

Jürgen Nauber and Axel Paulsch (Eds.)
**International Workshop on diverse
Knowledge Systems in IPBES**



International Workshop on diverse Knowledge Systems in IPBES

**Gustav-Stresemann-Institute Bonn, Germany
January 18th - 20th, 2015**

**organized by
German Federal Agency for Nature Conservation (BfN)
in cooperation with the
Institute for Biodiversity Network e.V. (ibn)**

Editors

**Jürgen Nauber
Axel Paulsch**

F. Daguitan, V. Figueroa, C. Goerg, P. Hardison, K. Heubach,
S. Lehmann, H. Magata, P. Malmer, O. Masardule, S. Mitambo,
D. Pacheco, C. Paulsch, U. Payyappallimana, E. Perez, J. Rubis,
M. Tengoe, P. Trakansuphakon, H. Wittmer



Cover picture: Skink in Mexico (C. Paulsch)

Editors' addresses:

Dr. Axel Paulsch Institut für Biodiversität – Netzwerk e.V.
Nussbergerstr. 6a
93059 Regensburg
E-Mail: paulsch@biodiv.de

Jürgen Nauber Federal Agency for Nature Conservation, Division I 2.4 "MAB Secretariate,
Cooperation with Central- and Eastern European States, IPBES"
E-Mail: juergen.nauber@bfn.de

The workshop is part of a project which is funded and supported by the German Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety (BMUB).

This publication is included in the literature database "DNL-online" (www.dnl-online.de)

BfN-Skripten are not available in book trade. A pdf version can be downloaded from the internet at: http://www.bfn.de/0502_skripten.html.

Publisher: Bundesamt für Naturschutz (BfN)
Federal Agency for Nature Conservation
Konstantinstraße 110
53179 Bonn, Germany
URL: <http://www.bfn.de>

The publisher takes no guarantee for correctness, details and completeness of statements and views in this report as well as no guarantee for respecting private rights of third parties. Views expressed in this publication are those of the authors and do not necessarily represent those of the publisher.

This work with all its parts is protected by copyright. Any use beyond the strict limits of the copyright law without the consent of the publisher is inadmissible and punishable.

Reprint, as well as in extracts, only with permission of Federal Agency for Nature Conservation.

Printed by the printing office of the Federal Ministry for Environment, Nature Conservation, Building and Nuclear Safety

Printed on 100% recycled paper.

ISBN 978-3-89624-150-4

Bonn, Germany 2015

Contents

- 1 Introduction 4
- 2 Background 5
- 3 Results 9
 - 3.1 Conclusions..... 9
 - 3.1.1 Full participation of ILK holders from IPLCs 9
 - 3.1.2 Participatory Mechanism10
 - 3.1.3 IPLC networks.....11
 - 3.1.4 Strengthening capacity building12
 - 3.1.5 Pilot processes13
- 4 Abstracts of presentations.....16
 - 4.1 Results of the task force on indigenous and local knowledge16
 - 4.2 Results of the expert group on deliverable 3d18
 - 4.3 Progress of the concept of the Multiple Evidence Base Approach19
 - 4.4 WWF’s Experiences with Indigenous and Local Knowledge Systems for the Conservation and Sustainable Use of Biodiversity and Ecosystem Services21
- 5 List of participants26

1 Introduction

The aim of the workshop was to give the opportunity to discuss how indigenous peoples and local communities can contribute to and benefit from the work undertaken by the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES). The workshop was held back to back with the third Plenary of IPBES (IPBES 3, Bonn, January 12th to 17th, 2015) in order to directly reflect on the decisions taken at the plenary and the progress of work presented during the IPBES 3 negotiations.

In its multi-stakeholder meeting in Panama 2012 and the first plenary in 2013 IPBES had decided that different forms of knowledge, including indigenous and local knowledge should be recognized and respected in the work of IPBES, e.g. in assessments. At the same time capacity building was established as one of the four main functions of IPBES, including capacity building for indigenous and local communities.

In the second plenary (IPBES 2, December 2013) IPBES agreed to form a task force and an expert group to develop 'Procedures, approaches and participatory processes for working with indigenous and local knowledge systems' and to develop 'Policy support tools and methodologies regarding the diverse conceptualization of values and nature's benefits to people including ecosystem services'. Another task force had collected and prioritized capacity building needs. All these groups presented their interim results for further discussion at IPBES 3 and decisions were taken on how to proceed with this work. This formed the starting point for the discussions during the current workshop.

The participants had been invited in their personal capacity as experts and did not represent any organizations or governments. Their contributions are their personal opinions as experts and do not necessarily reflect the views of their institutions or the Federal Agency for Nature Conservation.

The workshop was held at Gustav-Stresemann-Institute, Bonn, Germany, from January 18.-20. 2015.

This report puts together the results of the discussions and group work performed during the workshop and adds the abstracts of the introductory presentations. The participants agreed to formulate the results in a concise format: conclusions and main ideas were put as statements or theses, each of which is supported by an explanation or rationale and then the consequences / actions for the IPBES process are outlined.

The current workshop was part of a series of workshops on the issue of indigenous and local knowledge by the German Federal Agency for Nature Conservation (BfN) through the Institute for Biodiversity Network (ibn). The first workshop was held on Vilm Island (Germany) in April 2013 under the title 'Connecting diverse knowledge systems in the context of IPBES'. The results of the Vilm workshop went into the official IPBES expert workshop (by UNESCO at the UNU in Tokyo in June 2013) 'The Contribution of indigenous and local knowledge systems to IPBES: building synergies with science'. The second workshop of the series was held in cooperation with the Indigenous Peoples' International Centre for Policy Research and Education, TEBTEBBA, in Mandaluyong City, Philippines, in August 2014 under the title 'Indigenous valuation of biodiversity and ecosystem services compared to other ways of valuation in the context of IPBES'. In this workshop as well as in the current one member of different IPBES fora took part (including MEP, task forces and expert groups in both workshops as well as from the UNESCO technical support unit in

the current workshop). This participation provided a direct link to bring the workshop results to the attention of the fora dealing with the matter.

The results of the workshop are made freely accessible and are forwarded to the respective task force and expert group.

2 Background

After founding in April 2012 the Intergovernmental Platform on Biodiversity and Ecosystem Services (IPBES) held three plenary sessions. Whereas in the first session (IPBES 1, January 2013 in Bonn, Germany) the internal structure of IPBES had to be organized, the second plenary meeting (IPBES 2, December 2013 in Antalya, Turkey) took IPBES a major step forward in adopting a work programme for 2014-2018. This work programme foresees a set of deliverables to be produced and established expert groups or task forces to help develop these deliverables. In the work programme two of the planned deliverables explicitly deal with indigenous and local knowledge or diverse conceptualizations, respectively:

a) Deliverable 1c is meant to develop 'Procedures, approaches and participatory processes for working with indigenous and local knowledge systems'. A task force was established in 2014.

b) Deliverable 3d wants to develop 'Policy support tools and methodologies regarding the diverse conceptualization of values and nature's benefits to people including ecosystem services based on an assessment and a guide'. An international expert group for this task was established in 2014.

At the third plenary (IPBES 3, January 2015, Bonn, Germany) the first results of the work of these groups were presented and discussed.

The task force for deliverable 1c presented its work through document IPBES/3/INF/2. One building block of this deliverable will be a roster of experts on indigenous and local knowledge and the task force outlined the parameters, process and criteria for the selection of members for such a roster. IPBES 3 decided to 'Note the progress made in the establishment of a roster of experts' and the Secretariat will issue a call for nominations to first build up a pilot roster which then can be filled with more experts. The task forces members also mentioned that for the future the establishment of a network of experts would be very useful (meant as a managed forum for exchange and discussion compared to a roster in the sense of a mere list of experts). In the same information document the task force proposed a participatory mechanism (PM) for working with indigenous and local knowledge systems (ILK). The task force mentioned the following needs to ensure the effective inclusion of ILK into the four IPBES functions and strengthen the participation of indigenous peoples and local communities in the institutional arrangements of the IPBES:

- Facilitate transdisciplinarity and mutual understanding between different knowledge systems by promoting interactions among indigenous peoples, local communities and scientists. Enhance the communication of information from the local to other scales, acknowledging the different ways that knowledge is transmitted within ILK systems.
- Strengthen understanding of other knowledge systems, including the diverse contexts and worldviews in which these knowledge systems may be anchored, and develop

appropriate means of knowledge collection and sharing.

- Ensure the inclusion of indigenous and local knowledge systems by enhancing the participation of indigenous peoples and local communities within IPBES institutional arrangements and processes including through capacity building, benefit-sharing and in accordance with international guidelines including free, prior and informed consent and respect of intellectual property rights.
- Facilitate indigenous peoples' participation in the IPBES Platform and its institutional arrangements as a whole, including within different IPBES bodies and entities/ organizations or hubs currently contributing to the implementation of the work programme, and consider how to ensure the legitimacy of representatives of ILK systems.
- Consider benefits to indigenous peoples and local communities including the strengthening of their own knowledge systems through pilot projects and approaches and procedures that encourage compilation, consolidation and knowledge transmission, the development of ILK networks in regions that currently do not have these networks, a platform for shared learning and exchange among ILK systems, and enhanced understanding of the science-policy interface.
- Promote and respect contributions from a range of independent networks and hubs that act at different scales. The establishment of this polycentric and decentralized network would support a network of actors, including indigenous peoples and local communities at different scales and could encourage the development of national level hubs supported by governments or other entities promoting ILK systems at the national level.
- Provide a coordinating platform for the different hubs to enable them to participate in a global network platform and enabling them to communicate and share their knowledge related to endogenous and local issues among each other and at multiple scales including the national, regional, and global.
- Ensure a balanced contribution from diverse knowledge systems into IPBES deliverables, including respect for multiple worldviews such as living-well in balance and harmony with Mother Earth.

IPBES 3 also '*noted* the progress made' of this building block of deliverable 1c.

As a third outcome of its work the task forces presented interim approaches and procedures to build ILK into IPBES assessments and proposed how a stepwise procedure could look like. The eight steps proposed are:

- Global Call for submissions on ILK relevant to the assessment theme
- Identify relevant ILK holders and experts, as well as scientific and grey literature
- Work with selected ILK holders to prepare their inputs for the Global Dialogue Workshop
- Global Dialogue Workshop with ILK holders/experts and CLAs and LAs
- Follow-up the workshop with ILK Work Sessions in selected pilot sites
- ILK incorporated into the drafting of the Second-order Draft
- Feedback to ILK holders and communities
- Lessons learned on ILK approached and procedures.

Accordingly, IPBES 3 '*Decided* to continue piloting the preliminary guide on indigenous and

local knowledge approaches and procedures in the thematic assessments and in the four regional assessments (the Americas, Africa, Asia and the Pacific and Europe and Central Asia)'.

The expert group on deliverable 3d presented its progress in IPBES/3/INF/7 and the main part is a preliminary guide on the conceptualization of values of biodiversity and nature's benefits to people. This guide was discussed at IPBES 3 but some parties felt that it would need more work and refinement. Accordingly, IPBES 3 *'Approves*, until the fourth session of the Plenary, the continuation of the expert group established for the development of the preliminary guide on the conceptualization of values of biodiversity and nature's benefits to people, which, at the discretion of the Chair, following consultations with the Bureau, could be expanded to include a limited number of resource persons and representatives of strategic partners as resources permit' and *'Requests* the expert group to revise the preliminary guide following an open review by Governments and stakeholders, to revise the report on scoping for the methodological assessment regarding diverse conceptualization of multiple values of nature and its benefits, including biodiversity and ecosystem functions and services, based on comments received following an open review by Governments and stakeholders, for consideration by the Plenary at its fourth session, and to work in a mutually supportive way with the task force on indigenous and local knowledge systems and other expert groups and task forces established with regard to relevant deliverables, including ongoing assessments and the work on the catalogue of policy support tools and methodologies'. The guide was open for review until March 31st of 2015.

Another important agenda item of IPBES 3 was capacity building and the most urgent capacity building needs. Since its founding in April 2012 IPBES defined capacity building as one of its four functions.

'In terms of the resolution establishing the Platform (UNEP/IPBES.MI/2/9, annex I), its mandated functions shall include prioritizing key capacity-building needs to improve the science-policy interface at appropriate levels, and then providing and calling for financial and other support for the highest priority needs related directly to its activities, as decided by the Plenary.' (IPBES 3/3).

This capacity building function was also reflected in the first work programme of IPBES (2014 to 2018), as agreed upon at the second IPBES plenary meeting in December 2013. Particularly the deliverables 1(a) and 1(b) were dedicated to capacity building and a respective task force was established in 2014:

'In decision IPBES-2/5, the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services established a task force on capacity-building for the period 2014–2018. Terms of reference for the task force were set out in annex II to the decision. The primary purpose of the task force is the implementation of deliverables 1(a) and 1(b) of the programme of work for the period 2014–2018 in such a manner that they support that of the whole work programme. Deliverable 1 (a) relates to priority capacity-building needs to implement the Platform work programme matched with resources through catalysing financial and in-kind support, and deliverable 1 (b) to capacities needed to implement the Platform work programme developed;' (IPBES 3/3).

This task force started its work in 2014 and presented a first report of its outcomes for the third IPBES plenary in January 2015, as document IPBES 3/3. On the basis of this

document the plenary adopted a list of capacity building needs as expressed by member states and stakeholder organizations (IPBES/3/18, Dec. IPBES-3/1). These needs are categorized under five headings:

- 'Enhance the capacity to participate effectively in implementing the Platform work programme';
- 'Develop the capacity to carry out and use national and regional assessments';
- 'Develop the capacity to locate and mobilize financial and technical resources';
- 'Improve the capacity for access to data, information and knowledge';
- 'Develop the capacity for enhanced and meaningful multi-stakeholder engagement'.

Each of the five categories is subdivided into more specific needs which make obvious that capacity building for effective participation in IPBES processes and for making use of IPBES products is needed for state representatives as well as representatives of stakeholder organizations from different backgrounds, including from indigenous peoples and local communities.

Furthermore, IPBES 3 decided on several instruments to support capacity building, as proposed by the task force. These instruments include (as listed in the IPBES 3 outcome document IPBES/3/18):

- a programme on fellowship, exchange and training which should help to build capacity of young researchers and other professionals to take part in IPBES activities. The programme will include a mentoring scheme as well as training initiatives;
- a match-making facility as internet based instrument which should help to facilitate contact between those who have capacity building needs and potential providers of support to meet these needs, including financial support;
- a capacity building forum where capacity building needs should be packaged in a way to match with criteria or priorities of potential donors. The first forum is planned as a personal meeting to take place in the second half of 2015 according to the interest expressed after a respective call.

These instruments are in the planning or piloting phase and will be further discussed and elaborated by the task force until the fourth IPBES plenary in early 2016. Each of these instruments can be used to strengthen capacity building of members of indigenous peoples and local communities, as discussed in the current workshop.

3 Results

3.1 Conclusions

3.1.1 Full participation of ILK holders from IPLCs

Thesis:

In order to systematically ensure mechanisms for ILK contributions in the entirety of the IPBES process it is necessary to ensure full and effective participation of ILK experts from IPLCs both in the specific task force as well as in the ongoing and expected thematic and regional assessment processes, *inter alia*, and provide the necessary structures and resources.

Explanation / Rationale:

So far, participation of ILK experts from IPLCs in the IPBES process has been limited mainly to task forces. This is due to several reasons and obstacles that would have to be overcome, e.g. structural and individual constraints regarding time and financial resources to actively participate, timely information and facilitation with the nomination process, language barriers, academic standards and ways of communication that do not fit with the genuine ILK holders, etc..

Making ILK visible and relevant at regional and global levels in IPBES, and in other fora, will enhance the recognition of ILK and support for ILK holders, and their governance systems and expertise in management of biodiversity and ecosystem services. This will in turn facilitate design of efficient policy tools.

Consequences / Actions for

IPBES: For IPLCs /support

projects:

- Facilitate timely information on calls for nomination and open review processes* through existing IPLC networks (including setting up appropriate communication channels);

- Strategically identify governments (and stakeholder organizations) supportive of nominating ILK experts from IPLCs through their national nomination lists, e.g. Germany, Bolivia, Sweden, Norway, Colombia, India, the Philippines, among others, and initiate dialogues towards a process by which they would be comfortable nominating experts from IPLCs;

- Strategically identify candidates for nominations, and support their interactions with the wider networks (e.g. identifying resource persons to assist with reading of IPBES texts);

- Liaise with the IPBES stakeholder network, and support them in their ambition, so enabling the participation of a diversity of actors including ILK and rights holders;

For IPBES:

- Identify additional financial resources and request member states to pledge for the trust fund;

- Identify ongoing projects in North South cooperation that can allocate financial support for ILK experts from IPLCs and facilitate partner networks among ILK experts from

IPLCs to contribute to IPBES, if they so wish, through their ongoing collaboration; Ensure and enhance capacity-building of experts in all IPBES functions to actively encourage, facilitate and welcome contributions from ILK experts from IPLCs and their participation in all IPBES functions;

*Upcoming options:

Reviews:

Valuation guideline

Open review of pollination assessment (01 Jan 2015 - Mar 2015)

2nd review of policy support tools (11 May – 5 Jul 2015)

Nominations:

Regional assessments

Assessment on land degradation

Additional members expert group valuation

Assessment on sustainable use

Scoping on invasive alien species

3.1.2 Participatory Mechanism

Thesis:

A broader and inclusive participatory mechanism, based in IPLCs context and experiences, is needed. Such a mechanism should build on and expand existing piloting of preliminary approaches and procedures for taking ILK into assessments through networks, activities, and work among IPLCs.

Explanation / Rationale:

To further enhance the quality and relevance of the contributions of IPLCs, and to secure that their contributions also lead to benefits for local communities, a mechanism for IPLC participation and contributions that is based on self-identification is proposed. **Self-identification** will refer not only to *who* will contribute, but also *what* can be contributed. It will encourage knowledge contributions that are mobilized by knowledge holders themselves, and open to different forms of knowledge, holistic approaches, local classification etc. (This can be carried out mainly within the framework of the current budget and additional in kind and financial support from ongoing projects/or support from other IPBES stakeholders, if needed).

Consequences / Actions for

IPBES: For IPLCs/support

projects:

Encourage, strengthen and support that the current ILK is passed from generation to generation; For IPBES:

Collaborate with IPLC organizations to formulate calls for self-identification of contributions to IPBES;

Identify umbrella organizations at regional level (such as Tebtebba, or Africa

Biodiversity Network) that can co-convene, or help organize dialogue workshops;
Build capacity to store, share, and process submitted information that fully recognizes and respects the rights of knowledge holders;

3.1.3 IPLC networks

Thesis:

In order to ensure systematically implemented mechanisms for ILK contributions, members of expert groups and task forces need to build upon and join forces with existing networks of IPLCs.

Explanation / Rationale:

There are already numerous well-organized networks of IPLCs and in place which ILK holders participating in the IPBES process, the IPBES ILK Participatory Mechanism and the Stakeholder Network could easily build upon or link up with. However, it remains essential to set up an efficient system to, amongst others, communicate knowledge needs, identify relevant ILK experts from IPLCs, document relevant cases, translate information, etc. and ensure that participation builds on and reflects reciprocity and mutual gains. Bearing in mind that getting involved into IPBES in general equals to additional work, which is challenging for individual knowledge holders time and financial resources, it is crucial to ensure that the diversity of ILK holders and the outcome of their collective action of biodiversity management and governance is appropriately reflected in IPBES assessment.

Consequences / Actions for

IPBES: For IPLCs/support

projects:

- Ensure mutual exchange of knowledge and information between communities holding ILK and members of IPBES groups;

- Set up appropriate communication channels to ensure communication, identification and translation needs as identified above;

- Organize workshops with representatives of existing networks to discuss specific topics, including across knowledge systems, and in particular the diversity of ILK holders of knowledge, and synthesize knowledge;

- Link to existing networks and strategic partnerships and processes, e.g. Community-Based Monitoring and Information Systems (CBMIS) network, including the CBD process of finding ways of engage in bottom up approaches to the monitoring of Aichi targets;

- Contribute to the envisaged ILK Participatory Mechanism;

For IPBES:

- Assist in setting up communication channels;

- Make sure ILK can be appropriately recognized in assessments (especially if not published already and given there is usually no individual authorship);

- Actively enable linkages between ILK holder processes to the IPBES stakeholder

engagement process ('inclusive open-ended network' as set out in the stakeholder engagement strategy adopted at IPBES-3); Establish the envisaged ILK Participatory Mechanism;
Encourage and support the development of ILK Centers of Excellence; initiated and under control of indigenous peoples and local communities and their organizations;

3.1.4 Strengthening capacity building

Thesis:

In order to ensure the effective participation of IPLCs in all IPBES functions it is crucial that the respective capacity of IPLCs is strengthened accordingly.

Explanation / Rationale:

Stakeholders can only effectively participate if there is adequate and appropriate understanding of IPBES objectives, principles, procedures, and deliverables, and how it relates to their own reality and needs, and if they are aware of the opportunities for engagement.

Consequences / Actions for IPBES:

For IPLCs/and IPLC supporting projects:

The International Indigenous Forum on Biodiversity and Ecosystem Services (IIFBES) and other regional / national networks of IPLCs could:

establish a working group on capacity-building with the objective to organize an strategic approach for the participation of IPLCs in the capacity-building activities of IPBES;

develop a joint proposal for supporting capacity-building for IPLCs that are not supported by IPBES;

participate in the Capacity Building Forum (second half of 2015) organized by IPBES (and at first hand distribute information about the forum to the relevant IPLC networks);

Develop a proposal for presentation in the Capacity Building Forum regarding specific capacity building needs of IPLCs in the context of the development of the Participatory Mechanism and the ILK approaches and procedures;

For IPBES:

The Task Force on ILK could propose to the Task Force on Capacity Building:

- to give focus on young academic scientists or other fellowships for indigenous institutions in the Fellowship Programme;
- to include in the fellowship programme as a priority the participation of IPLCs;
- to organize a "Training Programme for effective participation of Indigenous Peoples in the Platform regional and global assessments and thematic assessments";
- to systematise and analyse capacity building experiences to apply learned lessons in future actions in all IPBES functions
- to organize an exchange programme on ILK;
- to support the participation of IPLCs in all capacity-building activities as crosscutting issue;

- to engage IPLCs in capacity building activities for scientists in strategic elements of IPBES functions, in support of how to implement the ILK approaches and procedures in practice in the assessments;
- to look into ways to support and strengthen networks such as the IIFBES;
- Furthermore, BES Net could be used as source for funding and other kind of support of the capacity building for IPLCs and the upcoming capacity building forum could be linked to the development of the Participatory Mechanism.

3.1.5 Pilot processes

The current decisions regarding ILK have brought up the opportunity to run 4 pilot processes on the preliminary approaches and procedures, the Participatory Mechanism and the Roster of Experts. The group discussed about the possibility to run, in parallel, a process to pilot a participatory mechanism with the support of other strategic partners that can also play a significant role in the development and execution of such a process. Workshop participants identified 3 main processes to discuss and integrate:

- To increase the IPLCs full and effective participation in all IPBES 4 functions;
- To overview the interactions of ILPCs with the piloting process already decided upon and to identify mechanisms that can foster the IPLCs full and effective participation;
- The Regional/Thematic Assessments;

These main processes should be supported by a combination of mechanisms that will ensure a full and effective IPLCs participation in all four IPBES functions and a long term engaging with ILK-holders (Figure 1):

- ILK experts from IPLCs participation in the piloting processes of Procedures and approaches (Des. IPBES/3/2 and IPBES/3/INF/2);
- IPLCs participation in to the Regional Assessments. Parallel to the capacity building the identification of ILK experts from IPLCs to actively participate in different IPBES structures could be ensured;
- Networks of networks are also important as part of the Participatory Mechanism to enhance the uptake of ILK from IPLCs into the current IPBES processes in a legitimate and constructive way for all parts involved;

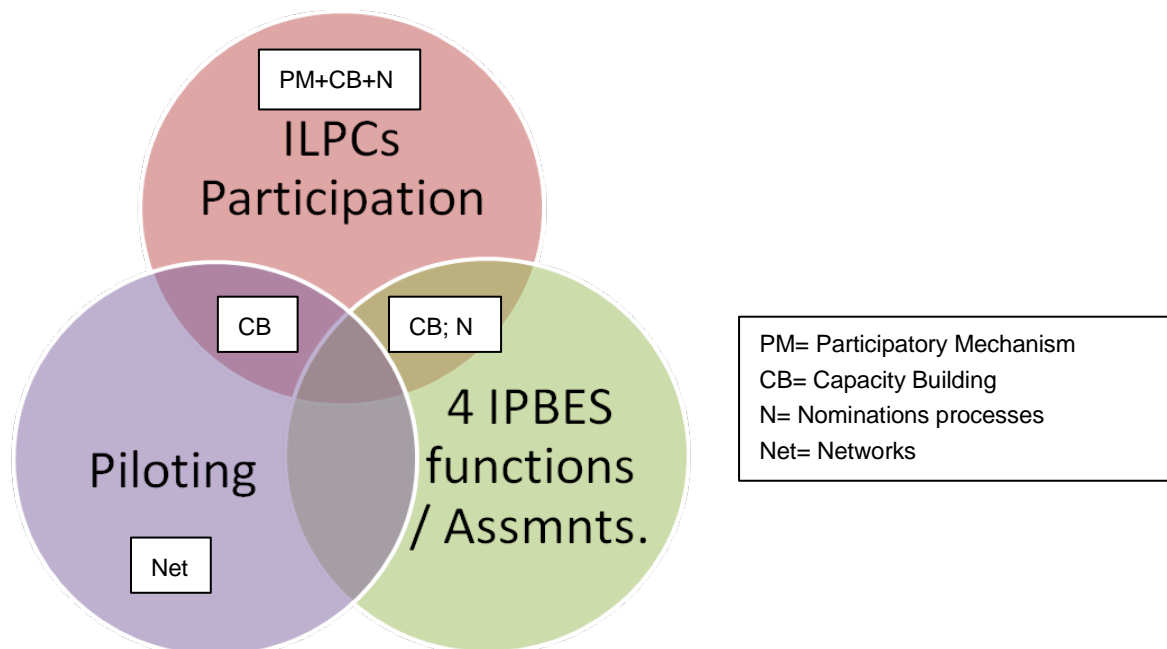


Figure 1. Main actions regarding ILK in 2015-2016 and the need of mechanisms to foster ILPCs full and effective participation in all IPBES functions

The proposed piloting of Approaches and Procedures (Table 1) can run in a parallel with our second proposed process, especially through self-identification of IPLC organizations and networks, universities, etc.; as a way to test a new tool in the participatory Mechanism. All the audience in networks can also be reached and encouraged to share their knowledge and to generate new knowledge from such an exchange.

As an outcome it is also important to find ways and means (arrangements) among the institutions represented at the current Bonn workshop and the further institutions (networks of networks) that could be able to participate in this parallel process to enrich IPLCs participation.

Table 1: Paralleling the processes

ASSESSMENTS	TENTATIVE TIMEFRAME	ILK PILOTING ADOPTED IN IPBES 3	SECOND CIRCLE / PARTICIPATORY MECHANISMPILOTING
<p><u>COORDINATION MEETING WITH CLAs/LAs:</u> LAND DEGRADATION AND RESTORATION</p> <p>1A. REGIONAL 2 REGIONS 1B. THEMATIC EXPERTS</p> <p><u>SCOPING:</u> 2A. REGIONAL IAS 2B. THEMATIC IAS</p>	APRIL 2015	ILK TASK FORCE CO-CHAIRS AND SELECTED TF-MEP MEMBERS/RESOURCE PERSONS) AT GLOBAL COORDINATION MEETING (5 PERSONS)	IDENTIFICATION OF PARTNERSHIPS TO START WITH THIS PILOTING PROCESS, COMMON UNDERSTANDING WITH THE PARTICIPANTS/SOCIAL ORGANIZATIONS INSTITUTIONS/NETWORKS IN THE BONN WORKSHOP AND THE TSU. COMMON BASIC AGREEMENTS AMONG ORGANIZATIONS/INSTITUTIONS WITH IN KIND, AND MONETARY SUPPORT (IF NEEDED).
	MARCH-MAY 2015	GLOBAL CALL FOR SUBMISSIONS ON ILK FOR ASSESSMENT ON LAND DEGRADATION AND RESTORATION	GLOBAL CALL: A CLEAR INVITATION TO DISSEMINATE INTO THE NETWORKS OF NETWORKS AND TO PARTNERS.
	MAY-JUNE 2015	SELECTION AND IDENTIFICATION OF ILK HOLDERS AND EXPERTS	SELF-IDENTIFICATION FROM THE AUDIENCES OF THE NETWORKS OF NETWORKS AND DELIVERY OF STARTING CONTRIBUTIONS TO THE COMMUNITY/ COMMUNITIES/ ORGANIZATIONS/ INSTITUTIONS/PERSONS/
<p><u>FIRST AUTHOR MEETING WITH CLAs/LAs:</u></p> <p>TWO REGIONAL /THEMATIC ASSESSMENTS: (LANDDEGRADATION)</p>	JULY TO SEPTEMBER 2015	PREPARATORY MEETING WITH ILK HOLDERS AND EXPERTS FROM 5 SELECTED ILK SITES PER REGION TO PREPARE AND COMPILE INPUTS	GATHERING AND ANALYSIS OF INFORMATION AND THE PROCESS OF COMMUNITY/SHARING KNOWLEDGE
	CA. SEPTEMBER-OCTOBER 2015	IALOGUE WORKSHOPS IN EACH REGION (RDW) - 1 DAY FOR PREPARATION OF ILK HOLDERS/RESEARCHERS 3 DAY WORKSHOP WITH 20 ILK HOLDERS/ RESEARCHERS,5 ILK TASK FORCE MEMBERS, 15 CLAs/LAs	
	OCTOBER-DECEMBER 2015	FOLLOW-UP WORK SESSIONS ON ILK AT 5 SELECTED PILOT SITES PER REGION TO FEED RELEVANT ILK DATA INTO THE FIRST ORDER DRAFT (FOD) ASSESSMENTS AND TO SUPPORT COMMENTS FROM EXTERNAL REVIEWERS OF ASSESSMENTS.	CONTINUING THE NETWORK'S COMMUNITY CO -PRODUCTION OF KNOWLEDGE, DIVE DEEPER IN SOME QUESTIONS/ COMMENTS / INTEREST FROM THE RDW TO BE DELIVERED TO THE FIRST ORDER DRAFT AND COMMENTS FROM EXTERNAL REVIEWERS.
	2016	<p>FIRST AUTHORS MEETING</p> <p>THE BENEFITS OR "GIVING BACK" TO IPLCs RECOGNITION OF ILK AND RESPECT RECOMMENDATIONS OF POLICY OPTIONS ACROSS ALL SCALES AMONG NETWORKS AND ILK NETWORKS INVOLVED IN THE PROCESS AT REGIONAL, NATIONAL AND SUB-NATIONAL LEVEL. SHARING OF KNOWLEDGE AT LOCAL AND SUB-NATIONAL LEVEL, ALL THE ILK CAN BE WRITTEN AND SHARED IN THEIR OWN LANGUAGES AND TO ENHANCE ILK TRADITIONAL WAY TO TEACH IT THROUGH GENERATIONS.</p>	

Abbreviations used in the table:

CLA: Coordinating Lead Author, LA: Lead author, TSU: Technical Support Unit, 1a, 1b, 2a, 2b: these numbers refer to the deliverables of the IPBES work programme 2014-2018.

4 Abstracts of presentations

4.1 Results of the task force on indigenous and local knowledge

Based on a presentation by Edgar Perez, member of the task force

Edgar Perez from Guatemala is member of the task force on working with indigenous and local knowledge and presented results of the work of this task force. After emphasizing the importance of ILK through quotations of several recent publications Edgar listed the proposed procedures and approaches to work with indigenous and local knowledge systems as follows:

- Peoples and place first: mediated by culture, age, gender, governance; adaptive responses, spirituality
- Mutual goals, benefits and benefit shared
- ILK and biocultural diversity
- Recognizing and supporting rights and interest
- Establishing mutual trust and respect and an equitable intercultural space for dialogue
- FPIC - IP
- Reciprocity and giving back
- Storage of and access to information
- Utilizing formal and informal agreements and statements.

The participatory mechanism proposed by the task force was explained using three figures:

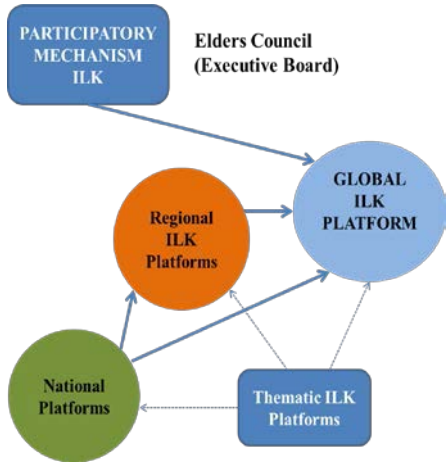


Figure 2: Participatory Mechanism Part 1

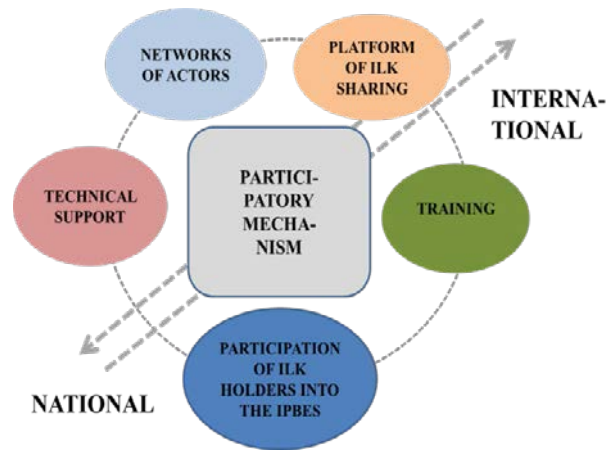


Figure 3: Participatory Mechanism Part 2

Functions of IPBES

Scales	Functions of Participatory Mechanism	Knowledge generation	Assessment of knowledge	Policy support	Institutional arrangements
NATIONAL INTERNATIONAL	1. Technical support	Compiling, recording and systematizing ILK	Checking ILK into assessments	Disseminating policy briefs about ILK	TG-ILK (interested regional and national entities taking the lead)
	2. Information sharing	Communicating ILK	Comparing information across regions	Strengthening incorporation of ILK in policy decision making	Global Platform of ILK (Nodes at different levels and polycentric)
	3. Networking of actors	Articulating current ILK networks	Creating synergies through and across networks	Articulating networks to policy decision making	
	4. Training	Use of techniques and methods	Learning from ILK	Decolonizing	Programme of training in ILK
	5. Qualify participation of ILK holders into the IPBES institutional arrangements.				
Capacity building					

Figure 4: ILK in the four functions of IPBES

With respect to the roster of experts, Edgar presented the following points to be considered by the Multidisciplinary Expert Panel (MEP):

- How will the roster be used? How will the roster be useful?
- By whom it will be accessed must be clarified in order to design a roster that is fit for its purpose.
- Budget and human resources to manage such a roster must be taken into account when planning its size and complexity.

- How do we account for differing expectations of what comprises 'expertise'?
- Need to ensure that the Roster offers some value to the experts enrolled in it.
- What sort of nomination and vetting process for experts should be decided upon?

Edgar Perez concluded his presentation with a tentative list of next steps in the work of the task force, aligned with the IPBES work programme as such.

4.2 Results of the expert group on deliverable 3d

Based on a presentation by Diego Pacheco, member of the expert group.

Diego Pacheco as member of the expert group on deliverable 3d presented how the preliminary guide on the conceptualization of values of biodiversity and nature's benefits to people could be structured:

Chapter 1 will elaborate on how values are conceptualized and inform about the approaches to and methods of valuation (wide range of diverse perspectives from different world views and knowledge systems).

Chapter 2 is mapping out the diversity of ontological, epistemological and ethical world views and the plurality of values and value systems.

Chapter 3 will review and assess the way values are formed and the drivers and dynamics of changes in values, including changes across spatial, temporal and social organizational scales.

Chapter 4 will review and assess a range of valuation approaches and methods associated with diverse intellectual traditions and knowledge systems (holistic and indigenous knowledge-based).

Chapter 5 will review and assess the diverse ways in which different valuation approaches and methods may be integrated and bridged, and will also assess the opportunities for and limits of such integration and bridging.

Chapter 6 will assess the applicability and relevance of different valuation approaches and methods at different levels and in different contexts, including by indigenous and local communities.

Chapter 7 will assess current capacity and identify capacity-building needs and, in collaboration with the Platform's task forces.

Diego also presented the experts group listing of the different approaches and perspectives on valuation related to nature, nature's benefits and good quality of life:

Focus of values	Types of values		Key targets of valuation
NATURE Intrinsic value	Non-anthropocentric		Individual organisms
			Biophysical assemblages
			Biophysical processes
			Biodiversity
NATURE'S BENEFITS TO PEOPLE		Instrumental	Biosphere's ability to enable human endeavour
			Nature's ability to supply benefits (basis of benefits)
			Nature's gifts, goods and services (actual services enjoyed)
GOOD QUALITY OF LIFE	Anthropocentric		Security and Livelihoods
			Sustainability and Resilience
			Diversity and Options
			Living well in harmony with nature and Mother Earth
Focus of values	Types of values		Key targets of valuation
		Relational	Health and Wellbeing
			Education and Knowledge
			Identity and Autonomy
			Good social relations
			Art and Cultural heritage
			Spirituality and Religions
			Governance and Justice

4.3 Progress of the concept of the Multiple Evidence Base Approach

Based on a presentation by Maria Tengö, Stockholm Resilience Centre

In her presentation Maria Tengö explained that there are three general approaches to exchange knowledge between systems:

Integration: Components of one knowledge system incorporated into another through a validation process;

Parallel approaches: Placing knowledge systems next to each other, using separate validation mechanisms and assessing insights;

Co-production of knowledge: Engaging in mutual processes of knowledge generation.

The Multiple Evidence Base Approach (MEB) stresses the integrity of knowledge

systems, the validation within rather than across knowledge systems and sees the complementarity of knowledge as a way to get an enriched picture.

Showing figure 5 Maria explained that the MEB has three phases, where in phase 1 the problem definition is co-produced between all relevant actors before phase 2 brings together knowledge on an equal platform, in parallel system where each knowledge system brings up its own evidence and conclusions, based on internal validation mechanisms. Phase 3 is the joint analysis and evaluation of knowledge and insights to generate multi-level synthesis and identify and catalyze processes for generating new knowledge.

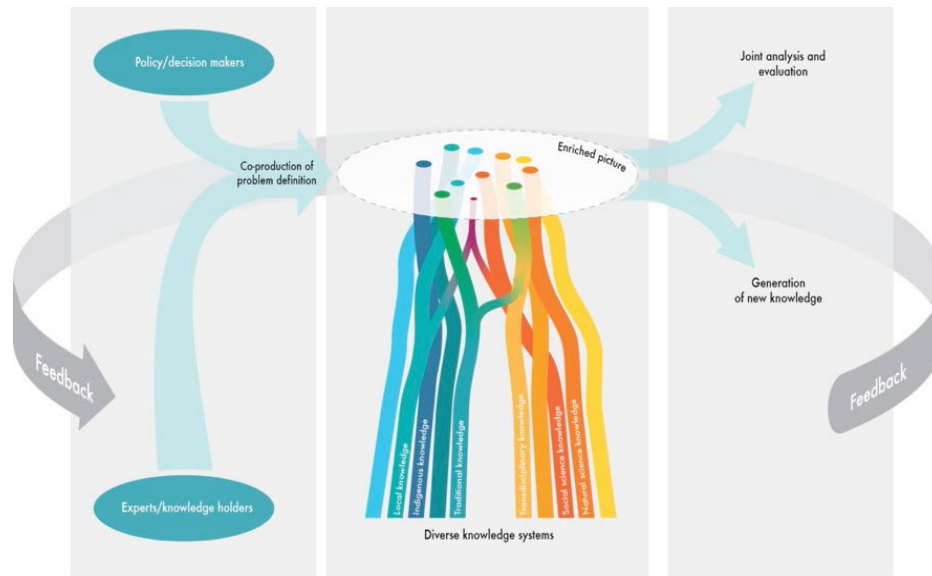


Figure 5: The three phases of MEB

Maria emphasized that placing insights from knowledge systems side by side through the MEB will enable an enriched understanding of the social-ecological system or the issues at hand and can serve as triangulation across knowledge systems and a learning platform for generating insights and, as well as a basis for further co- production of knowledge in e.g. IPBES. Using the MEB makes knowledge mobilization a process, thus creating legitimacy and credibility and usefulness for all actors.

It was although mentioned that assessment processes like in IPBES are based on several assumptions like:

- Ontological: What is the nature of reality/ underpinning rationality?
- Methodological: What is the research process?
- Axiological: What is the role of values?
- Rhetorical: What is the language of research (including Metaphors)?
- Epistemological: What is the relationship of the researcher to that being researched?

Maria then informed about the fact that five pilot projects to implement the MEB are under way which are emerging from and contribute to local needs for mobilizing existing and new knowledge, creating synergies for solutions that contribute to the wellbeing of the

communities involved. The projects develop methods, procedures and good examples for how evidence can be mobilized for needs, from local to global, and across knowledge systems, e.g. in IPBES. The projects can help to create mutual learning about co-generation of knowledge across diverse knowledge systems. This learning can fulfill multiple needs within governance and policy making.

The five projects are undertaken in different parts of the world with local partners:

- in the Philippines with the Tinoc community and Tebtebba,
- in Thailand with the Hin Lad Nai community and PASD,
- in Kenya with the Tharaka and Meringa communities and ICE/ABN,
- in Panama with the Usdub and Guna Yala communities and FPCI
- and in Ethiopia with the Gindeberet community and Melca-Ethopia.

Three workshop participants from the respective communities gave a short insight into their respective pilot projects: Helen Magata for the Philippine case, Prasert Trakansuphakon for the project in Thailand and Simon Mitambo for the Kenyan project.

4.4 WWF's Experiences with Indigenous and Local Knowledge Systems for the Conservation and Sustainable Use of Biodiversity and Ecosystem Services

by Günter Mitlacher, Johannes Kirchgatter, Tatjana Puschkarsky and Ernesto Noriega

WWF examined a variety of field projects worldwide (WWF 2013) with the aim of contributing to the elaboration of 'appropriate procedures and approaches for working with indigenous and local knowledge systems' in the context of the IPBES task force on indigenous and local knowledge systems to implement deliverable 1(c) of the work programme (IPBES 2). WWF's assessment can help guide, encourage, and promote knowledge collaboration and the generation of new knowledge in order to strengthen IPBES' diverse knowledge foundation.

WWF's fieldwork, reports, and studies are grounded in experience and evidence from diverse knowledge systems. Indigenous and local knowledge as well as traditional skills and practices offer valuable contributions to biodiversity conservation and the sustainable use of ecosystems. WWF's field projects illustrate how indigenous and local knowledge is applied in biodiversity monitoring and management of protected areas all over the world, testifying to the potential of building synergies among diverse knowledge systems.

Various WWF policies provide the context for meaningfully engaging with indigenous peoples and local communities. In 2008, WWF's *Statement of Principles on Indigenous Peoples and Conservation* (WWF International 2008, first published in 1996) was reissued in order to affirm WWF's commitment to this policy and to further its consistent application across all WWF program areas. In 2007, WWF published a review on *Strengthening WWF Partnerships with Indigenous Peoples and Local Communities* with recommendations for appropriate measures. In 2008, this was followed by guidelines on *Mainstreaming WWF Principles on Indigenous Peoples and Conservation in Project and Program Management* (Larsen and Springer 2008).

On the ground, WWF has developed fruitful partnerships and trusting relationships with indigenous peoples and local communities in a variety of eco-regions. WWF is committed to involving them in the planning and execution of field programmes, respecting their cultural heritage, and promoting their expert biodiversity knowledge.

Principles for Engagement with Indigenous and Local Knowledge Holders

Inspired by relevant examples from WWF's work in Asia, Africa and Latin America, WWF suggests the following 'Principles for Engagement with Indigenous and Local Knowledge Holders'. Drawn from on-the-ground experience in protected areas, these may help strengthen and support the development of IPBES biodiversity assessment principles, procedures, and approaches.

Mutual Respect: Mutual respect is the cornerstone for successful collaboration. Treating traditional local expertise with respect is of utmost importance for scientists or practitioners engaging with indigenous and local knowledge holders. This also entails acknowledging different motivations for conservation, including spiritual beliefs, social rules, and leadership structures, as well as traditional management institutions. Acknowledging the contribution of indigenous and local knowledge systems to the protection of an area's biodiversity entails granting access rights, tenure security, and participation rights in protected areas management.

Transparency: As there are differences between indigenous and local knowledge systems and science, the corresponding actors operating in each system often have different priorities and interests. There is a need to openly present values, assumptions, motivations and objectives in order to discuss the respective agendas in a transparent way. It is of particular importance to avoid raising false expectations with unrealistic promises. Furthermore, established consultation procedures such as FPIC (Free, Prior and Informed Consent) as described in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP) need to be respected and embedded in a culturally sensitive approach to knowledge collaboration.

Trust and Long-term Commitment: In order to enable the exchange of sensitive information for a common cause, trust needs to be built between all actors in knowledge collaboration. This can only be attained through long-term relationships with the local population. Dialogue fora for mutual learning need to be established. These shared spaces for discussion and reflection can later evolve into platforms for negotiation, conflict resolution, and decision-making for biodiversity conservation.

Ownership of Process and Results: The notion of ownership is central to equitable knowledge collaboration. Indigenous and local knowledge holders need to know that their intellectual property rights are respected. They are the legitimate owners of their knowledge and should be in control of what happens with it from the onset of a project until its end. Feedback and return mechanisms of research results to the communities are an important element of this.

Facilitators and 'Bridging Agents': Relationships between indigenous peoples, local communities, and government agencies are not always conflict-free, often due to resource and land use restrictions imposed on the people who live in or adjacent to protected areas. Independent, external NGOs are sometimes well-placed to mediate between the different actors, establish common ground, and identify potential shared benefits. Particularly if they have been present in the area for a long time, their acquaintance with local knowledge systems and familiarity with the community dynamics enables them to function as 'bridging agents' between the population and the authorities.

Indigenous and Local Languages: Effective communication is one of the most important factors for knowledge collaboration, with indigenous languages carrying important biodiversity information. Collaboration on biodiversity knowledge not only requires proficiency in the language but also a familiarity with the mode of communication and cultural idiosyncrasy of a particular group of people in order to judge how to assess information conveyed through personal anecdotes, humor, or customary exaggeration. Cultural and language interpreters and intermediaries from local grassroots organizations can play an important role in this process.

Identification of Knowledge Holders: To identify legitimate knowledge holders for a specific research question or assessment, it is important to be aware of the social complexities prevalent in the communities from which indigenous and local knowledge originates. In many cases, knowledge is gender-specific with access to it determined by strict cultural rules. On occasion, it might only reside with specialized members of a society. Wherever possible, the selection process of knowledge holders should involve local indigenous organizations enjoying the trust and recognition of their communities.

Cultural Continuity: The recognition of the valuable role which indigenous and local knowledge systems play in the efforts to protect biodiversity must be accompanied by a commitment to strengthen the cultures that generate them. The continuity of indigenous and local knowledge systems can be encouraged by creating spaces for the transmission of knowledge. Reinforcing the ties between the generations, elders engage in transmitting their tracking skills and ecosystem knowledge in workshops with youth. New technologies and documentation methods offer novel possibilities for indigenous youth to record and share their cultural heritage in attractive and innovative ways.

Cultural Context: There is a danger in simply extracting fragments of indigenous and local knowledge systems and using it without taking into account the complexity of its cultural context. 'Cherry-picking' isolated and decontextualized bits of information can end up trivializing and distorting traditional knowledge. Selective and partial use of information as a result of one-sided validation efforts diminishes the potential for fruitful and equitable knowledge cooperation. A greater danger arises when the impoverished version of traditional knowledge returns to the communities. Due to the already vulnerable condition of the cultural foundations of many traditional societies, the inclusion of this knowledge in an international context could easily be perceived by the communities as positive feedback, which might result in the re-absorption of it in its oversimplified form. The deformation of the traditional knowledge systems would be a negative side effect and might accelerate their demise.

Benefit Sharing: Knowledge-sharing should be accompanied by tangible benefits for the communities. This can be either in monetary terms or through long-term granting of access rights to natural resources and a stake in the protected area management. Indigenous peoples and local communities can further benefit from their collaboration with conservation agencies if mechanisms are provided for them to propose specific assessments and raise red flags that call attention to critical situations in their territories in order to obtain support for adaptive management.

Methodologies for Participatory Biodiversity Assessments

WWF has developed methodologies for participatory biodiversity assessments characterized by a strong sense of ownership of indigenous and local knowledge holders. In order to build synergies among knowledge systems for the benefit of biodiversity conservation, these tools enable collaborators to work together in formulating research questions, choosing adequate data gathering methods, and jointly interpreting the results in order to draw relevant conclusions for the management of biodiversity and ecosystem services. Having examined various tools that have been successfully implemented in WWF-supported protected areas, the following two methodologies are considered relevant to present in some detail.

The '*Event Book System*' is a monitoring system developed in Namibia which was designed to assist semi-literate communities to monitor and manage their natural resources. It is a simple tool made up of charts filled by local game guards as they record important sightings of wildlife or other events occurring in their assigned area. The tool has been adopted with good results by 77 communal conservancies in Namibia, which represents about 19.2 % of the country's total land area. It has also been implemented in fifteen national parks and with similar systems launched in Zambia, Botswana, Malawi, Mozambique, Zimbabwe, Tanzania, Cambodia, and Mongolia.

'*Wildlife Workshops*' in Thung Yai Naresuan Wildlife Sanctuary, Thailand, were conceived to identify priority areas for conservation in a participatory manner by compiling local knowledge on the conservation status of mammals. The workshops consist of three parts: wildlife status assessments, impact assessments, and conservation planning. The workshops engage elders with experience within a defined spatial area in several village focus groups. This allows participants to cross-check information and to mitigate subjective memory and differences arising from varying levels of observation skills. The evidence that participants rely on to determine population changes, such as encounter frequency with (or absence of) animals and their traces, complements the information received through indicators biologists use by monitoring biodiversity over time.

Conclusion

IPBES biodiversity assessments present unique opportunities to build synergies among diverse knowledge systems and can lead to improved efforts if implemented according to agreed-upon ethical principles and procedures. Based on a review of WWF's global experiences, several key principles have been found to strengthen the outcome of biodiversity assessments. IPBES assessments have the potential to reinforce traditional cultures by showing respect for indigenous and local knowledge holders' expertise and promoting their relevance and viability for solving current and future conservation challenges. As a diverse knowledge platform, IPBES can dually contribute to the inter-related goals of protecting the earth's biological *and* cultural diversity.

Literature:

IPBES 2: [Report](#) of the second session of the Plenary of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services; IPBES/2/17,9. Jan 2014, Decision IPBES-2/5: Work programme for the period 2014–2018, II, p 49

Larsen and Springer 2008, *Mainstreaming WWF Principles on Indigenous Peoples and Conservation*. Gland and Washington

UNDRIP: http://www.un.org/esa/socdev/unpfii/documents/DRIPS_en.pdf

WWF International 2008, *Indigenous Peoples and Conservation: WWF Statement of Principles*. Gland WWF 2013:

http://awsassets.panda.org/downloads/wwf_ipbes_ilk_information_2013.pdf

Authors

Tatjana Puschkarsky and Ernesto Noriega

Project Consultants for the Indigenous Youth Initiative Dzanga-Sangha, Central African Republic Email: t.puschkarsky@gmx.de

Johannes Kirchgatter

Officer Africa Projects

WWF Germany

Email: johannes.kirchgatter@wwf.de

Günter Mitlacher

WWF IPBES Focal Point

Director International Biodiversity

Policy WWF Germany

Email: guenter.mitlacher@wwf.de

Tatjana Puschkarsky and Ernesto Noriega had been participants in the first workshop of the series, held in Germany in April 2013, and were invited to the current workshop as well, but could not personally participate. Instead, they handed in the text contribution above with their co-authors.

5 List of participants

Name	Institution	Address	Country	Phone/Fax/e-mail
Daguitan, Florence	Tebtebba	1 Roman Ayson Road 2600 Baguio City	The Philippines	Tel:63-74 4447703 Fax:63-74-4439459 flor@tebtebba.org
Figueroa, Viviana	CBD-Secretariat	413, Saint Jacques Street, suite 800 Montreal QC H2Y 1N9	Canada	viviana.figueroa@cbd.int
Görg, Christoph	Helmholtz-Centre for Environmental Resarch	Permoserstraße 15 04318 Leipzig	Germany	christoph.goerg@ufz.de
Hardison, Preston	Tulalip	B226 41 Ave NE, Seattle 98115	USA	Tel:++1 206 527-0119 prestonh@comcast.net
Heubach, Katja	Helmholtz-Centre for Environmental Resarch	Permoserstraße 15 04318 Leipzig	Germany	Tel: +49 (0)341 2351650 katja.heubach@ufz.de
Lehmann, Susanne	GermanIPBES Coordination Unit	Heinrich Konen Straße 1 53227 Bonn	Germany	Susanne.Lehmann@dlr.de
Magata, Helen	Tebtebba	1 Roman Ayson Road 2600 Baguio City	The Philippines	Tel: Tel:63-74 4447703 Fax:63-74-4439459 len@tebtebba.org
Malmer, Pernilla	SwedBio	Kräftriket 2B 106 91 Stockholm	Sweden	pernilla.malmer@su.se
Masardule, Onel	Fundacionpara la Promocion del Conocimiento Indigena (FPCI)	Ave. Peru. Calle 41. Edificio Las Camelias. Oficina 302. Bella Vista. Panama 0815 - 0 Panama	Panama	Tel.: + 507 3921074 Fax: + 507 3921497 masardule@gmail.com
Mitambo, Simon	African Biodiversity Network	Kenyatta Avenue, Section 9, Thika	Kenya	smitambo@yahoo.com
Nauber, Jürgen	Federal Agency for Nature Conservation	Konstantinstraße 11053179 Bonn	Germany	juergen.nauber@bfn.de
Pacheco, Diego	IPBES expert group		Bolivia	jallpa@yahoo.com
Paulsch, Axel	Institute for Biodiversity Network (ibn) e. V.	Nussbergerstraße 6a 93059 Regensburg	Germany	Tel.: +49 (0)941/38132462 Fax: +49 (0)941/38132465 paulsch@biodiv.de
Paulsch, Cornelia	Institute for Biodiversity Network (ibn) e. V.	Nussbergerstraße 6a 93059 Regensburg	Germany	Tel.: +49 (0)941/38132462 Fax: +49 (0)941/38132465 cornelia.paulsch@biodiv.de
Payyappallimana, Unnikrishnan	United Nations University - Institute for the Advanced Study of Sustainability	No.1 Arun Apartments No.5, 2nd Cross Trust puram, Kodambakkam, 600024 Chennai	India	Tel.: +91-44-24844184 payyappalli@unu.edu

Name	Institution	Address	Country	Phone/Fax/e-mail
Perez, Edgar	IPBES task force		Guatemala	otus.cyd@gmail.com
Rubis, Jennifer	UNESCO	1 Rue Miollis 75732 Paris	France	j.rubis@unesco.org
Tengö, Maria	Stockholm Resilience Centre, Stockholm University	Kräftriket 2B 106 91 Stockholm	Sweden	Tel.: + 46 73 7078885 maria.tengo@su.se
Trakansuphakon, Prasert	PASD – Pǵákinyan Asociation for sustainable Development	252 Moo 2 T. Sansainoi A. Sansai Chiang mai Thailand 50210	Thailand	Tel.: +66 53 398872 Tel.: +66 81 9934641 Fax: +66 53 398872 ptrakan@gmail.com
Wittmer, Heidi	Helmholtz-Centre for Environmental Research	Permoserstrasse 15 04318 Leipzig	Germany	Tel:++49 341 235 1629 heidi.wittmer@ufz.de