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**Plenary meeting to determine modalities and institutional
arrangements for an intergovernmental science-policy
platform on biodiversity and ecosystem services
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Item 4 (f) of the provisional agenda*

**Consideration of the modalities and institutional
arrangements for an intergovernmental science-policy
platform on biodiversity and ecosystem services:
work programme of the platform**

**Options for implementing the assessment function of the
intergovernmental science-policy platform on biodiversity and
ecosystem services**

Note by the secretariat

The annex to the present note sets out a report on options for implementing the assessment function of the intergovernmental science-policy platform on biodiversity and ecosystem services. The report is presented in the annex in English only and, apart from the executive summary, without formal editing. The executive summary, in the six official languages of the United Nations, is presented in document UNEP/IPBES.MI/1/INF/4. The report has been produced by the secretariat in collaboration with the United Nations Educational, Scientific and Cultural Organization, the United Nations Development Programme, the United Nations Environment Programme World Conservation Monitoring Centre and the Food and Agriculture Organization of the United Nations.

* UNEP/IPBES.MI/1/1.

Annex

Options for implementing the assessment function of the intergovernmental science-policy platform on biodiversity and ecosystem services

Executive summary

1. The outcome document of the third ad hoc intergovernmental and multi-stakeholder meeting on an intergovernmental science-policy platform on biodiversity and ecosystem services, known as the “Busan outcome”, states that the proposed platform should:

Perform regular and timely assessments of knowledge on biodiversity and ecosystem services and their interlinkages, which should include comprehensive global, regional and, as necessary, subregional assessments and thematic issues at appropriate scales and new topics identified by science and as decided upon by the plenary. These assessments must be scientifically credible, independent and peer-reviewed, and must identify uncertainties. There should be a clear and transparent process for sharing and incorporating relevant data. The new platform should maintain a catalogue of relevant assessments, identify the need for regional and subregional assessments and help to catalyse support for subregional and national assessments, as appropriate.

2. Continuing and recently completed global assessments of relevance to the platform include the Millennium Ecosystem Assessment, the International Assessment of Agricultural Science and Technology for Development, the Global Environment Outlook, the Global Biodiversity Outlook, the Global Forest Resources Assessment, the Economics of Ecosystems and Biodiversity and the Global International Waters Assessment. A number of regional assessments have also been carried out, including the African Environment Outlook and the Southern African Millennium Ecosystem Assessment, in addition to a growing number of national assessment activities being undertaken around the world. There are many lessons that can be learned from these and similar assessment processes that can be used to inform the development of the assessment work programme of the platform.

3. While the assessment processes listed above are numerous and broad in scope, gaps in the assessment of biodiversity and ecosystem services nevertheless remain, as discussed in the gap analysis set out in document UNEP/IPBES/2/INF/1. In particular there is a need for a regular, periodic, multi-level assessment process that provides a conceptual and institutional framework that will allow for the coherent gathering, review, synthesis, communication and monitoring of information, as well as the tracking of changes in biodiversity and ecosystem services and their consequences for human well-being.

4. In addition, there is a need to set up a global process to ensure the timely provision of scientific advice on emerging issues of concern, whether in response to policymakers’ requests or concerns arising from the scientific community.

5. There are a number of options for how assessments could be implemented under the platform in line with the needs listed in the Busan outcome. The platform plenary and assessment working groups, if established, may therefore wish to consider the following, among other things, with regard to the assessment work programme:

(a) Priorities for assessment on the regional, subregional and global scales, including how subregional and regional assessments might contribute to global assessments to ensure that information is available on the scale of greatest utility while using standard frameworks to allow integration across and between assessments performed on different scales;

(b) How to incorporate different types of knowledge, such as scientific knowledge, traditional knowledge, grey literature and citizen science, into the assessment process;

(c) How to provide economic valuations for various ecosystem services and changes under different conditions and in different regions;

(d) How to assess and communicate social and ethical values for biodiversity and ecosystem services and how to take them into account alongside ecological and economic values;

(e) How to develop quantitative and qualitative models, scenarios and indicators that will aid understanding of biodiversity and ecosystem services and their relation to human well-being;

(f) How new topics identified by the scientific community might be brought to the attention of the plenary;

(g) The processes for the selection of authors and peer review to ensure scientific credibility and transparency;

(h) How the assessment work programme might be designed in a way that is mutually supportive of the knowledge generation, policy support and capacity-building functions of the platform.

6. Options for implementing the assessment functions of the platform include global, regional and subregional assessments that could be undertaken using a standard conceptual framework that is sufficiently robust and inclusive that it could be used in various regions. A global assessment could begin after the regional assessments have started, which would allow it to draw on regional datasets, assessments and knowledge. Alternatively, a global assessment could be undertaken in parallel with regional assessments and a synthesis produced to bring the findings together.

7. Thematic assessments could be carried out on a demand-driven, ad hoc basis, as decided by the plenary. Alternatively, the plenary could decide that a set of thematic issues and assessments should be produced on a regular basis or that the platform should develop partnerships with existing assessment processes such as the Regular Process for Global Reporting and Assessment of the State of the Marine Environment to provide regular thematic assessments on biodiversity and ecosystem services.

8. Assessment of new topics identified by the scientific community could be carried out on an ad hoc basis by establishing a specific process that regularly reports to the plenary, for example by creating a working group or task force on emerging issues, by establishing a framework for the submission of suggestions to the plenary for consideration or by forming a partnership with existing processes and inviting them to submit a list of topics for consideration by the plenary.

9. Regardless of the decisions taken on the scope and process of assessment, the plenary might also wish to give attention to how the assessment work programme could link to existing assessment processes to ensure that it adds value and does not duplicate work.

1. Context and mandate

1. The Busan outcome (UNEP/IPBES/3/3 paragraph 6c) agreed that *“The new platform should perform regular and timely assessments of knowledge on biodiversity and ecosystem services and their interlinkages, which should include comprehensive global, regional and, as necessary, subregional assessments and thematic issues at appropriate scales and new topics identified by science and as decided upon by the plenary. These assessments must be scientifically credible, independent and peer-reviewed, and must identify uncertainties. There should be a clear and transparent process for sharing and incorporating relevant data. The new platform should maintain a catalogue of relevant assessments, identify the need for regional and subregional assessments and help to catalyse support for subregional and national assessments, as appropriate”*.

2. Undertaking timely and regular assessments will be a key function of IPBES. Assessments of biodiversity and ecosystem services play numerous roles in decision-making including:

- Meeting information needs identified by decision-makers;
- Assessment of key and emerging issues identified by science;
- Providing the state of knowledge on the status and trends of biodiversity, ecosystem services and their links to human well-being;
- Highlighting trade-offs between decision options, synergies, multiple and interacting drivers of change, and linkages among and between policy objectives and drivers;
- Improving understanding of the impacts of policy options through the use of scenarios;
- Exploring future prospects to provide insights into possible development pathways, including undesirable outcomes;
- Considering the breadth of knowledge related to biodiversity and ecosystem services, and synthesising and condensing this knowledge for decision-makers;
- Making sense of uncertainty as well as highlighting areas of consensus and disagreement amongst the scientific community.

3. Assessments provide a critical judgement of knowledge, options and uncertainty, through synthesizing and communicating complex information on relevant issues. The assessment process is as important as the assessment product, with the process providing value by involving and engaging stakeholders and linking different disciplines and sectors (e.g. environment with development) in the shaping of needs, scope and information availability for assessment, in addition to delivering on the final assessment products.

4. Various assessments have been considered in a range of documentation for previous IPBES meetings including in: the IPBES Gap Analysis¹; Analysis of the assessment landscape for biodiversity and ecosystem services², Millennium Ecosystem Assessment: experiences and impacts³ and Background on the IPCC^{4,5}.

5. The purpose of this information document is to set out the issues and options for potential assessment processes under IPBES, building on the agreement reached in Busan and the series of information documents products from the second and third intergovernmental and multi-stakeholder meetings on IPBES, in addition to drawing on experiences from related assessment processes. This information document does not set out the specific methodology for assessment, nor the range of options for conducting assessments, such as how the selection of authors should take place or the peer review process. It is anticipated that these will be addressed at the second session of the Plenary and subsequent meetings of IPBES.

2. Brief Overview of existing initiatives

6. Assessments provide an important evidence base for decision-makers to make informed decisions based on science, and are one of the key tools available to support the science-policy interface - at all scales.

7. A review of the global assessment landscape is set out in document UNEP/IPBES/3/INF/1, which lists 13 global assessment initiatives relating to biodiversity and ecosystem services and summarises some of their key characteristics, strengths and shortcomings. These assessments include The Millennium Ecosystem Assessment (MA), the International Assessment of Agricultural Science and Technology for Development (IAASTD), Global Environment Outlook (GEO), Global Biodiversity Outlook (GBO), Global Forest Resources Assessment (FRA), The

¹ UNEP/IPBES/2/INF/1

² UNEP/IPBES/3/INF/1

³ UNEP/IPBES/3/INF/12

⁴ UNEP/IPBES/3/INF/5

⁵ UNEP/IPBES/3/INF/13

Economics of Ecosystems and Biodiversity (TEEB) and Global International Waters Assessment (GIWA). A number of regional assessments were also reviewed including the Africa Environment Outlook and the Southern African Millennium Ecosystem Assessment. This document complements the Gap Analysis for the purpose of facilitating the discussion on how to improve and strengthen the science-policy interface on biodiversity and ecosystem services (UNEP/IPBES/2/INF1).

8. Since the MA reporting its findings in 2005, there has been increased assessment activity at the sub-global level, with new ecosystem assessments being initiated from the regional, national and sub-national levels. Figure 1 outlines the coverage of sub-global assessments recently or currently being undertaken making use of the MA conceptual framework linking ecosystem change to human well-being. To date there are two regional assessments that have been undertaken with the MA conceptual framework; the Southern Africa Millennium Ecosystem Assessment (SAfMA) and the Caribbean Seas Assessment (CARSEA). Both these assessments involved stakeholders and experts throughout the region, focusing on ecosystem services of importance for the region such as fuel wood, water supply and tourism. In Europe there are plans for a regional assessment, which would aim to draw heavily on assessments already undertaken in Europe. There has also been a rapid growth in national level assessments, such as the Portugal national assessment, the Mexican National Assessment, the Japanese Satoyama Assessment and the National Ecosystem Assessment in the United Kingdom (UK NEA).

9. Annex 1 presents a comparison of elements of the process of a small selection of some of the recent and ongoing major assessment activities. Each of the assessment processes analysed contain either a regional and/or national component. Few of the assessment processes to date have been established to allow for the data and knowledge generated in assessments conducted at the national and regional scale to flow through to the global assessment. The Forest Resource Assessment (FRA), for example explicitly allows for this flow of information based on national reports submitted by countries. To complement this approach, FAO have invested in capacity building at the national level to improve the quality and quantity of data available for the global assessment. The GEO process is a global assessment which encourages and catalyses regional, country, city and a range of thematic 'GEO' assessments and state of the environment reporting processes, using the same conceptual framework. The typical model used is to provide seed funds for a start-up workshop, provide the training on how to conduct a GEO assessment, and then ongoing technical support (peer review of drafts, etc.), and outreach and communication.



Figure 1: Geographical spread of sub-global assessments carried out using the MA conceptual framework

10. While the review of the assessment landscape sets out the lessons learned from a number of global assessments, there are key lessons to be learnt from assessments at regional, sub-regional, and national scales, including:

- a. Communication to the full range of stakeholders is most effective if it is planned from the initial stage of the assessment, and is undertaken throughout the process.
- b. Meaningfully engaging policy makers at the outset of the assessment improves its impact. This engagement allows policy makers to articulate the questions they need addressed and provide guidance on how they would prefer to receive the information.
- c. Capacity is often built during the assessment process. Access and professional exposure to other experts to assist in learning new assessment methods and tools can contribute to the development of long term capacity within and across scales. Development of capacity can be further enhanced by making methods and tools available in different languages (see also Information Document on capacity building).

- d. Assessments are most effective when their conceptual framework has been jointly developed by all stakeholders, and provides a common understanding between both multidisciplinary scientists who will carry out the assessment, and other stakeholders.
- e. The selection of authors and review editors and the peer review process affects the transparency of the assessment and its scientific credibility. The development of clear roles and responsibilities of authors, including a conflict of interest policy is important.
- f. Multi- and transdisciplinary author teams and geographic and gender balance increases the integration of different types of information and communication between knowledge providers and assessors, which in turn increase the comprehensiveness of the assessment.

3. Current gaps within assessment processes

11. The Gap Analysis⁶ undertaken for the second ad hoc and multi-stakeholder meeting on IPBES in 2009 sets out a number of gaps in the science-policy interface, that could be addressed through the assessment function of IPBES. These might include:

- that as a result of the vast quantity and varying quality of differing, fragmented and sometimes even contradictory knowledge currently available, together with the lack of clear authoritative synthesis and a clear and targeted communication thereof, decisions taken are not necessarily informed by the best available knowledge;
- that knowledge is often not presented in the form of clear policy alternatives that systematically outline the implications of policy options under detailed framing assumptions and provide better guidance in policy implications;
- that there is far more focus on identifying issues and formulating policies with regard to multilateral environmental agreements at the global level than on supporting policy implementation and policy evaluation, particularly at the regional and sub-regional levels of governance, and on the extent to which effective information and advice pertains to and is used by the development community at the lower governance levels;
- that there is a need for more integrated quantitative models, scenarios and indicators that will aid understanding of not only biodiversity and ecosystem services, but also the relevance of biodiversity and ecosystem services to human well-being;
- that no regular periodic multi-level assessment process exists that provides the conceptual and institutional framework coherently to gather, review, synthesize, communicate and monitor information and track changes in biodiversity and ecosystem services and their consequences for human well-being at the global, regional and national levels and on the interrelation across these levels;
- that there are continuing difficulties in ensuring timely scientific advice on emerging issues of concern at and across all levels, whether in response to policymakers' requests or resulting from concerns arising from the scientific community.

4. Potential options for performing assessments under IPBES

Global and regional assessments

12. The Busan outcome identified that IPBES should perform regular and timely assessments of knowledge on biodiversity and ecosystem services and their interlinkages. It is widely recognized that regular and timely assessments are the most useful in many contexts compared to one-off assessments. Regular assessment enables a long term picture in trends and the effectiveness of policies to be assessed and communicated. The IPCC for example has become more valuable as it builds on previous assessments and has evolved as new knowledge, approaches and tools have become available in response to the findings and gaps of previous assessment cycles.

13. IPBES assessments could focus on the global and regional scale and as necessary at the subregional scale, although IPBES could also encourage and help catalyse national assessment processes, and in conducting regional and global assessments is likely to draw heavily on findings from national assessments.

14. The IPBES plenary may also request thematic assessments to be conducted by an assessment working group or task force. Examples of such assessments might include on bio-energy, food security and biodiversity, best practice

⁶ UNEP/IPBES/2/INF/1

restoration of ecosystem services, the value of dryland ecosystem services, or the scientific underpinning for the role of Protected Areas in meeting national development targets. New topics as identified by science and decided by the plenary may also be the subject of thematic assessments.

15. Possible options for carrying out global and regional assessments under IPBES include:
- a. Regional assessments are undertaken following a standard conceptual framework and method that is sufficiently robust and flexible to be used in a different regional and sub-regional contexts. A global assessment could begin after the regional assessments, allowing the global assessment to draw on regional datasets, assessment and knowledge and thereby producing a global synthesis.
 - b. A global assessment is undertaken in parallel to regional assessments. A synthesis report can be produced on selected topics/themes as agreed by the plenary that are addressed in both the global and regional assessment reports in parallel.
 - c. A combination of regional and thematic assessments (see below) can be undertaken with a synthesis of key findings at the global level.

Thematic assessments

16. Thematic assessments are likely to be an important part of the IPBES work programme. For example such an assessments may focus on an ecosystem of interest such as the economic value of ecosystem services in drylands, on an area of emerging policy concern, such as food security and wetland biodiversity, or on an area where there are significant gaps in knowledge, such as on the impact and cost of Invasive Alien Species.

17. Thematic assessments in the IPCC are treated in the same manner as emerging issues or 'new topics'. The IPCC has agreed on a framework to guide decisions on whether to produce a special report, technical paper or methodology report⁷. Based on that framework the IPCC may decide to prepare a special report or incorporate the material into the next comprehensive assessment report. Very often proposals for special reports come from governments, the UNFCCC or other international bodies. , and such requests are considered in a scoping meeting which then makes recommendations to the plenary (see also the Inf Doc on Knowledge Generation, where this process is explained in further detail).

18. Potential options for carrying out thematic assessments under IPBES include:
- a. Thematic assessments are carried out on an ad hoc basis, according to criteria decided by the Plenary, and using a conceptual framework established for IPBES.
 - b. The Plenary decides on a set of thematic issues and assessments which are produced on a regular basis.
 - c. IPBES develops partnerships with current on-going assessment processes such as the Regular Process for Global Reporting and Assessment of the State of the Marine Environment (GRAME) , to provide a thematic assessment for example on biodiversity and ecosystem services in the marine environment.
 - d. A combination of the above approaches.

New Topics for assessment

19. The Busan outcome recognises that new topics identified by science and decided upon by the Plenary may be assessed. Such topics might be identified through tools such as horizon scanning or a foresight process. These tools and their outputs have also been used by a number of national governments and scientific processes. For example, on the global scale, UNEP have initiated a Foresight Process, which every two years will produce a listing of the most important emerging issues in relation to the global environment from the perspective of the a specially convened science foresight group.

20. It is envisaged that assessment of new topics would be carried out on an ad hoc basis and therefore possible options for identifying new topics for assessment include:
- a. Establishing a specific process that reports to the IPBES Plenary regularly, such as a working group.
 - b. Establish a framework, where by suggestions on new topics for assessment are made to the Plenary for consideration.
 - c. Form a partnership with existing processes and invite them to submit a list of potential new topics for discussion by the plenary.

(See also the Inf Document on Knowledge Generation for a fuller discussion on the identification of new issues for assessment.)

⁷ www.ipcc.ch/pdf/ipcc-principles/revd-decision-framework-for-special-reports.pdf

Datasets and accessibility

21. Datasets and the ability to access data, as well as being able to access peer reviewed literature are an important element of the assessment process. While assessments do draw on the peer reviewed literature, a number of them have also relied on datasets that have been drawn together at different scales and are available through a web-based data portal, such as the GEO, MA, and FRA. The scientific credibility of an assessment depends in part on the accessibility of data. Furthermore, the accessibility of the data lends itself to the transparency of the process by enabling individuals and organisations not involved in the assessment to review the underlying data. There are a myriad of relevant databases available to support assessment, in many different forms and with varying coverage and quality. Procedures will need to be developed or adopted by IPBES for their use..

22. Options for ensuring the availability and accessibility of datasets used in IPBES assessments will also be related to how IPBES will generate new knowledge. However options could include:

- a. IPBES to make datasets available and accessible through a web portal coupled with guidance for their use.
- b. IPBES to establish partnerships with organisations and networks already working on collating datasets, accessing data and improving accessibility.

Use of traditional and local knowledge

23. The inclusion of traditional and local knowledge into assessment processes allows assessments to draw on a wider knowledge base, and may result in stronger findings as a result. Inclusion of traditional knowledge may also provide a means by which indigenous and local communities derive a sense of ownership through engagement and contribution to the IPBES process.

24. Although there have been many discussions on the use of traditional and local knowledge in assessment initiatives, comprehensive guidelines on the use of traditional knowledge in scientific assessment have not yet been developed.

The assessment process – methods and approach

25. Consideration will need to be given to the process for assessment adopted or developed by IPBES. There are many lessons to be learned from related assessment initiatives, and many common characteristics of assessment, from which IPBES can draw.

Lessons from the Millennium Ecosystem Assessment global and sub-global assessment processes and methodologies have been compiled in the MA Methods Manual⁸, which may provide a basis for IPBES assessment methodologies. The Integrated Environmental Assessment Training Manual⁹ and other guidance might also be helpful in determining the most appropriate process and methodology for IPBES assessments.

Catalogue of relevant assessments

26. Through the Busan outcome (para 6c) it is envisaged that the new platform should maintain a catalogue of relevant assessments. Such a catalogue would assist in identifying the need for assessments at different scales. While IPBES will carry out its own global and regional assessments, there are a number of assessment process which IPBES can either catalyse (e.g. national assessments) or acknowledge and link to either formally or informally (e.g. FRA, and the Regular Process).

27. A range of initiatives already maintain catalogues of assessment, which could be used as the basis for this function of IPBES. These include for example, UNEP's PEARL initiative, the Assessment of Assessments (GRAMÉ database) and the sub-global assessment network following up to the MA. UNEP Live, which is currently being developed to provide easy access to assessment reports and their content may also be able to contribute

28. The GRAMÉ database for example is freely accessible online, with no registration required and was developed as part of the AoA process. Records can be searched by a number of different variables including region, scale, country, whether they have been reviewed by a member of the Expert group, classification (e.g. broad assessment, narrow assessment) and key words. More advanced search options are available and include the ability to search for repeated assessments, use of a conceptual framework, use of indicators and if socio-economic data is available.

⁸ Ash *et al.* (2010) *Ecosystems and Human Well-Being – A Manual for Assessment Practitioners*, available at www.unep-wcmc.org/medialibrary/2010/10/31/90af3045/EcosystemsHumanWellbeing.pdf

⁹ www.unep.org/ieacp

29. Possible options for developing a catalogue of assessments include:
- a. Developing and maintaining a catalogue for the specific use of IPBES;
 - b. Review on-going initiatives and establish relevant partnerships which meet the needs of IPBES for access to ongoing and completed assessments and their findings ;

Enabling conditions

30. A range of factors are important in ensuring a successful assessment, regardless of scale. The following enabling conditions have been identified from other assessment processes, which when taken into account in IPBES would help ensure that IPBES assessments strengthen the science-policy interface on biodiversity and ecosystem services to the greatest degree possible:

- a. **Authorising environment and legitimacy of assessments.** It is recognised that a particular strength of the IPCC process is the authorising environment provided by an intergovernmental process coupled with clear and transparent procedures and a clear target audience. Other assessments with lesser authorising environments have struggled to gain the same level of legitimacy with decision-makers. It is anticipated that IPBES would derive legitimacy from the IPBES Plenary, and through responding to the needs identified by governments, including the needs of the relevant MEAs. Legitimacy with other stakeholder groups in civil society, such as with NGOs and the business community will depend on the manner and process by which they are engaged in IPBES.
- b. **Policy impact and relevance.** It is essential that IPBES assessments respond to policy needs, whilst maintaining scientific independence. Ensuring that IPBES maintains its scientific independence for assessments and at the same time is policy relevant is not just dependent of the design of the assessment process but also on the IPBES governance structure and rules of procedure. The policy impact and scientific independence will be determined by issues such as the formulation and agreement of the questions that the IPBES assessment process will address, how the policy makers and scientists engage in the process, and how the assessment is endorsed by the IPBES plenary.
- c. **Conceptual framework (and harmonisation of methods).** The social and scientific process of creating the conceptual framework for an assessment is important to ensure the support and ownership of different stakeholders, and for clear communications of the assessment to target audiences. A conceptual framework that is usable at different scales and in different contexts has proven to be an important element in moving from the global to the regional to the national, as highlighted by the MA sub-global assessments. However, the conceptual framework and methods need to have enough consistent elements to allow for data, knowledge and concepts to flow between scales – for example for the regional scale assessments to be able to inform global scale assessments. To ensure internal consistency of the IPBES assessment process across different scales, IPBES will need to adopt or develop its own conceptual framework and process for assessment. Should IPBES wish to develop its own conceptual framework, this could be achieved through a scoping phase or by a multistakeholder expert group , which might propose a conceptual framework back to the IPBES Plenary for approval.
- d. **Accessibility and availability of data and indicators.** As highlighted above, and further discussed in the Knowledge Generation Information Document, access to data and indicators and in particular methods for developing indicators at the appropriate scale are essential to be able to carry out assessments. Principles of data management and the rights and responsibility of data providers within an assessment are cornerstones of many of the current global assessments. Such current practices should be reviewed and potentially adopted by IPBES, including those being implemented by GEO BON. There are also a large number of indicator initiatives such as the Biodiversity Indicator Partnership (linked to the CBD’s Aichi Targets), Ramsar Indicators and the Commission of Sustainable Development Indicator Framework¹⁰. A standard set of scalable indicators may allow for elements of different regional assessments to be synthesised together.
- e. **Outreach and communication.** Outreach and communication are essential parts of an assessment and are often overlooked during the planning of an assessment. Outreach and communication needs should be addressed and built in from the beginning of the design of the work programme and maintained through the life of the assessment cycle. Lessons can be learnt from TEEB, which successfully communicated messages throughout the assessment cycle and the Assessment of Assessments, which identified best practices on communications for marine assessments. IPBES will need to engage dedicated capacity to ensure strong outreach and communications efforts for its assessment and other functions.

¹⁰ UNEP/IPBES/3/INF2

- f. **Support of the scientific community.** The support and involvement of a broad range of members of the scientific community, across disciplines will contribute to the scientific credibility of assessments carried out under IPBES (see also the Knowledge Generation Inf Doc).

31. Stakeholder involvement is often central to creating the appropriate enabling environment to undertake an assessment. The core principles of successful assessments (relevance, credibility and legitimacy) are best achieved through strategic and effective participation of all relevant stakeholders in the assessment process. Having different stakeholders involved in an interactive process can promote knowledge and information exchange and allows for different groups express their positions and interests on issues. Furthermore the involvement of multiple stakeholders can enrich the process, with individuals and organisations working to a common goal, with ownership contributing to the authorisation environment. Stakeholder involvement in assessment can take the following forms¹¹:

- Being consulted on the needs for an assessment;
- Being consulted on key questions framing the assessment;
- Receiving information about assessment progress, findings, and opportunities to participate;
- Contributing knowledge to the assessment report;
- Contributing contextual information about an ecological or social system;
- Being consulted on the condition and trends of ecosystem services and human well-being in a region (practitioners and holders of local knowledge);
- Attending public hearing about assessment processes and findings;
- Attending education or capacity building workshops on assessment processes and findings;
- Participating in the assessment process as student interns or fellows of the assessment;
- Participating in the assessment governance
- Being a formal end user of the assessment products;
- Participating in the peer review of the assessment; and
- Acting as a partner for the dissemination of assessment findings.

32. Stakeholder involvement may involve some or all of the options outlined above, and the scale at which the assessment is taking place may influence the most appropriate involvement of stakeholders. Many of the assessment process outlined in Annex 1 have engaged stakeholders at different levels, for example IAASTD, which included stakeholders (e.g. Private sector and NGOs) at the Bureau level, and SAfMA which carried out very extensive stakeholder involvement at the local level. However, there are risks involved with including a wide-range of stakeholders, which may include lobby groups and therefore stakeholder involvement should be clearly planned in order not to jeopardise the independence of the assessment. A conflict of interest policy is likely to be an important element of the IPBES assessment procedures.

5. Relationship with other IPBES work programmes

33. The IPBES work programme on assessments will be dependent on and contribute to the other work programme areas outlined in the Busan Outcome: knowledge generation, policy support and capacity building. Capacity building has formed an important part of nearly every assessment process, either directly (e.g. fellowships and dedicated workshops) or indirectly (e.g. by taking part or engaging in the assessment process). Assessments under IPBES will be dependent on the knowledge generation work programme area, and will themselves serve to identify gaps in policy-relevant knowledge for which the generation of new knowledge is required.

Finally, assessments are themselves tools for supporting policy formulation and implementation, and can be a useful means for assessing other such tools.

6. Next steps

34. This paper provides some initial issues to be considered and options for delivering the assessment function of IPBES. Key issues which IPBES will need to consider before an assessment is initiated include:

- a. Determining the scope of the assessment, potentially through a scoping exercise undertaken by an expert working group to be established by the IPBES Plenary.
- b. The development of a conceptual framework and methodology for use at regional and global scales.
- c. Developing criteria for the prioritization of assessments, including regional and thematic assessments, and how new topics will be addressed.
- d. Development of a process for the selection of authors to ensure geographic and gender balance and appropriate multi-disciplinary expertise.

¹¹ MA Methods Manual

- e. Development of a transparent process for the handling of the peer review process.
- f. Development of a process to ensure linkages with other existing assessment processes to ensure complementarity and avoid duplication.
- g. Development of criteria for the selection of stakeholders, including their roles and responsibilities, ensuring independence of the assessment process.

Annex 1: Analysis of different assessment processes at different scales.

This is not a comprehensive list but rather an indicative set of assessments that illustrate options for addressing different aspects of the assessment process.

Nature and Character	Assessment											
	IPCC	MA	GEO	IAASTD	FRA	State of the World's Plant Genetic Resources for Food and Agriculture	Assessment of Assessments (of the Marine Environment)	Human Development Report (HDR)	TEEB	SafMA	CARSEA	UK NEA
Global element	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	No
Regional element	Regional chapters in the report from Working Group II	34 Sub-global assessments where conducted as part of the MA process at different scales	The technical report contains regional chapters, however the GEO process is used to undertake many regional, sub-regional, national and sub-national assessments	5 sub-global assessments	Based on national reports, enabling extraction of relevant information at the national level	Based on submissions from member governments	Includes relatively smaller assessments at the regional scale	Regional and national report produced	but many of the examples used are national (e.g. payment of ecosystem services in Costa Rica) or local (e.g. economic benefits of the Panama Canal)	A regional assessment covering Southern Africa and assessments of the Zambezi basin, the Gorongosa-Marromeu region of the Solfala province, Mozambique and the Gariep basin	A regional assessment for the Caribbean Sea ecological region, with a focus on fishing and tourism as two services the region is dependent on.	No
Nested Assessment of different scales	No	Some	No	Appear to be but not clear how much information informed the global process.	Not specifically but the national data contributes directly to the global picture	No specifically but the national data contributes directly to the global picture	Yes	The global report is developed from regional and national data	No	Yes, Regional to local scale	No	Synthesis for each of the 4 devolved countries
Thematic issues assessed	Yes, eg Managing the Risks of Extreme Events.	Synthesis reports were prepared for specific audiences	No	Thematic on agriculture but it recognised the multifunctionality of agricultural systems.	Thematic on forest resources, and thematic studies eg bamboo, and mangroves	Could be viewed as thematic as its focus is on genetic resources	No	No	No	No	Fishing and tourism	No
New Topics assessed	Yes, for example Ocean Acidification	No	Highlights emerging issues during the assessment process	No	No	No	No	No	No	No	No	No
Datasets and accessibility	Data is obtained	Data was available in a	Data access is based	The data came from FAO,	The data comes	Derived principally	Comes from contributing	Data is derived from UN	Comes from case studies	Data from the	Not known	Data came from the

Nature and Character	Assessment											
	IPCC	MA	GEO	IAASTD	FRA	State of the World's Plant Genetic Resources for Food and Agriculture	Assessment of Assessments (of the Marine Environment)	Human Development Report (HDR)	TEEB	SafMA	CARSEA	UK NEA
	from peer reviewed literature, Governments and scientific institutions	central intranet for authors to access though the data primarily came from the peer-reviewed literature.	around a cooperation of data providers. The process underpinned by an interactive online open access data system – the GEO data.	CGIR, Governmental and scientific knowledge (from academic and private sectors). FAO data is available via their website.	directly from countries and can vary in quality depending on the national investments made in forest management, monitoring and data collection.	from country reports	partners many of whom are collecting primary data. A database of relevant assessments was also developed as part of the process and freely available online.	statistics for countries and is available for download from the web, for the different statistics used	around the world, mostly from peer reviewed literature. A database of studies including some from the grey literature is available.	institutions involved and the peer reviewed literature. Also used participatory methods of data collection and analysis, through interviews.		peer reviewed literature, government datasets and reports and newly generated information for the values.
Use of traditional knowledge	No	Not explicitly	Has issued guidance on its inclusion for GEO 5.	Additional information from traditional knowledge.	No	No	No	No	No	Informal sources and information used.	No?	No
Assess status and trends	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Use of Scenarios	Yes	Yes	Yes	Drew on scenarios from other processes	No	No	No	No	No	Yes	Yes	Yes
Explores Response Options	Yes	Yes	Yes	Yes	No	No	No	No	Yes	Yes – including trade-offs	Yes – led to UN resolution for the Caribbean.	Yes
Outreach and communication – to support decision-makers	Presentations, occasional events, distribute copies of reports and access to graphics upon request.	Some elements under the MA follow-up process	GEO report launches and dissemination in hard copy and online.	Outreach and communication limited to presentation and dissemination of the reports	Presentations, distribute reports and support to National Forest Monitoring and Assessments with information.	A set of information resources available online, including international sharing mechanism to assist in the implementation of the action plan developed.	Identified best practices for communication that will be taken forward by the Regular Process	A media package is available to download from the web. Also a web-based tool – Public Data Explorer to allow the public to explore the data through visualisation	Phase 3 will focus on communication of the key findings of Phase 2. Communication of the findings begun before the final report was issued.	Not clear	Yes, through the Cropper Foundation	Planned for the second phase
Capacity building	Develops tools, standards &	Under the MA and follow-up: development	Development of tools, standards &	During IAASTD capacity development was	Capacity building surveys have	Is a similar model to FRA and focuses on	Through the AoA, it is anticipated that	Internships for young professionals	Recognises the importance of capacity	Capacity of young professionals	Capacity of young professional	Capacity of people built

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	methods; provides technical support, and runs a fellowship programme. Anticipated that there will be training and workshops organised, more formal networks established and costs for attending meetings will be met.	of tools, standards & methods; organising training and workshops; technical support provided, network for the SGA created, engaging stakeholders, a fellowship programme and the costs to attend meetings met.	methods; organising training and workshops; technical support provided, network of GEO collaborating centres, engaging stakeholders, a fellowship programme and the costs to attend meetings met.	limited to technical support, engaging a broad range of stakeholders and assistance in the cost to attend meetings by participants.	been carried out with each assessment cycle, which in turn has improved the quality of the data obtained from country reports. FRA has used standards tools and methods, training workshops, networks and technical support.	building capacity at the national level to improve the quality of data obtained from country reports. FRA has used standards tools and methods, training workshops, networks and technical support.	the Regular Process will develop a set of tools, standards and methods, organise training and workshops, provide technical support and engage a range of stakeholders.	are available with the Secretariat	building in TEEB for National and International Policy Makers for countries to be able to undertake their own national assessments.	was built during the SafMA, through their physical involvement in the assessment. SafMA also developed a short training course and have carried out training in other parts of Africa to pass on their experiences.	Is was built during the assessment through their physical involvement.	through taking part in the assessment process. Decision-makers capacity built by taking part in the User Group and stakeholder meetings
Secretariat function, including Technical Support Units	A Central Secretariat in Geneva at WMO and coordinates the IPCC work and liaises with governments. Four TSUs are hosted by different countries. Each TSU supports a different working group.	Secretariat distributed across six institutions providing core admin, logistical, communication and technical support to the working groups. Four TSUs established to support the 4 working groups.	The Global Secretariat is based at UNEP in Nairobi. Regional Secretariat is based in the UNEP Regional Offices, and are supported by GEO Collaborating Centres in their regions.	A distributed Secretariat hosted in UNEP, the World Bank, FAO and UNESCO to oversee the assessment.	Based at FAO and overseeing the assessment process	Based at FAO and overseeing the assessment process	Secretariat at UNEP and IOC-UNESCO overseeing the assessment. Support provided from UNEP-WCMC and UNEP-GRID	Secretariat based at UNDP, consisting of five units: Operations, Research Team, Statistics Unit, Communication and Publishing Unit, and the National Human Development Reports (NHDR) Unit	Secretariat based in Bonn. Coordinators for each of the working groups located in different institutions around the globe	One institution coordinating the assessment. Different institutions taking responsibility for different assessments within the larger assessment.	Based at the Cropper Foundation and the University of the West Indies.	Based at UNEP-WCMC.