  
1. Assembling data and knowledge (including monitoring)

**Type of user**  
6. Stakeholders in general

**Scale of application**  
Global  
Regional  
Sub-regional  
National  
Sub-national  
Set of sites  
Single site

**Biological or ecological context of application**  
Marine  
Coastal  
Land

**Challenge addressed**  
Perverse incentives  
Missing information  
Lack of supportive markets or rights  
High transaction cost  
Lack of risk management options

**Socio-economic context of application**  
ALL

**Examples**  
From Australia but now widely used worldwide especially in marine conservation planning (evidence: Leathwick et al., 2008. Novel methods for the design and evaluation of marine protected areas in offshore waters)

**Related Aichi Targets**  
Target 11

**Description, references and availability**

URL for more information  
<http://www.nq.edu.au/marxan/>

**Contact to Source Person**  
Hugh Possingham

**Similar Tools**



**People Also Viewed**



**I used this tool for**



**Assessment of the policy tool**

1-10 (1=very bad; 10=excellent)  
XX number of users have assessed this tool  
Cost-effectiveness: 8  
Adaptability to different contexts: 9  
Equity: 8  
User-friendliness: 8

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**Incorporation of Biodiversity and Ecosystem Services into Strategic Environmental Assessment**



The guide has been published by UNEP, as an output of the GEF funded "Project for Ecosystem Services" (ProEcoServ) implemented by the Ecosystem Services Economics Unit, DEPL. The guide is available in English, Spanish and French. Strategic Environmental Assessment (SEA) is potentially a very suitable tool to mainstream ecosystem services in strategic decision-making. The guide "Integrating Ecosystem Services in Strategic Environmental Assessment" provides practical, step-by-step guidance on how to integrate ecosystem services effectively in SEA. The methodological approach is structured in four stages, each comprising two or three specific tasks: Stage 1: Establish the ecosystem services context. In this first stage, SEA needs to provide an understanding of the context within which the strategic action will be developed and implemented. This requires

identifying and mapping ecosystem services and beneficiaries for the region that will be affected by the strategic action (Task 1.1), reviewing existing regulations concerning these services (Task 1.2), and identifying links with other existing or foreseen strategic actions (Task 1.3). Stage 2: Determine and assess priority ecosystem services. The purpose of this stage is to generate detailed information on a limited set of "priority" ecosystem services, which are considered relevant for shaping and informing the development of the strategic action. This requires determining priority ecosystem services (Task 2.1), and assessing their baseline conditions and trends (Task 2.2). Stage 3: Identify alternatives and assess impacts on ecosystem services. In this stage, the strategic action is taking shape and specific alternatives are proposed to achieve the objectives proposed through the action. SEA has the purpose of contributing to the identification of possible alternatives to enhance ecosystem services, or at least minimize negative effects on them (Task 3.1), predicting and evaluating impacts for each alternative (Task 3.2), and identifying measures to enhance and mitigate impacts (Task 3.3). Stage 4: Follow up on ecosystem services. This stage begins when all alternatives have been closed, and the strategic action has been approved. It aims at understanding the effective progress in the implementation of the action, the actual impacts on ecosystem services, as well as relevant contextual changes. It entails two tasks: monitoring and managing ecosystem services during implementation (Task 4.1), and testing the quality of the SEA process (Task 4.2). The proposed methodological approach aims at ensuring that all relevant information of ecosystem services is collected, processed and used to support decision making. Stakeholder consultation is a vital component of SEA, and it is relevant in all the stages, as shown by the Figure.

**Elements of the policy cycle**  
Policy design and decisions;

**IPBES conceptual framework**  
(B) Direct drivers of change

**Family of tools**  
2. Assessments and evaluation  
4. Selection and design of policy instruments

**Type of user**  
3. IPBES Member Countries  
5. Scientific and academic community;  
6. Stakeholders in general

**Scale of application**  
Sub-regional  
National  
Sub-national

**Biological or ecological context of application**  
Marine  
Coastal  
Island  
Inland water  
Forest and woodland  
Cultivated/Agricultural land  
Grassland  
Wetlands  
Heathlands  
Mountain  
Dryland  
Polar  
Urban

**Challenge addressed**  
Perverse incentives  
Missing information  
Lack of supportive markets or rights  
High transaction cost  
Lack of risk management options

**Socio-economic context of application**  
Across the social economic spectrum. SEA (or SEA-like processes) are now applied in several dozen countries in the world.

**Examples**

**Related Aichi Targets**

**Description, references and availability**

**URL for more information**  
<http://www.proecoserv.org/information-hub-test/guideline.html>

**Contact to Source Person**  
Davide Geneletti, University of Trento  
davide.geneletti@unitn.it

**Similar Tools**



**People Also Viewed**



**I used this tool for**

- Mission
- Assessments
- Capacity Building
- Policy Design
- Sub-regional
- Public Discus
- Uncovers
- Agenda
- ALL
- Single Use

**Assessment of the policy tool**  
1-10 (1=very bad; 10=excellent)  
XX number of users have assessed this tool  
Cost-effectiveness: 8  
Adaptability to different contexts: 9  
Equity: 8  
User-friendliness: 8

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Work Programme  
Resources

**Addis Ababa Principles and Guidelines for The Sustainable Use of Biodiversity**



The principles provide a framework to assist various stakeholders including governments, resource managers, indigenous and local communities and the private sector on how to ensure sustainable use of the components of biodiversity with a long-term perspective. The guidelines function as policy support tools to develop strategies aiming to understand and comply with these principles. Available at: <http://www.cbd.int/sustainable/addis.shtml>

**Elements of the policy cycle**  
Policy design and decisions;

**Family of tools**  
2. Assessments and evaluation  
3. Public discussion, involvement and participatory process  
6. Capacity building

**Type of user**  
developing IPBES deliverables  
3. IPBES Member Countries  
6. Stakeholders in general

**Biological or ecological context of application**  
Marine  
Coastal  
Island  
Inland water  
Forest and woodland  
Cultivated/Agricultural land  
Grassland  
Wetlands  
Heathlands  
Mountain  
Dryland  
Polar  
Urban

**Socio-economic context of application**

**Examples**

**Related Aichi Targets**

**Description, references and availability**

**URL for more information**

**IPBES conceptual framework**  
(B) Direct drivers of change

**Scale of application**  
Regional  
Sub-regional  
National  
Sub-national

**Challenge addressed**  
Missing information  
Lack of risk management options

**Contact to Source Person**

**Similar Tools**



**People Also Viewed**



**I used this tool for**



**Assessment of the policy tool**

1-10 (1=very bad; 10=excellent)

XX number of users have assessed this tool

Cost-effectiveness: 8

Adaptability to different contexts: 9

Equity: 8

User-friendliness: 8