

# Sub-Global Assessment Network



## Sub-Global Assessment Network 4<sup>th</sup> Annual Meeting Report Stellenbosch, South Africa 26<sup>th</sup> – 29<sup>th</sup> November, 2012



Hosted by the SGA Network Secretariat in partnership with the Council for Scientific and Industrial Research (CSIR)

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## 1.0 Summary of 4th Annual Meeting of the Sub-Global Assessment Network

From the 26<sup>th</sup> – 29<sup>th</sup> of November, 2012, in Stellenbosch, South Africa, the 4<sup>th</sup> Annual Meeting of The Sub-Global Assessment (SGA) Network was convened by the Network Secretariat (UNEP-WCMC and The Cropper Foundation), in partnership with The Council for Scientific and Industrial Research (CSIR). Support was provided by the European Commission, the Swedish International Development Cooperation Agency and the United Nations Environment Programme.

This meeting brought together more than eighty ecosystem assessment practitioners from across the globe to discuss the progress of the SGA Network in 2012, recent advances in the field of ecosystem assessment, and the plans for the future as the Network continues to move forward both as individual practitioners and as a collective whole.

In particular, the meeting sought to:

1. Showcase progress and achievements of the Network and its members throughout 2012 and outline a vision for 2013
2. Continue to share information, lessons learned and experiences of undertaking ecosystem assessments
3. Highlight emerging tools, concepts and issues in the evolving field of ecosystem assessment

In summary, 2012 was undoubtedly a good year for the Network: participants saw the Network grow in size; and the Network's role as a mechanism through which the capacity and training needs of its members can be met, was expanded further through the running of a series of capacity building events and activities. These initiatives have been supported by the production of several publications by the SGA Network Secretariat, such as 'Lessons learned from carrying out ecosystem assessments: Experiences from members of the Sub-Global Assessment Network' and information publications on the Network and the Intergovernmental science-policy Platform on Biodiversity and Ecosystem Services (IPBES).

One of the substantive objectives of the 4<sup>th</sup> Annual meeting was the highlighting of emerging tools, concepts and issues in the field of ecosystem assessment. Over the course of the meeting the participants, through the sharing of experiences, and the facilitation of plenary and group sessions, looked at the nature and usage of tools for ecosystem assessments, the ways through which traditional knowledge can be further integrated with conventional science in assessments, and the various ways in which the science-policy interface can be strengthened through improved mainstreaming of assessment findings and results. One of the key points emerging from these presentations and discussions was the fact that many of the principles and guidelines for tool development, traditional knowledge integration, and mainstreaming, are still not being explored as fully as they should be and that there should be an

attempt by the Network to marshal the various schools of thought together, *vis a vis* the Manual for Assessment Practitioners<sup>1</sup>.

In addition, the 4<sup>th</sup> Meeting served as an avenue for reflection on the Network itself and what is needed from the Network by the members. The Secretariat outlined its planned activities for 2013, which included the strengthening of existing networking and communication methods; the hosting of approximately three targeted capacity building workshops; and helping to implement more Regional Hubs across the Network. Key in the work programming and forward thinking for the Network is its role and partnership with IPBES. The exploration of the ways in which the Network and IPBES can work together in a mutually beneficial and supportive way will be a priority of the Secretariat in 2013.

During several plenary and discussion sessions, participants provided feedback to the Secretariat on what has worked well and what are the focal areas that should be given emphasis during 2013 and beyond. Overall, participants felt that one of the major successes of the Network, and the annual meetings, has been the networking aspect and the building of relationships between assessments and practitioners. However, many feel that there is a need to expand the remit of the meetings to include more of the target groups of assessments – decision-/policy-makers, as well as practitioners within other fields. In moving forward, members also believe that some more in-depth assessment of the Network should be undertaken by the Secretariat, for example, in the form of a comparative analysis across scales or time, towards the development of a common set of questions or indicators for use in assessments.

This document therefore seeks to further elaborate on the presentations and various sessions covered at the 4<sup>th</sup> Annual Meeting, distil conclusions and feedback provided by the participants of the meeting, and identify the relevant actions for the Secretariat to follow-up on.

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<sup>1</sup> Ash *et al.*, 2010. Ecosystems and Human Well-being: A manual for assessment practitioners. Island Press.

## 2.0 Background

Sub-Global Assessments (SGAs) were a component of the Millennium Ecosystem Assessment (MA), addressing the multi-scale nature of global environmental change and attempting to reconcile local to global perspectives and decision making.

The Sub-Global Assessment Network (hereafter referred to as the ‘SGA Network’ or ‘the Network’) was established as a follow-up to the MA sub-global component, to maintain communications and momentum within SGAs. Following re-structuring and re-initiation of the Network in 2011, it now goes beyond this, expanding to incorporate additional members and looking to increase its impact in the future.

Overall, the SGA Network seeks to create a common platform for practitioners (individuals and organisations) involved in ecosystem assessment at regional, sub-regional, national and sub-national levels. The intention is to promote and facilitate improved capacity in undertaking and using assessments. Achievements of the SGA Network will support relevant global processes such as the IPBES and Multi-lateral Environmental Agreements (MEAs).

### 2.1 Objectives of 4<sup>th</sup> Annual Meeting

The SGA Network 4<sup>th</sup> Annual Meeting (hereafter to be called the ‘meeting’) was convened by the UNEP World Conservation Monitoring Centre (UNEP-WCMC) and The Cropper Foundation, with support from the European Commission, the Swedish International Development Cooperation Agency and the United Nations Environment Programme. The meeting was hosted in Stellenbosch, South Africa with support from the Council for Scientific and Industrial Research (CSIR).

This year’s meeting brought together over sixty ecosystem assessment practitioners from across the globe to discuss the progress of the SGA Network in 2012, recent advances in the field of ecosystem assessment, and the plans for the future as the Network continues to move forward both as individual practitioners and as a collective whole. In particular, the meeting sought to:

1. Showcase progress and achievements of the Network and its members throughout 2012 and outline a vision for 2013
2. Continue to share information, lessons learned and experiences of undertaking ecosystem assessments
3. Highlight emerging tools, concepts and issues in the evolving field of ecosystem assessment

The meeting concluded with a one-day capacity building workshop on ecosystem service indicators.

## 2.2 Meeting Execution

The meeting took place over four days and involved a combination of presentations, discussions, interactive sessions and informal visits showcasing the ecosystem services (ESS) of Cape Town and the surrounding area. Various facilitatory methods were used throughout to maintain meeting organisation and to direct and encourage contributions from all participants. These methods included:

- Participants were seated in cabaret format in order to facilitate group work and discussions.
- Each session was directed by a chair-person (or persons), leading topics and discussions and providing concluding remarks.
- Presentations were based on suggestions and offers from the meeting participants subsequent to the 3<sup>rd</sup> Annual meeting. They aimed to highlight specific ideas, knowledge and lessons learned relevant to each session to invoke thoughts and insights in later discussions.
- Brief questionnaires and note-cards were used in interactive sessions and group discussions, to direct answers towards productive contributions and to enable information to be extracted on multiple levels, from individual to group.
- Large posters were used to consolidate session outputs; these were left on the walls for the remainder of the meeting. This facilitated information exchange between individuals and enabled primary information to be collected by the Secretariat.
- Poster sessions during coffee-breaks allowed participants to showcase and discuss their SGA work in more detail and in an informal setting. A short poster-presentation session was held, allowing the authors to discuss their work in more detail with interested audiences. A list of the posters presented can be found in Appendix 3.
- An ‘ideas board’ was made available for participants to contribute comments and suggestions throughout the meeting. Suggestions recorded upon this board can be found in Appendix 4.





- Field trip visits outside of the main meeting session enabled an informal environment for individual networking and discussion, as well as direct, practical experience of ecosystem services supply from Cape Town and its surrounding areas.

### 2.3 Opening Session

The meeting was formally opened by the Network Secretariat, the host organisations in South Africa, and the United Nations Environment Programme (UNEP). The representatives of these institutions were:

- Mr Fundisile Mketeni (Deputy Director–General, Biodiversity and Conservation Branch, Department of Environmental Affairs, South Africa);
- Dr Belinda Reyers (Council for Scientific and Industrial Research, South Africa);
- Mr Neville Ash (Head of Biodiversity and Ecosystem Services Branch, UNEP); and
- Dr Matt Walpole (SGA Network Secretariat, UNEP – WCMC).

This opening session provided an opportunity for the meeting hosts to welcome the diverse group of participants to Stellenbosch and South Africa, and to give their thanks to the many persons that had come together to make the meeting possible. This session also allowed for a sense of introspection and perspective, as Neville Ash of UNEP took participants back on a brief journey through the SGA Network’s genesis in the wake of the Millennium Ecosystem Assessment, through to its present incarnation and what the hopes are for the future of the Network. Along the way, he paid tribute to one of the stalwarts of the MA: Angela Cropper, the co–founder of The Cropper Foundation and co–chair of the MA Scientific Panel, who passed away in November 2012. The welcome panel also took the opportunity to highlight the need for the Network to serve as a catalyst to, and provide support for, upcoming critical initiatives, such as the IPBES, and by ensuring that the many SGAs taking place around the globe, are coordinated so that a tangible and effective legacy is maintained.

### 3.0 Our Network

The introductory session served as an ice-breaker session for participants, within which they were asked to introduce another participant of their table to the entire session, focusing on who they are, their work and their connection to the SGA Network. Subsequent to this, Dr Matthew Ling, of the Network Secretariat, took the opportunity to provide an update on the work of the Secretariat during 2012. This presentation sought to:

- Identify the objectives of the SGA Network, which are to:



- Build capacity to undertake and use assessments
- Facilitate learning and exchange between and amongst SGA practitioners
- Support relevant global processes
- Remind participants of the ever-growing nature of the Network
  - Currently at approximately 180 members
- Highlight key initiatives and workshops facilitated by the Secretariat at various global meetings in 2012, including the:
  - Ecosystem Services Partnership (ESP) Conference 2012, Portland, Oregon, USA;
  - IUCN World Conservation Congress, Jeju, the Republic of Korea;
  - “Capacity building for undertaking ecosystem assessments: for ASEAN countries” workshop, Kuala Lumpur, Malaysia;
  - Latin America and Caribbean Regional Hub meeting and workshop, Guatemala City, Guatemala;
  - Online IPBES catalogue of assessments, with input by SGA Network members; and
  - Lessons learned publication based on experiences from SGA Network Members.
- Provide a brief description of planned activities for 2013. These include:
  - Maintaining a database of members and experts within the Network, while constantly reviewing the needs of the Network and its members;
  - Further deepening linkages between the Network and IPBES;
  - Increasing Regional Hub development; and
  - Several capacity building workshops.



#### 4.0 Building Partnerships

During the opening session, the opportunity was taken to emphasise two major partnerships that will be focused on throughout 2013 and hopefully beyond – IPBES and UNESCO Man and the Biosphere programme. Presentations on each of these topics were followed by a discussion session.

## 4.1 IPBES and the Network

Neville Ash provided an update on IPBES which highlighted:

- The formal establishment of IPBES;
- The need for IPBES to work alongside the SGA Network, such that work is not repeated or duplicated at the regional level, since IPBES will not be functioning at the national or sub-national scales, but rather focusing on regions;
- The structure and procedures governing the IPBES process and its work programme, which was scheduled to be agreed upon at the first plenary meeting of IPBES in Bonn, Germany, in January 2013. In addition, nominations for the Multi-disciplinary Expert Panel and the Bureau of IPBES were also submitted and decided upon; these groups served as a potential secondary entry point for members of the Network (incidentally it was pointed out that there exists no nominee from within the field of indigenous and traditional knowledge); and
- The IPBES agenda for 2013 and the role of the Network and its function as a partner. It is intended for the Network to contribute to the current review process of IPBES in addition to participating in the first plenary meeting of IPBES in Bonn in January 2013 as an observer.

	<b>What will IPBES do?</b>		<b>Under which principles will IPBES operate?</b>
	<p><b>Four main functions:</b></p> <ul style="list-style-type: none"> <li>• Catalyse knowledge generation</li> <li>• Assessments</li> <li>• Policy support</li> <li>• Capacity building</li> </ul> <p><b>Overseen and supported by:</b></p> <ul style="list-style-type: none"> <li>• Plenary</li> <li>• Bureau</li> <li>• Multidisciplinary Expert Panel (MEP)</li> <li>• Scientific community and other knowledge holders</li> </ul>	<p>Address terrestrial, marine and inland water biodiversity and ecosystem services and their interactions</p> <p>Full participation of developing countries</p> <p>Contribution of indigenous and local knowledge</p>	<p>Inter- and multidisciplinary approach</p> <p>Gender equity</p> <p>Bottom-up</p> <p>Collaboration – avoiding duplication</p> <p>Policy-relevant but not policy-prescriptive</p> <p>Scientific independence, credibility, relevance and legitimacy</p>

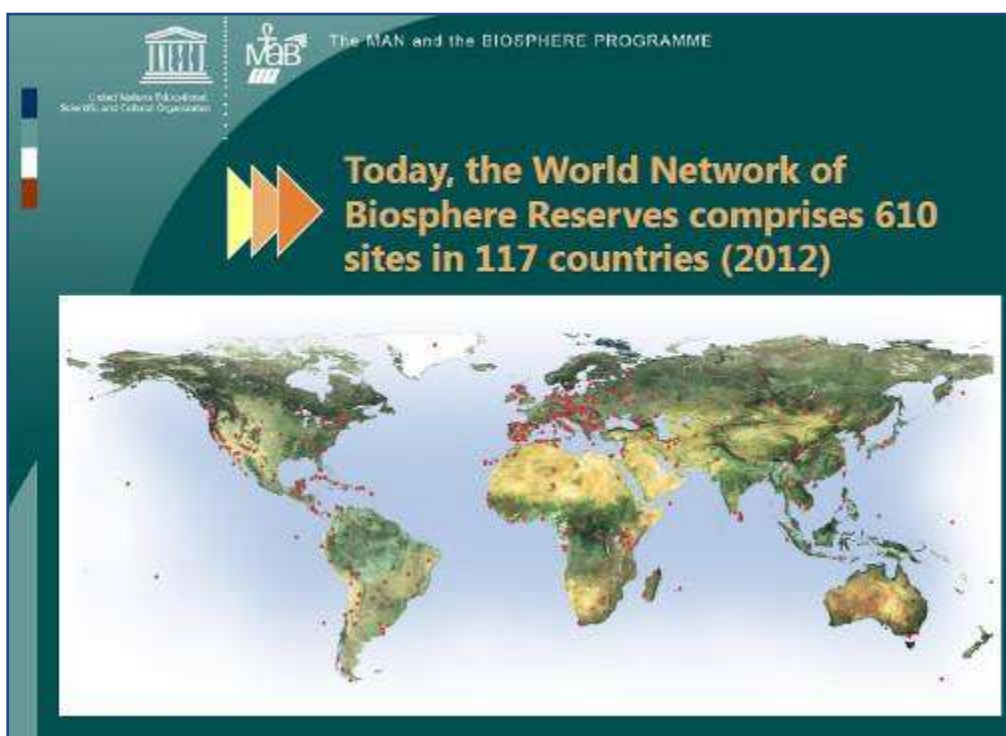
## 4.2 The Man and the Biosphere (MAB) Programme

Meriem Bouamrane, the UNESCO Programme Specialist for The Man and the Biosphere (MAB) Programme, then delivered a presentation highlighting how the SGA Network can be linked with, and inform, the Biosphere Reserves Programme of UNESCO, which is an Intergovernmental scientific

programme aiming at laying out the scientific basis for the improvement of people-environment relationships. The MAB Programme seeks to:

- Conserve biological and cultural diversity;
- Propose innovative approaches to sustainable development; and
- Promote research, monitoring, education and training.

Ms. Bouamrane stressed that there exists the potential for relationships to be built between the Network and the MAB programme. The focus of these relationships could centre on the development of methodologies and tools for a range of stakeholders; the co-construction of indicators for the purpose of monitoring; the improvement of access to information; addressing important research gaps; and the improving of networking across these programmes to facilitate the sharing of knowledge, tools, methods and experiences.



### 4.3 Moving forward with the Network

This session concluded with a plenary discussion facilitated by Matt Walpole, on the direction forward for the Network in 2013. Groups held table-based discussions and reported back to the plenary, the main points from which were compiled by the Secretariat.

In summary, the avenues for progress discussed were:

- Further developing the strategy for communication and engagement with policy-makers, governments, knowledge holders, and other non-specialists, in order to:
  - Influence policy-makers and governments; facilitate interaction and cooperation between scientists and major stakeholders; and
  - Strengthen dialogue between knowledge systems.

These objectives will be facilitated through the SGA Network website; improved information sharing and documentation from within the SGA Network; reciprocal capacity exchange visits between scientists and policy-makers; and graduate courses at the tertiary education level.

- Improving the quality and value of assessments by:
  - Highlighting those SGAs that have made policy and on-the-ground impacts as good practice examples;
  - Distilling and dissemination of MA/SGA findings and information on a greater scale;
  - Prioritising geographic and thematic issues/gaps in assessments;
  - Providing support for methodologies to connect knowledge systems;
  - Addressing the rigor and scientific credibility of assessment processes and outputs;
  - Ensuring that analysis of assessments is directed and delivered through the Network;
  - Developing a common framework for assessments within the Network;
  - Placing emphasis on up-scaling from local to global; linking biophysical with social and economic assessments, and incorporating assessments into the National Biodiversity Strategy and Action Plans (NBSAPs) for member countries;
  - Developing an accreditation system for SGAs; and
  - Conducting comparative studies and addressing any lack of national expertise.
- Improving outreach and presence through the provision of more information about SGAs on the Network website; identifying funding opportunities and linkages with donor agencies, and improving knowledge and experience sharing among the Network members.

- Expanding support for Regional Hubs
  - In addition to the establishment of Regional Hubs, consideration ought also to be given to the development of thematic hubs that could run in parallel to the geographic segregation of SGAs.
  - The Network should seek to improve the exchange and interaction between regions to facilitate increased information sharing and capacity development; sharing of methods and experiences; and to allow for greater linkages with other regional networks and partnerships, for example, the International Union for the Conservation of Nature (IUCN), The Economics of Ecosystems and Biodiversity (TEEB), and Education for Sustainable Development (ESD).
- Facilitating training and capacity building
  - Facilitating expert exchange among SGA members;
  - Providing directed training on priority topics such as communication of assessments, scenario development, trade-off methods, and tools;
  - Informed capacity building sessions to include policy-makers into the training process to allow for interaction with, and input from, decision making stakeholders; and
  - Consider the creation of SGA Network fellows and partnerships with other academic programmes, such as UNESCO chairs and resource groups.
- Clarifying and strengthening relationships with IPBES and other networks
  - There is a need to identify the avenues for the most effective partnership formation and the best strategic positioning of the SGA Network to support and learn from these initiatives.
- Improving the ecosystem assessment method
  - More emphasis to be placed upon local-level assessments through the development of adapted methodologies (based on the MA methodology), which has previously proven difficult at this scale.
  - This may be informed by the development of additional resource guides to supplement the existing “MA Methods Manual”.
- Future annual meetings
  - Meetings should be expanded to include other stakeholders, such as policy-makers, students and practitioners of other disciplines, for example, the social sciences;



- There should be more focus on dealing with challenges, for example, as well as serving as a means through which lessons learned can be continuously shared and developed.



## 5.0 What have we been doing?

The second session of Day 1 focused on updating the meeting participants on the progress and activities from several SGAs throughout the Network, which mostly centred around lessons learned in the implementation of SGAs in a variety of contexts and locations. The following sections introduce and summarise a number of update-presentations on assessment activities carried out by the Network members.

### 5.1 Assessment activities in South Africa – National Biodiversity Assessment 2011 and an update on the South African component of the Project for Ecosystem Services (ProEcoServ)

Amanda Driver of the South African National Biodiversity Institute (SANBI) gave a summary of South Africa's most recent National Biodiversity Assessment (NBA), which sets out to assess South Africa's biodiversity and ecosystems periodically on a five year cycle. The 2011 assessment covers terrestrial, river, wetland, estuarine, coastal and marine environments, with specific focus on areas of importance for climate change resilience, species of special concern and invasive alien species.

Five out of a total of twelve highlights from the NBA were elaborated upon by Amanda. These were as follows:

- Wetlands are the most threatened of all of South Africa's ecosystems, with 48% of wetlands being critically endangered;

- Tributaries are generally in better condition than main rivers, with 46% of main rivers being critically endangered as opposed to 25% of tributaries;
- Coastal and inshore ecosystems are more threatened than offshore ecosystems, with 24% of coastal and inshore ecosystems critically endangered, compared to 12% of offshore ecosystems;



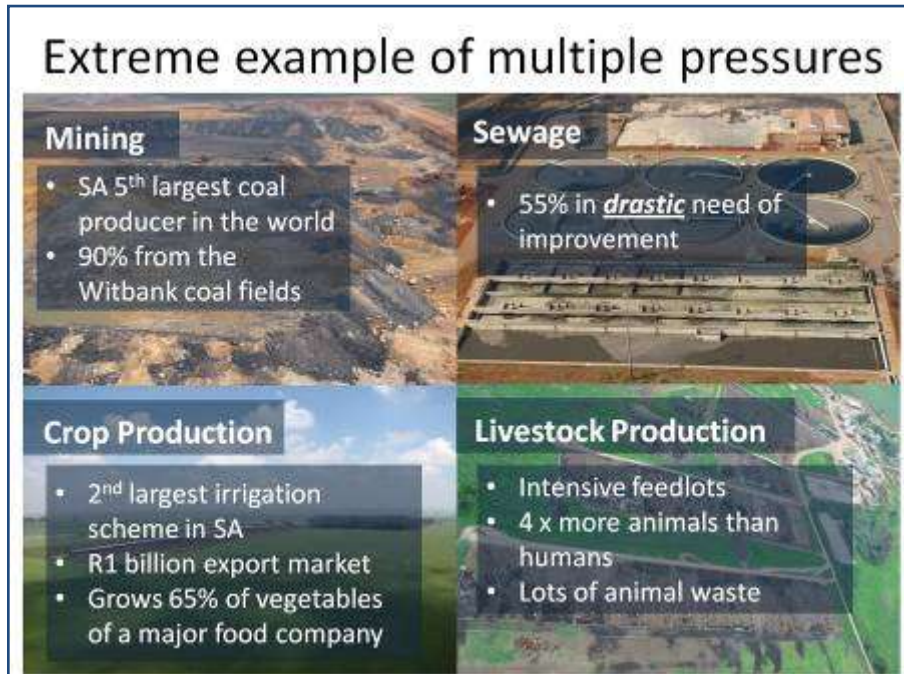
- Offshore marine ecosystems are the most poorly protected of all of South Africa’s ecosystems, with only 4% of offshore ecosystem types being well protected;
- The NBA 2011 has provided a new national map of areas that are important for climate change resilience.

Dr Belinda Reyers, of the Council for Scientific and Industrial Research (CSIR), then presented an update on the South African Project for Ecosystem Services (**ProEcoServ**) component of the global UNEP-GEF ProEcoServ. Belinda provided some specific details on one of the SA ProEcoServ pilot sites, namely the Eden District Municipality. Within the Eden district, the project focus is on risk, regulating services, and disaster management; some of the key findings from this pilot site included:

- Land-use practices in the catchment have just as much of an impact on flood risk as climate change;
- Clearing alien plants will decrease areas under high fire risk by almost 30%;
- Poor management of plantations, wetlands, rivers and estuary berms can more than double the flood risk.

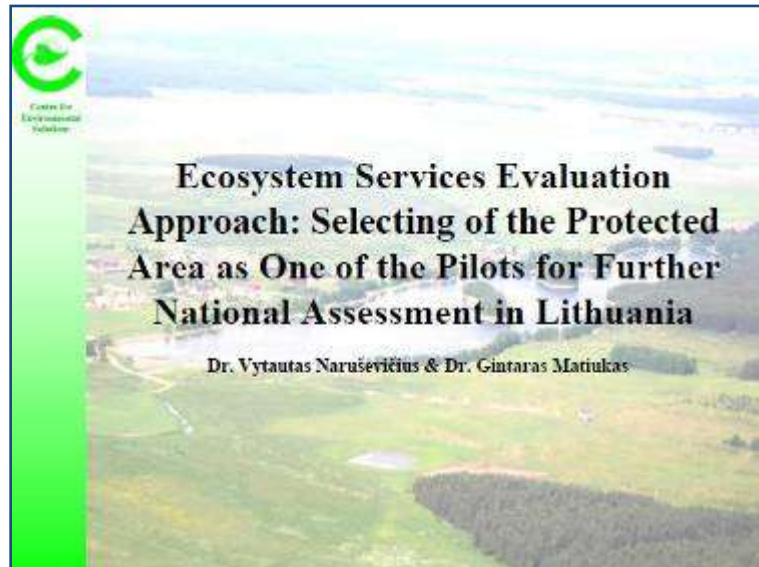
At a second SA ProEcoServ pilot site, the Olifants catchment, the project has four main areas of focus: conservation and agriculture; energy; metallic minerals; and rural agriculture. The slide below provides some examples of the extreme pressures that are impacting on these main focal areas.





## 5.2 Ecosystem services evaluation approach in Lithuania

Dr Vytautas Naruševičius, of the Environmental Protection Agency, Lithuania, provided a summary of a pilot study taking place at Tytuvėnai Regional Park. This study is intended to serve as a part of a network of model sites representing Lithuanian territory, as part of a national valuation of ecosystem services. Vytautas identified the value of using protected areas as valuable model/pilot sites for several reasons, including: the complexity of ecosystems and their services; the specific manner of ESS usage; greater involvement by local authorities/communities; the relative ease of identification (e.g. well defined areas with clear borders); and the presence of pre-existing support infrastructure.



### 5.3 Lessons and Experiences from Japan’s Satoyama Satoumi Assessment

Professor Koji Nakamura, Chairman of the Japan Satoyama-Satoumi Project (JSSP), delivered a comprehensive overview of the JSSP, beginning with its rationale, its key questions and scope, response options and scenarios, and the key recommendations and findings. These included: Satoyama-Satoumi are mosaics of different ecosystem types that are managed by humans to produce a bundle of ecosystem services for human well-being; the continued loss of these landscapes over the past 50 years has resulted in a drop in the resiliency of the coupled socio-ecological systems; and that a ten-year comprehensive research programme should be implemented to better understand the dynamics of this landscape.



### 5.4 Landscape Diversity and Ecosystem Services in Agricultural Ecosystems: Implications for Sustainable Growth and Rural Poverty in China.

**Research Issues: based on farm household data and land use pattern around the farms**

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            graph TD
            LD[Landscape diversity (LD)] --> LE[Natural Enemy (LE)]
            LE --> Aphid[Aphid]
            Aphid --> Labor[Labor]
            Aphid --> Insecticide[Insecticide]
            Aphid --> Yield[Yield]
            Labor --- Income[Farmer's income]
            Insecticide --- Income
            Yield --- Income
            
```

**Field survey**

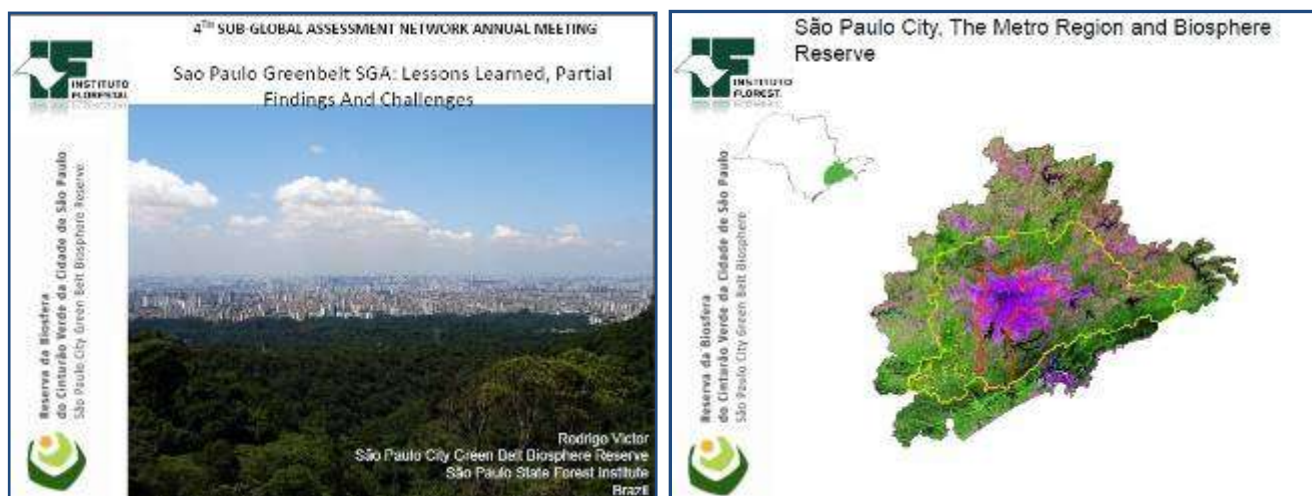
Forest  
Water area  
Farmland  
Built-up area  
Grassland  
Field investigation equipped with GPS

Professor Xiangzheng Deng (Chinese Academy of Sciences) provided a summary of a research project in China. The project sets out to understand the role of landscape diversity in bio-control services in cotton and wheat production, through a series of field experiments, and to understand the role of landscape diversity in cotton-pest control services, insecticide use, crop yield and income through household and plot surveys. This research showed that there was indeed empirical evidence on the connection

between land-use diversity, pest pressure and insecticide use in China. It was emphasised that this has policy implications for the profitability of the agricultural systems dependent upon this diversity.

### 5.5 Sao Paulo Greenbelt: Lessons learned, partial findings and challenges

Dr Rodrigo Victor, from the Sao Paulo State Forest Institute, gave participants an overview of the Sao Paulo Greenbelt SGA. The presentation was supported by several maps and images produced from the SGA, including: an overview of trends in deforestation in Sao Paulo State; the spread and scope of biosphere reserves within Brazil; and the concurrent pressures on these reserves by urbanisation. Much of the information presented will be published in an upcoming book on ESS (released March 2013) which will focus on twelve Biosphere Reserve ESS.



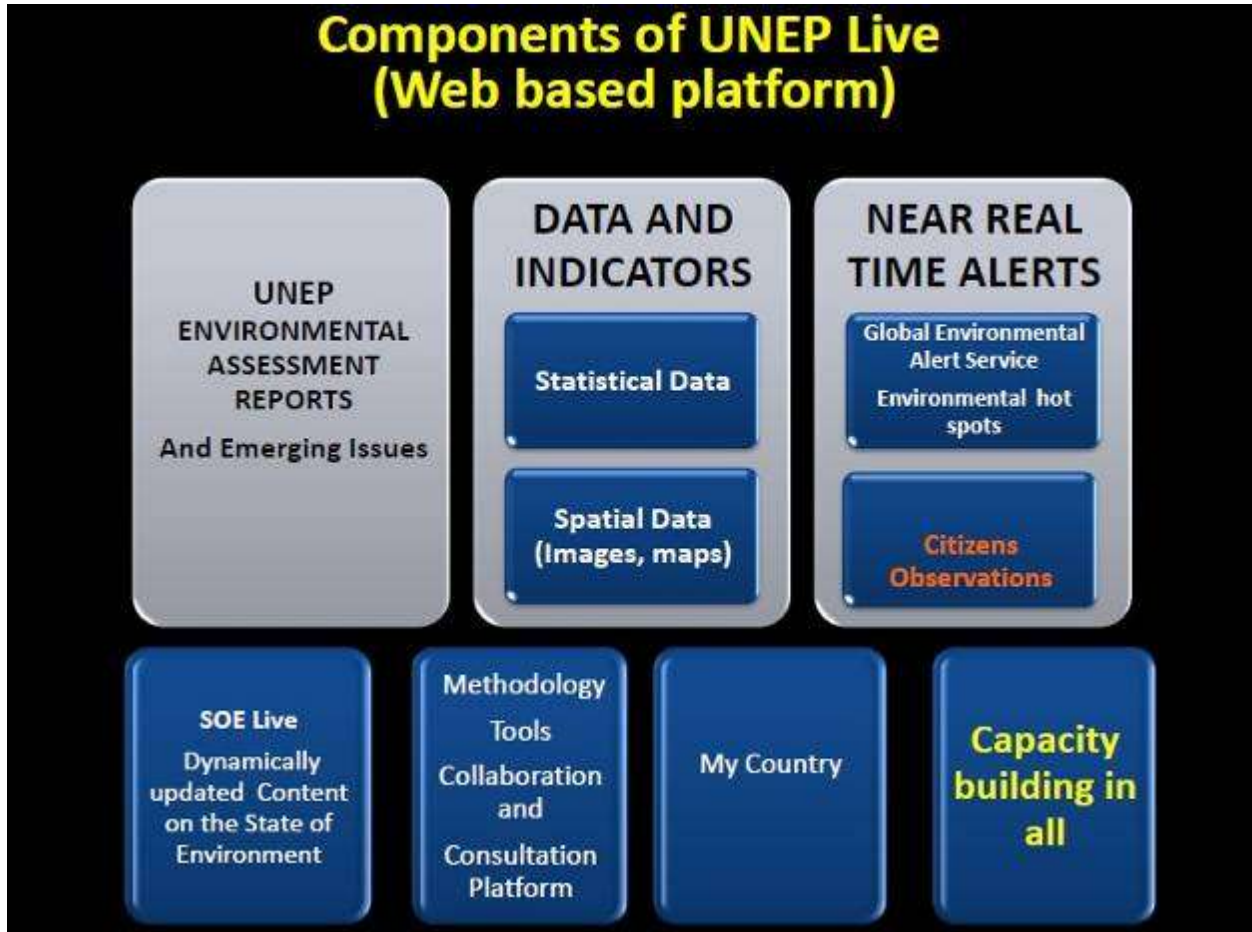
### 5.6 Lessons learned in the Arab Millennium SGA

Dr Adel Farid Abdel Kader (UNEP Regional Office for West Asia) provided a synthesis of the major lessons learned throughout the process of the Arab Millennium Ecosystem Assessment. In addition, a new digital, web-based platform for environmental information was discussed. The key lessons derived from the Arab Millennium SGA were:

- Assessments need to respond to actual needs and address the policy questions of decision-makers, and the fulfilment of the needs of the local communities;
- Social factors constitute the major pressures and need to be addressed, such as poverty and unemployment;
- Examine working and successful policies at the local level for up-scaling and replication;
- Adopting principles of good governance is critical to ecosystem management;
- Local inhabitants are not involved in the decision making process; their engagement is critical for sound ecosystem management; and
- Capacity building is essential.

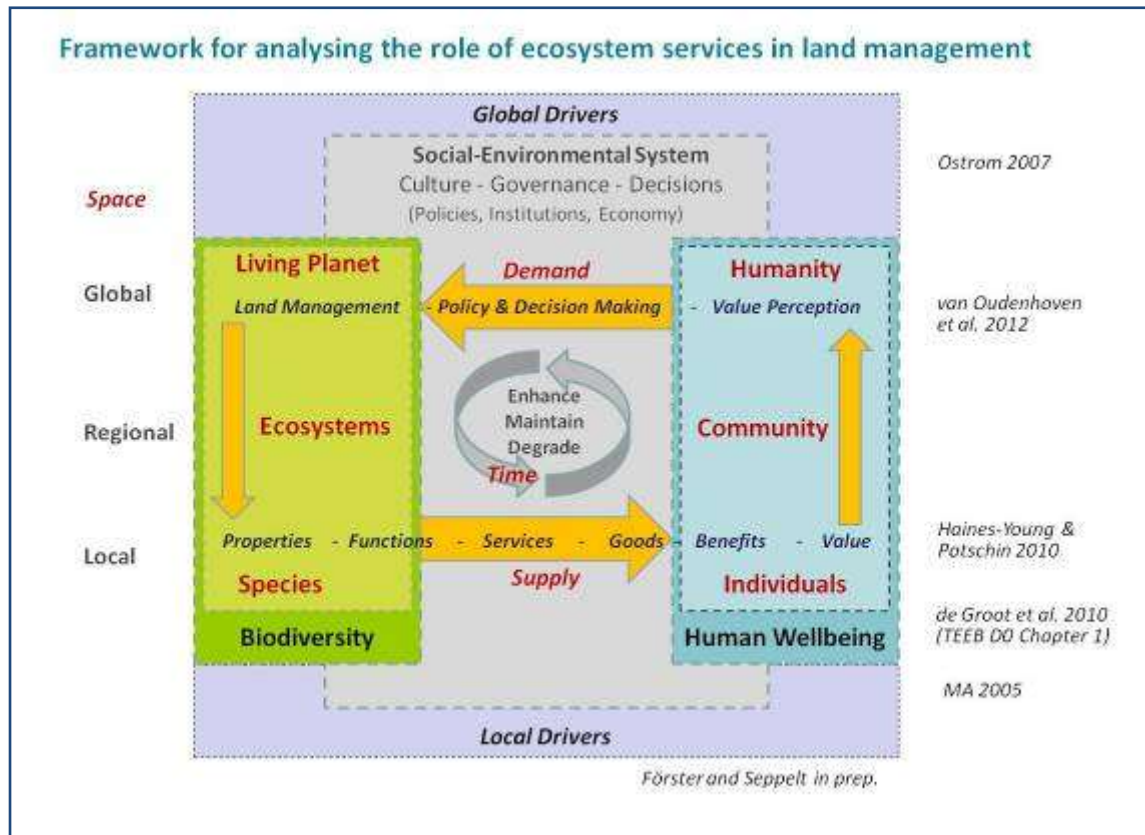


Dr Kader then outlined a new platform for the promotion of access to, and the usage of, environmental information for keeping the State of the Environment under review: UNEP Live.



### 5.7 Land management relationships to ecosystem services: Lessons from regional research projects

Professor Ralf Seppelt from the Helmholtz Centre for Environmental Research, Germany, sought to introduce the Global Assessment of Land-Use Dynamics, Greenhouse Gas Emissions and Ecosystem Services (GLUES) and to illustrate some of the major tools and mechanisms used. GLUES, in summary, is a research programme developed to produce new knowledge for effective decision making in the area of land and natural resource management through the integration of science and practice, and to develop new strategies and system solutions based on examples from selected regional case studies.



## 5.8 A model for assessing the environmental impact of agriculture on ecosystems: A 12-year experience in Argentina

Dr Ernesto Viglizzo took participants along the twelve-year journey of the Pampas SGA, which culminated in four conclusions:

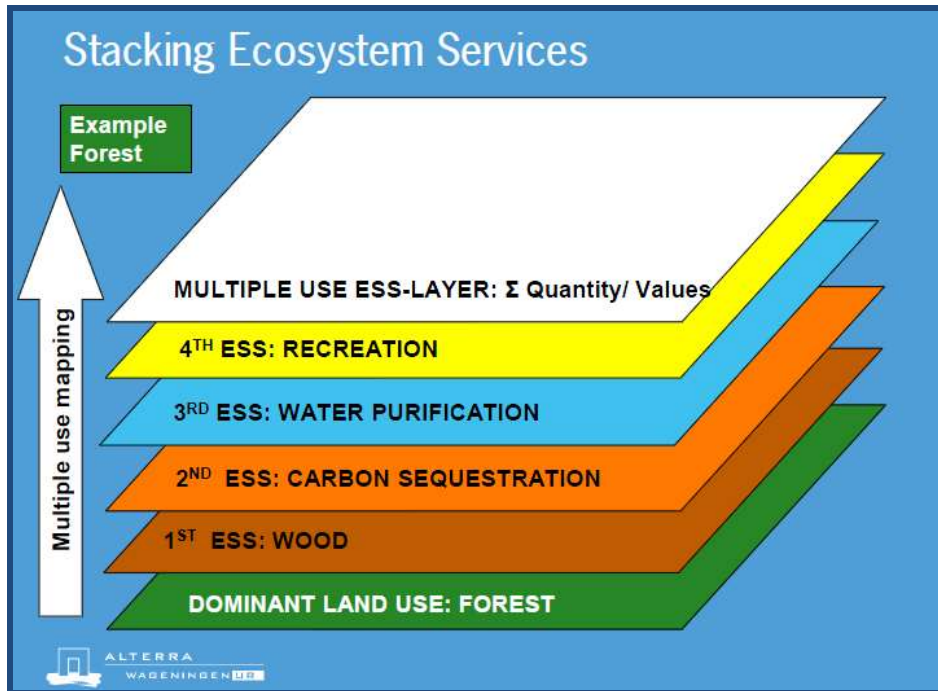
- The value of some essential ecosystem services can differ substantially when they are assessed through either monetary or biophysical methods.
- Some ecological principles that lie behind the notion of ecosystem services are not fully supported by scientific knowledge.
- The results of the monetary valuation of ecosystem services are not always supported by sound scientific evidence.
- In general, private organisations in Argentina paid more attention to the outcomes than governmental agencies did.



## 5.9 Bundles of Ecosystem Services as support for optimising sustainable land-use

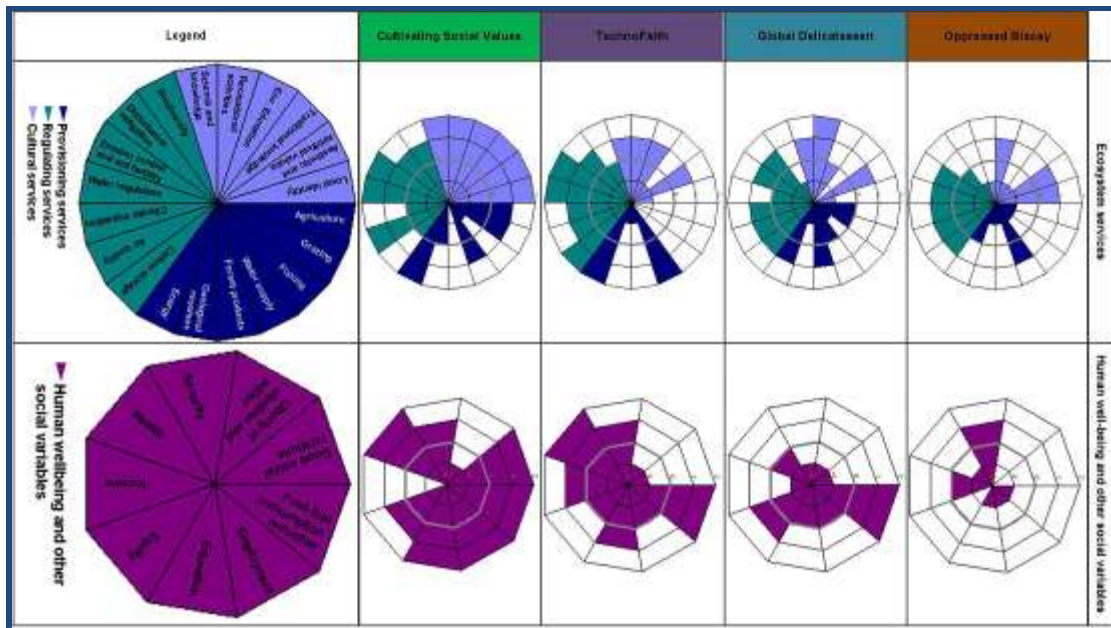
Mr Kees Hendriks (Alterra, Wageningen University and Research Centre) highlighted the ‘TEEB Netherlands’ research and its emphasis on the bundling of ecosystem services for analysis and policy making. Specific focus was placed on the need to learn more about how well ESS match with each other and those which are not best matched. It was highlighted that more information must be developed on ecological knowledge of production and regeneration, with regard to sustainable use, and compensation mechanisms for those who lose in policy trade-offs with respect to ESS.





### 5.10 Linking MA global scenarios to local scenario planning: a participatory approach from the Biscay SGA

Igone Palacios and Aitana Uria, of the Biscay SGA, led participants through the Biscay assessment process. The Biscay SGA developed scenarios for the region up to 2050, in an integrated and participatory way by down-scaling the MA scenarios; analysed how the relationship between Human Well Being (HWB) and ecosystem services might change over a range of plausible futures; and identified management strategies for the Biscay region.





## 6.0 SGA Network Regional Hubs:

As Day 1 came to a close, the focus shifted to the new Regional Hub arrangement within the Network. The session was kicked-off by Omar Mohammed, the coordinator of the Regional Hub for Latin America and the Caribbean (LAC) (hereafter referred to as “the Hub”), based at The Cropper Foundation. Omar gave a synopsis of the progress of the Hub so far, as well as the proposed work-plan for 2013. One of the major elements presented from the Hub was the inception meeting and training workshop on scenario

development, hosted in Guatemala in October 2012. Some of the major challenges experienced by the Hub thus far were also highlighted with one particular point raised on the issue of managing a network in a region which shares several languages, impacting not only communication, but also the dissemination of existing documentation and publications. Some other key points for consideration that were raised included: the ideal disaggregation of SGAs (thematic, geographic or otherwise); cementing a vision for the Hub(s); and management structures for Hub administration.

In looking forward to 2013, some of the proposed major initiatives for the LAC Hub include several capacity building and training workshops, expanded data gathering, and experimenting with the exchange of professionals across SGAs in the LAC region.



**Sub-Global Assessment Network**

### Who's in the Hub (countries)

Argentina, Barbados, Brazil, Chile, Colombia, Costa Rica, Guatemala, Mexico, Nicaragua, Peru, Trinidad and Tobago, Wider Caribbean




**Sub-Global Assessment Network**

### Looking ahead

- Development of work plan for 2013
  - ✓ Workshop series based on 3 major capacity needs issues (tentatively Communication/mainstreaming, traditional knowledge integration, and using the MA framework;
  - ✓ Deeper understanding of differentiation according to scales, environments, approaches to further streamline interventions
  - ✓ Donor and funding mapping for LAC;
  - ✓ Outreach, PR and expansion of Hub



Subsequent to this presentation, participants were asked to come together in their geographic regions and discuss the mechanisms and support which they might need if they were to establish regional SGA hubs. These groups were Asia Pacific, European, Latin America and Caribbean, Middle East/Arab Region.

Some of the key issues arising out of the majority of the regional groups were (see appendix 3 for full list):

- Existing networks must be utilised as a priority, and further developed or expanded to serve as a regional hub, rather than developing a brand new entity;
- A clear vision and goal for the hub must be in place to ensure its efficacy and value;
- Any establishment of a hub would need strong upfront support from the SGA Secretariat;
- There needs to be established criteria for disaggregation; in some regions there are great differences within regions based on focal areas, environments assessed and socio-political situations.

The first day's session ended after these discussions, and a short wrap-up delivered by Matt Walpole. Participants were then invited to an evening poster session and wine reception, wherein participants with posters were allotted time to do an informal presentation.

## 7.0 Emerging Perspectives

### *Exploring tools for ecosystem assessments*

Day two started with a session on 'Assessment tools', this was introduced by Lucy Wilson of the SGA Secretariat. Lucy delivered an overview of the expectations of the session, as well as an introduction on what can be generally regarded as a 'tool' for use in ecosystem assessments. The objectives of this session were to:

- Provide a brief introduction to why we need to use tools in assessments;
- Give an overview of what tools are available, and what tools are currently being used by members of the Network – with emphasis on some of the pros and cons of these tools;
- Have an open discussion regarding the strengths and weaknesses of the ecosystem assessment tool-sets based on the collective experience of the Network.



Based on the introductory presentation, it was established that ecosystem assessment tools can be considered to be a suite of models, programmes, methods and concepts that better enable the understanding of ecosystem services contributions to human well-being, by measuring, quantifying and exploring changes in environmental conditions. These tools can be used to:

- Conduct assessments of ecosystem services;
- Aid analysis within an assessment process;
- Apply the findings of an assessment process; and
- Communicate the findings of ecosystem assessments.

## 7.1 Spatial analysis to integrate ecosystem services tradeoffs into land-use options in Spain

Dr Fernando Santos Martin of the Autonomous University of Madrid, in his update on the National Ecosystem Assessment of Spain, focused on two of the current tools being utilised within the Spanish Assessment – spatial analysis, and scenarios. Within the subject-area of spatial analysis, Fernando demonstrated how the assessment has used data at a national scale to model ecosystems, biodiversity, land-use changes, demography, and ecosystem services. For example, by using spatial analysis, the assessment has shown that there is some empirical data to suggest that intensification and abandonment, with respect to land-use, does occur in parallel, showing a link between these two phenomena. In addition, Fernando outlined the process through which the national assessment undertook its scenario development process, within which approximately 259 persons from 57 organisations across all stakeholder groups were consulted towards the development of these plausible futures.

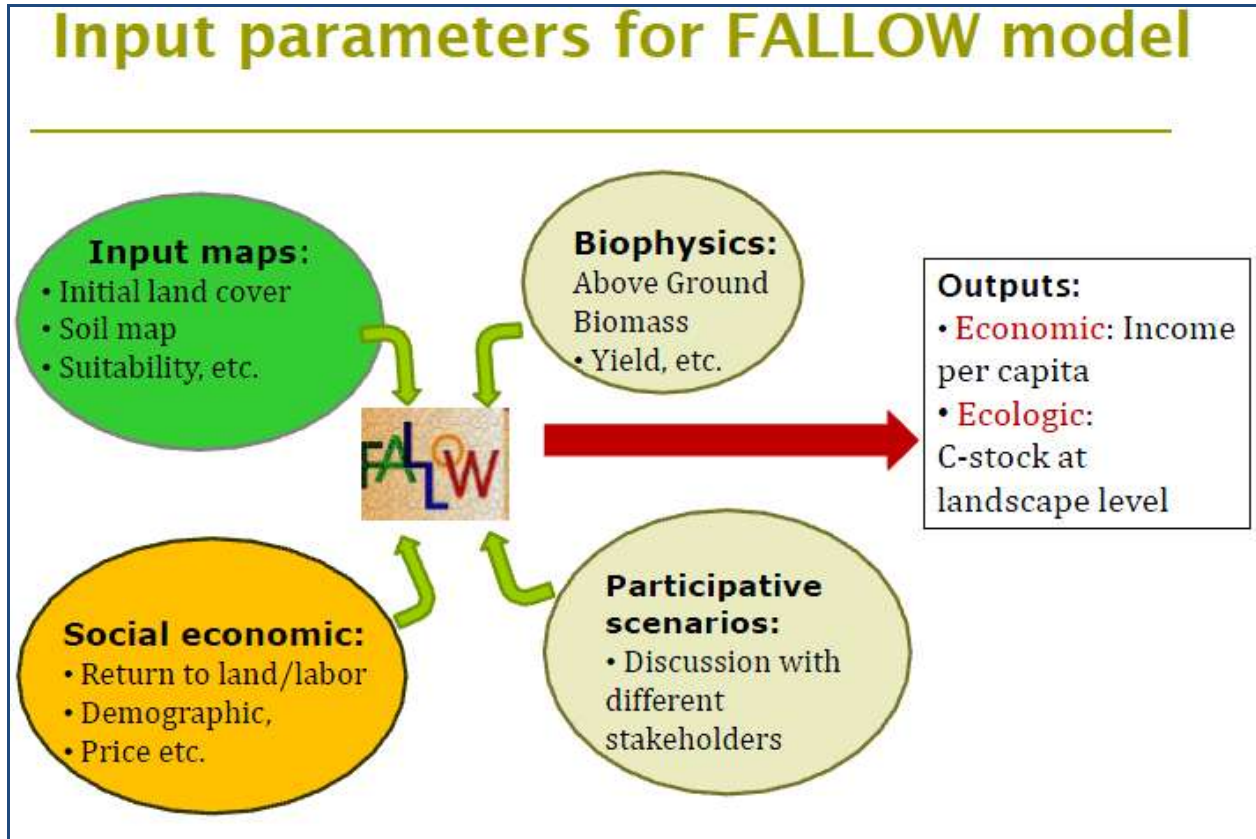


## 7.2 Low carbon emission development strategies using land-use dynamics modelling

Florence Bernard (the ASB Partnership for the Tropical Forest Margins) introduced the 'FALLOW' model, a landscape-dynamics model developed by the World Agroforestry Centre. The model focuses on:

- Impact assessment and scenario studies by simulating land-cover changes at the landscape level;
- Not only biophysical and socio-economic aspects, but also the 'knowledge' of agents as a constraint and as a dynamic property in landscapes; and

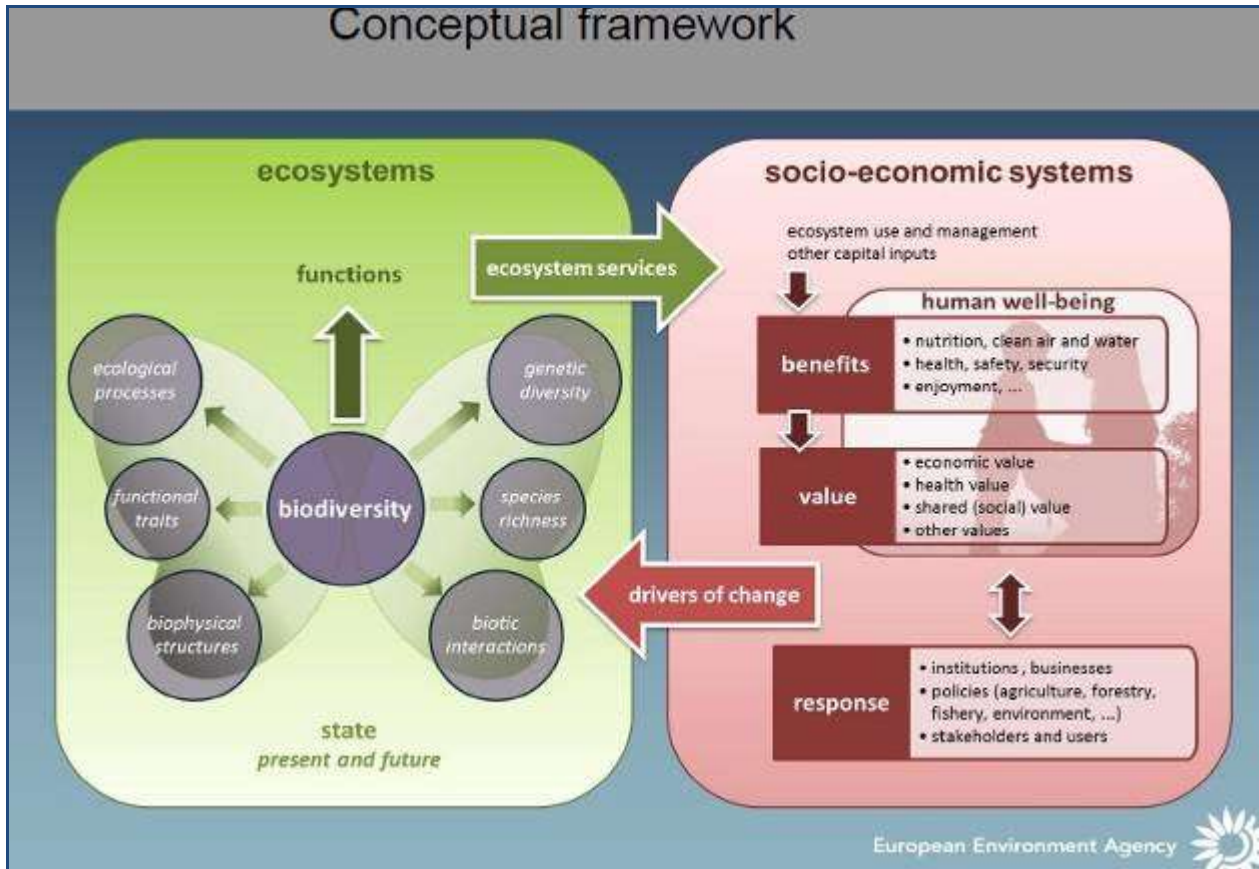
- Assisting the negotiation process between stakeholders in a changing landscape by visualising possible/likely consequences of factors.



### 7.3 Tools for assessing ecosystems in Europe

Valerie Laporte of the European Environment Agency (EEA), provided an overview of the tools currently being utilised within ecosystem assessments in Europe, guided by the EU biodiversity strategy to 2020 (Target 2, Action 5) and its concurrent working group “Mapping and Assessment of Ecosystems and their Services in Europe”. Valerie illustrated the four major steps towards the achievement of this strategy, as well as the tools being currently used and developed; these are:

- The Common International Classification of Ecosystem Services and QuickScan
- UN System of Environmental Economic Accounting, Volume II for experimental accounts
- Indicator programmes such as SEBI – Streamlining European Biodiversity Indicators
- BISE – The Biodiversity Information System for Europe



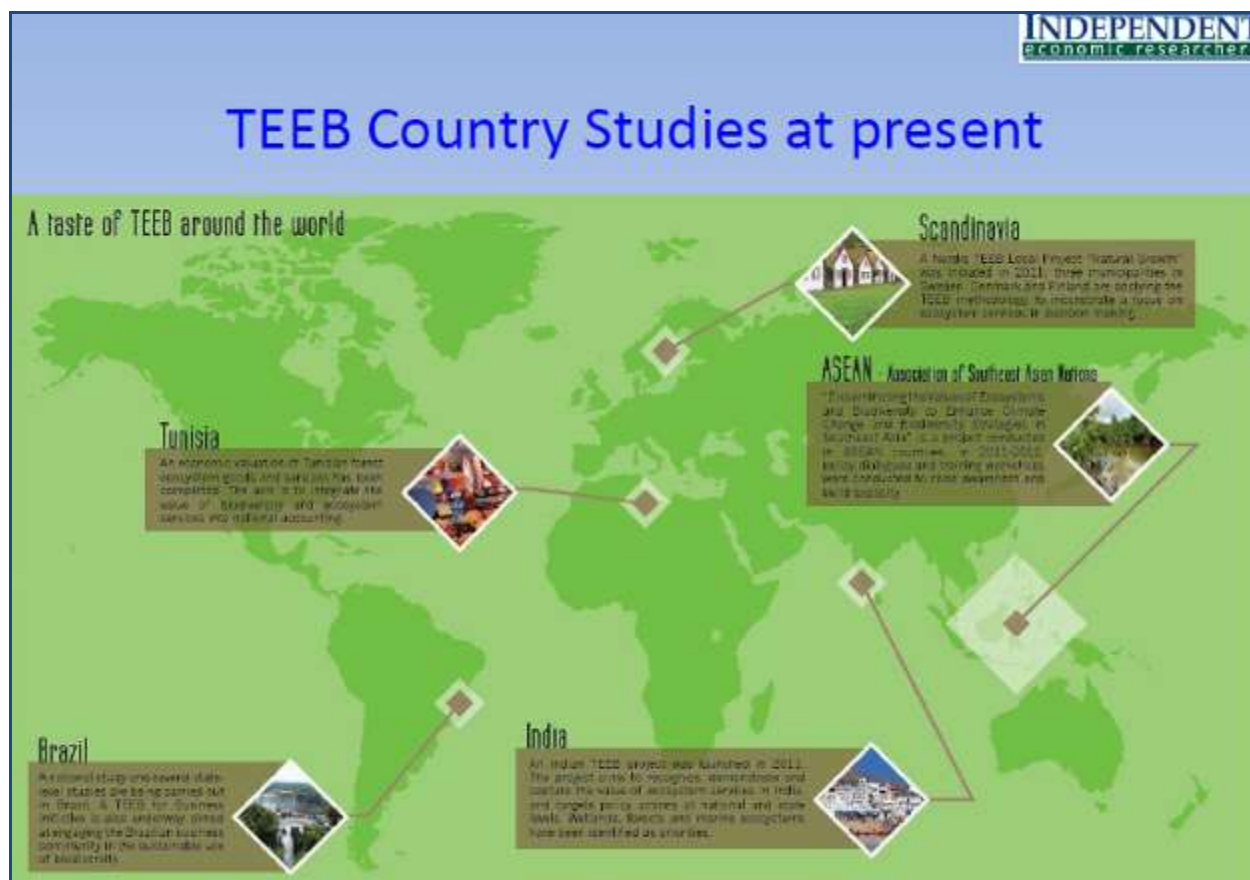
## 7.4 Development of guidance for TEEB Country Studies: Initial Thoughts

Dr Hugo Van Zyl (Independent Economic Researchers Consulting) sought to provide an overview of the TEEB Country Studies programme, its status, and some of the challenges which may be faced in its implementation.

Hugo stated that many countries are now seeking to implement TEEB Country studies, following along the lines of the initial TEEB programme, and with this there arises a need to set guidelines for what such studies ought to be, what they should entail, and the process through which they should be done, therefore ensuring levels of continuity and similarity. It was indicated that some of the key points within this thrust would be the need to recognise the value of ecosystem services (monetary or otherwise) and how best to translate such values into appropriate actions or policies.

However, a cautionary note was delivered by Hugo, in stating that such an undertaking is difficult since country contexts are undoubtedly different and factors such as size and influence on policy will differ. In addition, it was highlighted that integrating with policy processes is often difficult and a balance needs to be struck between prescription and passive reporting.





### 7.5 Interactive Session: What has the Network been using?

Subsequent to these presentations, participants were then asked to engage in a participatory and interactive discussion session regarding tools, and more specifically, the pros and cons for tools they know of or have had experience with, and what support might be given by the Secretariat to increase the usage, and understanding of these tools.

The tools were discussed along the categories of assessment stages: design and exploration; implementing the assessment; operationalisation of the assessment results and decision support; and communication and capacity building. Participants were asked to join a group to which they believed they could contribute best; they were then asked to list tools on posters representing each stage of the ecosystem assessment process. Within each group, discussions were then held to further clarify, expand or remove suggested tools, following which a presentation was made to the remainder of the plenary.

The following is a summary of these discussions:

### 7.5.1 Design and Exploration

Tools	Cons	Pros	Support Needed
<ul style="list-style-type: none"> <li>• Stakeholder engagement</li> <li>• Participatory workshop/consultation for designing and exploration</li> <li>• Meeting with the community</li> <li>• Participatory process                             <ul style="list-style-type: none"> <li>○ Interviews</li> <li>○ Surveys</li> <li>○ Workshops</li> <li>○ Feedback mechanism</li> </ul> </li> <li>• Stakeholder consultation workshop, information sharing                             <ul style="list-style-type: none"> <li>○ Stakeholder dialogue to negotiate policy questions and assessment focus</li> </ul> </li> <li>• Scoping – stakeholder exploration                             <ul style="list-style-type: none"> <li>○ Who are the key stakeholders?</li> <li>○ What is their involvement?</li> <li>○ What role should they play?</li> <li>○ Do they benefit or lose in the trade-off?</li> </ul> </li> <li>• Define the linkages between stakeholders and natural resources</li> <li>• Identify management tools of public policies already in place to insert ES assessment as an alternative approach</li> <li>• Exploratory scenario planning to identify important ES and drivers of change</li> <li>• Decide on which policies to target and ensure analyses focus on producing relevant information</li> <li>• Review existing or complementary projects</li> <li>• Inventories of important</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder workshop                             <ul style="list-style-type: none"> <li>○ Correct persons around the table</li> </ul> </li> <li>• Existing policy                             <ul style="list-style-type: none"> <li>○ Being limited within policies that currently exist</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholder workshop/engagement                             <ul style="list-style-type: none"> <li>○ Feel ownership</li> <li>○ Credibility</li> <li>○ Advocacy</li> </ul> </li> <li>• Trans-disciplinary research design</li> </ul>	<ul style="list-style-type: none"> <li>• Scoping                             <ul style="list-style-type: none"> <li>○ Communication skills and materials for buying-in potential customers of the assessment</li> </ul> </li> <li>• Core team                             <ul style="list-style-type: none"> <li>○ Policy makers</li> <li>○ Researchers</li> <li>○ Civil society</li> <li>○ Important stakeholder buy-in</li> </ul> </li> </ul>

<p>taxa groups</p> <ul style="list-style-type: none"> <li>• Land use/land cover map</li> <li>• Mapping             <ul style="list-style-type: none"> <li>○ Service delivery</li> <li>○ Cultural services</li> <li>○ Ecosystem services</li> </ul> </li> <li>• Define methodology approach based on specific objectives (biological, economic, mapping, etc)</li> <li>• Define conceptual framework</li> <li>• To motivate decision makers             <ul style="list-style-type: none"> <li>○ Use the SWOT and DPSIR frameworks to put ecosystem services in the context of participatory processes for decision making</li> </ul> </li> </ul>			
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### 7.5.2 Operationalisation/Decision Support

Tools	Cons	Pros	Support Needed
<ul style="list-style-type: none"> <li>• Scenarios</li> <li>• Trade off analysis</li> </ul>	<ul style="list-style-type: none"> <li>• Who convenes and who participates will create different results</li> </ul>	<ul style="list-style-type: none"> <li>• Multi-stakeholder deliberation reaching consensus</li> </ul>	<ul style="list-style-type: none"> <li>• Technical support</li> </ul>
<ul style="list-style-type: none"> <li>• Policy reviews and appraisal</li> </ul>	<ul style="list-style-type: none"> <li>• Working across sectors and across scales (sub-national)</li> </ul>	<ul style="list-style-type: none"> <li>• Lessons learned from previous policies (e.g. drivers for historical conditions)</li> <li>• Case studies</li> </ul>	<ul style="list-style-type: none"> <li>• Technical support on advocacy, communication specificity</li> <li>• Development of policy and planning level indicators</li> </ul>
<ul style="list-style-type: none"> <li>• Piloting actions</li> </ul>	<ul style="list-style-type: none"> <li>• Too context specific</li> <li>• Not replicable</li> </ul>	<ul style="list-style-type: none"> <li>• Learning from piloting actions</li> </ul>	<ul style="list-style-type: none"> <li>• Incentives for more</li> </ul>
<ul style="list-style-type: none"> <li>• Maps and visualisations</li> </ul>	<ul style="list-style-type: none"> <li>• Clear “one map policy”</li> </ul>		
<ul style="list-style-type: none"> <li>• Engagement of decision makers (on-going)</li> </ul>	<ul style="list-style-type: none"> <li>• Leadership</li> </ul>		<ul style="list-style-type: none"> <li>• Communication support from SGA</li> </ul>



### 7.5.3 Implementation (Doing the assessment)

Tools	Cons	Pros	Support Needed
<ul style="list-style-type: none"> <li>• Tools for mapping and spatial analysis, indicators, valuation and trade off analysis, policy dialogue, stakeholder workshops, scenarios</li> <li>• Analysis tools                             <ul style="list-style-type: none"> <li>○ Measuring status of ES, mapping</li> <li>○ Measuring value of ES, monetary and/or non-monetary</li> </ul> </li> <li>• GIS</li> <li>• Remote sensing</li> <li>• Interviews</li> <li>• Questionnaires</li> <li>• Consultation meeting</li> <li>• Indicators</li> <li>• Reviewers</li> <li>• Trainings</li> <li>• Workshops</li> <li>• Analysing:                             <ul style="list-style-type: none"> <li>○ MA/TEEB – table with ESS to explore all the actual and potential ESS</li> <li>○ GIS – tools to quantify</li> <li>○ Data on land-use and cultural use</li> </ul> </li> <li>• Community-based research, local residents are researchers (collection, analysis, interpretation)</li> <li>• Mapping cultural services (existing and potential in near future)</li> <li>• Modelling land-use using scenarios</li> <li>• Scenario development for implementation</li> <li>• Mapping/Modelling/GIS/Spatial Analysis, e.g. InVest</li> <li>• Participatory building scenarios together and analysis of policy options</li> <li>• Economic valuation identification and assessment of incentive structures driving</li> </ul>	<ul style="list-style-type: none"> <li>• Data dependent</li> <li>• Error of cultural services</li> <li>• Valuation TEEB</li> <li>• Appropriateness of a study, variation at local/regional scales</li> <li>• Success of model is data dependent</li> <li>• Modelling – high uncertainty in heterogeneous environments</li> <li>• Indicators – no consensus about the use of indicators</li> <li>• Guidance and training</li> </ul>	<ul style="list-style-type: none"> <li>• Valuation techniques                             <ul style="list-style-type: none"> <li>○ Provides some idea to the policy maker about the value of ES</li> </ul> </li> <li>• Mapping                             <ul style="list-style-type: none"> <li>○ Models and indicates to analyse the first data</li> <li>○ A good tool to start</li> </ul> </li> <li>• Indicators                             <ul style="list-style-type: none"> <li>○ Provides proxy</li> </ul> </li> <li>• GIS is a well-established tool                             <ul style="list-style-type: none"> <li>○ Data more freely available</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Yellow pages on tools                             <ul style="list-style-type: none"> <li>○ Concise</li> <li>○ In relevance to case-study</li> </ul> </li> </ul>

degradation <ul style="list-style-type: none"> <li>• Economic valuation for implementation</li> <li>• Biodiversity Indicators</li> <li>• Policy dialogues</li> <li>• Integrative approach</li> </ul>			
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### 7.5.4 Communication and Capacity Building

Tools	Cons	Pros	Support Needed
<ul style="list-style-type: none"> <li>• Mass Media</li> <li>• Social Media</li> <li>• Audio-Visual Media</li> <li>• Workshops and Training</li> <li>• Scenarios</li> <li>• Manuals and Printed Material</li> <li>• Summary for Policy Makers</li> <li>• Educational Materials, Formal, Popular</li> </ul>	<ul style="list-style-type: none"> <li>• Misrepresent</li> <li>• Cannot control interest</li> <li>• No target</li> <li>• Need to transfer technical information/messages to general public</li> <li>• Don't pay attention to your audience</li> </ul>	<ul style="list-style-type: none"> <li>• Big audience</li> <li>• Visibility</li> <li>• Raise awareness</li> <li>• Can recognise economic impact indicators</li> <li>• Listen to people</li> <li>• Awareness of future options</li> </ul>	<ul style="list-style-type: none"> <li>• Training journalists</li> <li>• Buying space/air time</li> <li>• Training on communication for scientists</li> <li>• Communication experts</li> <li>• Identify needs from stakeholders</li> <li>• Identity audiences</li> </ul>

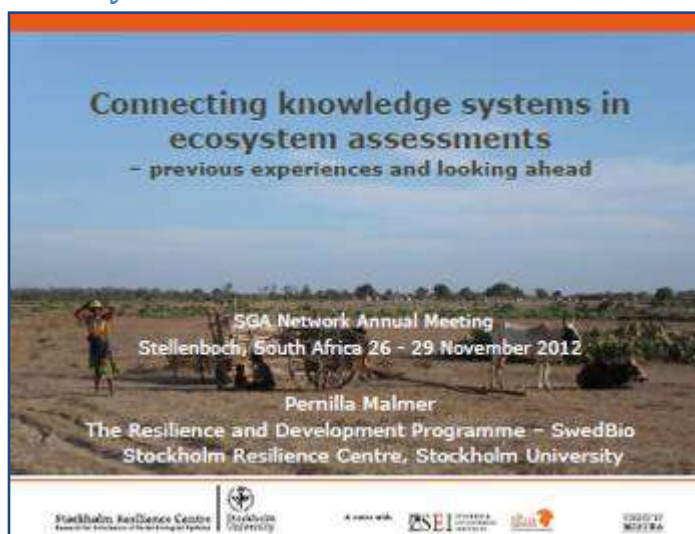
## 8.0 Indigenous, Traditional and Local Knowledge in Assessments

The second session of Day 2, focusing on emerging trends in ecosystem assessments, arose from a direct call by participants during the 3<sup>rd</sup> Annual Meeting of the Network in Bilbao, Spain, 2012. It was identified that there was a need to better understand and appreciate the role of Traditional Ecological Knowledge (TEK) in ecosystem assessments, this was therefore, included in this year's annual meeting to allow participants the forum within which they could share their experiences and build partnerships towards the better integration of TEK in assessments.

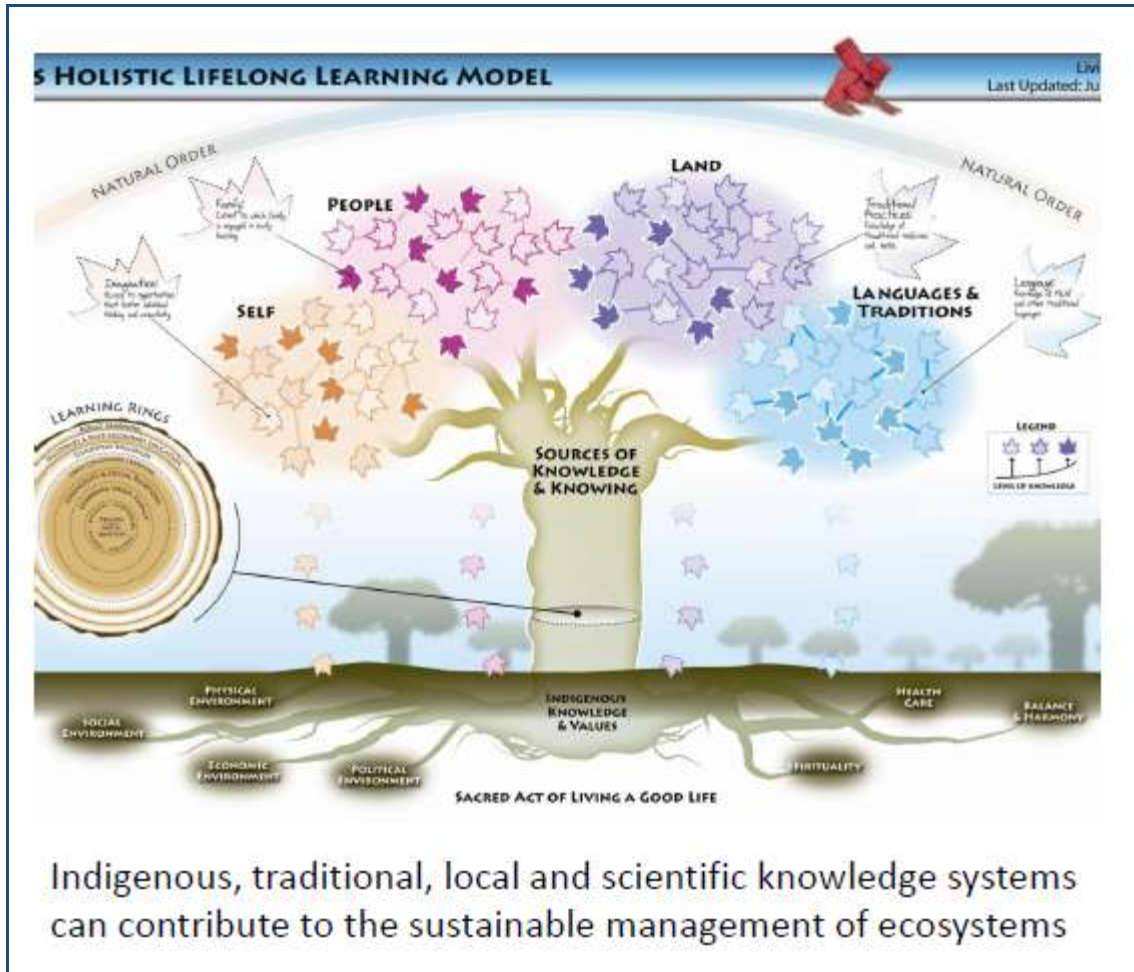
### 8.1 Connecting knowledge systems in ecosystem assessments

Dr Pernilla Malmer of the Stockholm Resilience Centre, sought to better describe the diverse approaches for exchanging knowledge, and how to improve current knowledge exchange processes within the field.

In her presentation, Pernilla stated that, from her experience, all knowledge systems are valid and can contribute to assessments by complementing each other towards better management of the



natural resources. This includes indigenous knowledge, which can be loosely defined as a common body of knowledge that has evolved from adapted practices handed down through generations. While interpretations may differ, TEK is generally defined by several core aspects which are: respect, trust, reciprocity and equal sharing, the appreciation of which can have implications for the quality of TEK received. Finally, Pernilla emphasised the three general approaches to exchanging knowledge: integration, parallel approaches, and co-production. It was emphasised that while the types of knowledge are perfectly valid on their own, attention must be paid to the process that brings them together.



## 8.2 Benefits of knowledge diversity in assessments from the community – global level

Gathuru Mburu, from the Africa Biodiversity Network, presented some general criteria that make knowledge exchange successful, and complemented this with an example of eco-mapping and eco-calendars, which have proved to be useful tools at a community level for describing assessments.

Gathuru identified several key elements for a knowledge exchange programme to be successful, which included:

- Long-term commitment;
- Respect for customs and practices;
- Modesty in relation to one's own knowledge system; and
- Free prior informed consent.



Gathuru included some examples of how community level tools, such as eco-mapping, closely follow and communicate the more academic aspects of an ecosystem assessment. For example, an ecosystem assessment focuses on historical changes/impacts, conditions and trends, scenarios and responses, whereas ‘Eco-Mapping’ seeks to map the past, present, and future, and initiate actions.

**Example of community assessment strategies:  
The Venda Community case**

**Ecological mapping**

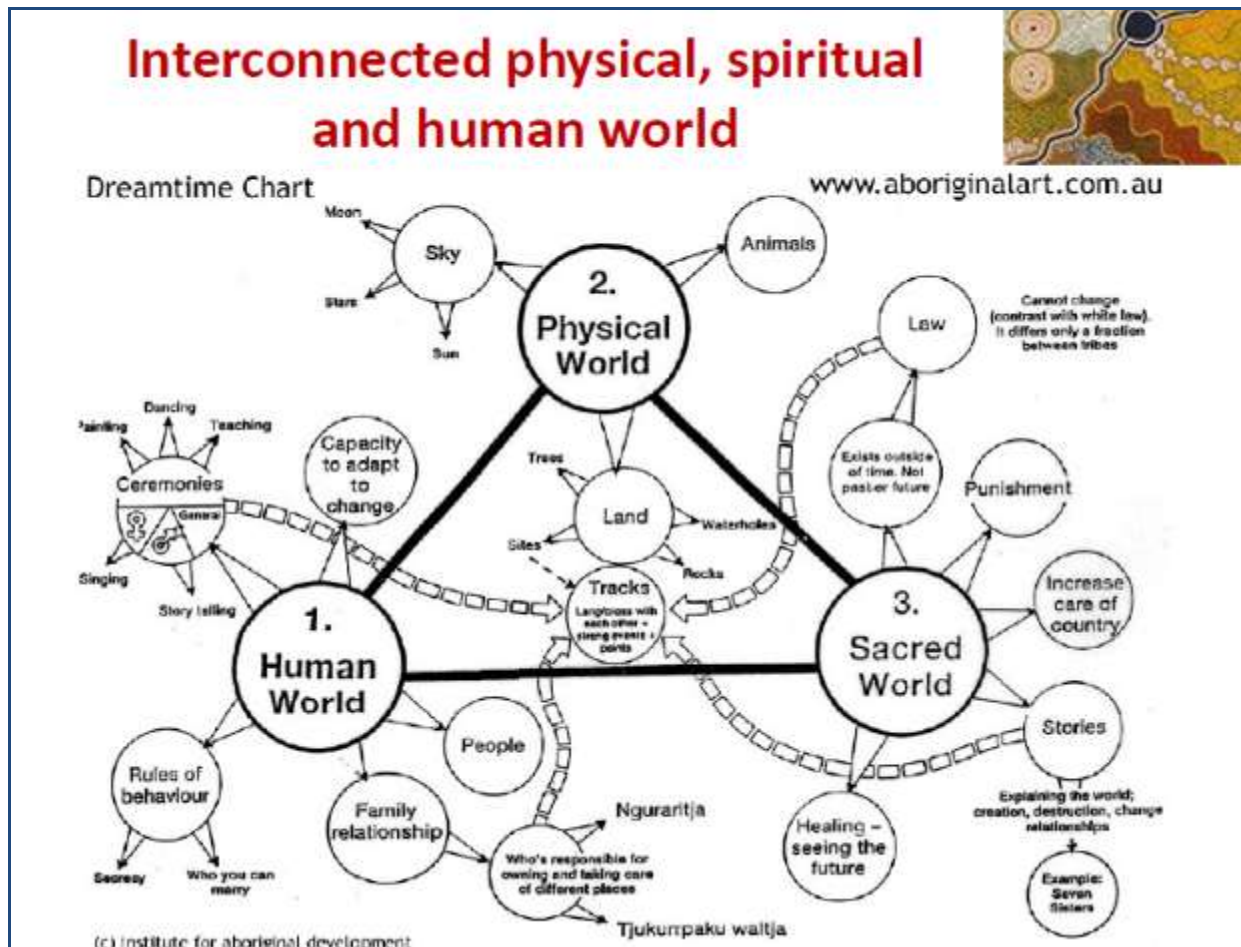
**Ecological calendars**



### 8.3 Application of TEK in examining the links between human well-being of Aboriginal people and Ecosystem Services from the tropical rainforests in North Queensland

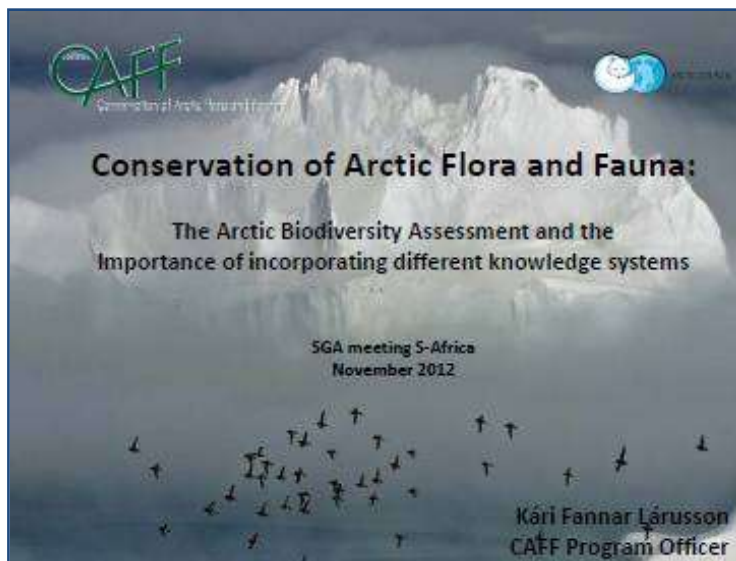
Dr Kamaljit Sangha of James Cook University, Australia, presented the perspective of TEK in the Aboriginal Australian context and the application of TEK within their MA case-study. Within this presentation Dr Sangha sought to elaborate the process through which the MA framework was applied and the results of the study, which are summarised below:

- The Mullunburra-Yidinji people’s well-being is strongly linked to the cultural and provisional services of natural resources;
- None of these attributes are considered in the well-being attributes applied by the Australian Bureau of Statistics; and
- An integrated framework that includes socio-economic and ecological attributes to accurately reflect the well-being of indigenous people must be developed.



## 8.4 The Arctic biodiversity assessment and the importance of incorporating alternative knowledge systems

In this case-study example from the Network, Kari Larusson, Programme Officer at the Conservation of Arctic Flora and Fauna Programme of the Arctic Council, provided an overview of the Arctic biodiversity assessment and the crucial role that traditional knowledge plays in this ecosystem towards the overall purpose of synthesising and assessing the status and trends of Arctic biodiversity. Within their experience, there are several benefits to be had in the incorporation of different knowledge systems, namely:



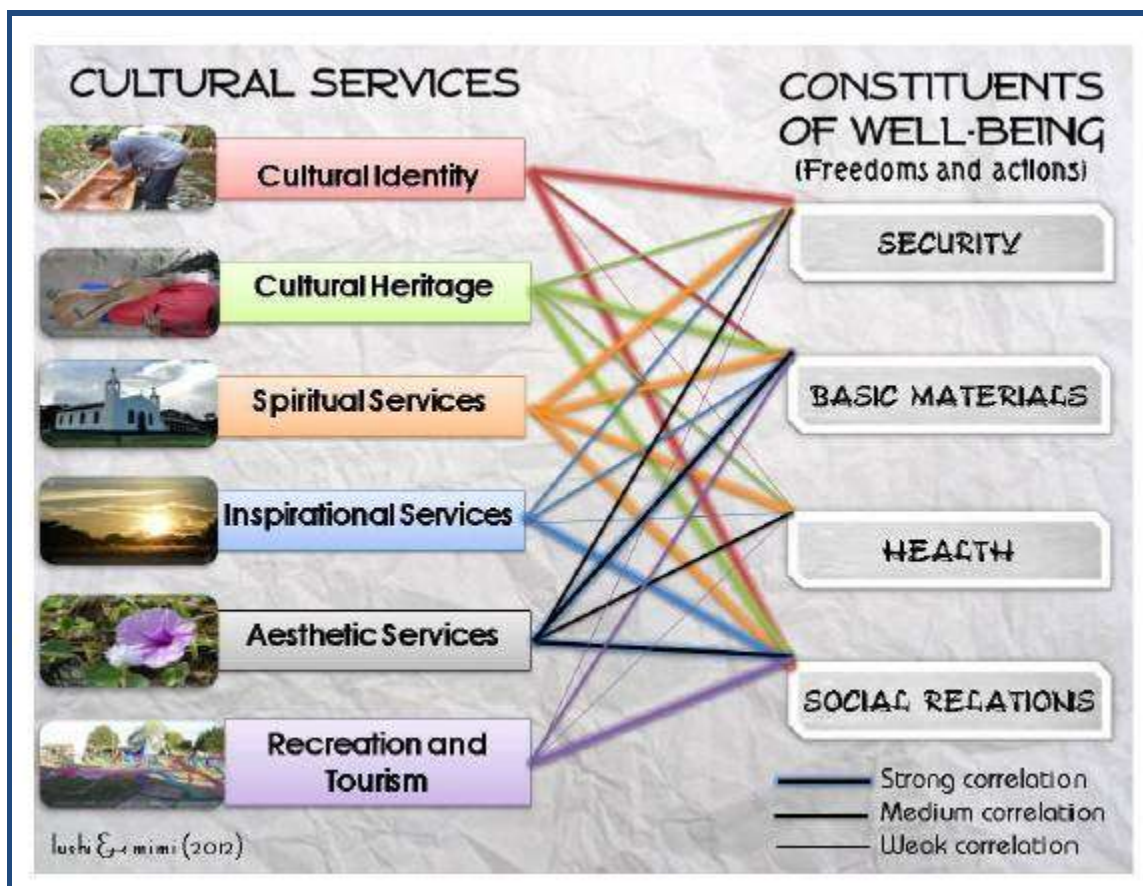
- Information from various sources increases the effectiveness of the assessment;
- Inclusion of stakeholders ensures buy in and contributes to successfully carrying out an assessment;
- TEK offers valuable insights into biodiversity, for example, identifying emerging trends and creating historical baselines;
- Identification of natural cycles in flora and fauna, and helping to identify further possible drivers of change;
- Sharing of knowledge runs both ways: knowledge holders learn from each other; and
- “Inclusion is closely related to empowerment”.

## 8.5 Traditional Knowledge in the Pantanal Millennium Ecosystem Assessment

Dr Michele Sato (Federal University of Mato Grosso) introduced a philosophical approach to the discussion on the integration of traditional knowledge into assessments. Her focus, and that of Pantanal MA, centred on the culture of the community and the ways through which dialogue between the traditional culture and conventional science can be expanded.

In her presentation, Michele emphasised that in these traditional communities, mythologies and other such manifestations of indigenous knowledge are expressions of reality, through which communities

interact with, and seek understanding about, the natural world. This ‘truth’ is crucial to their ability to understand the world around them, and any assessment that involved such traditional communities must find ways in which these ‘truths’ can be reconciled with conventional knowledge.



## 8.6 Summary of plenary discussions on Traditional Ecological Knowledge

- Many SGAs are dependent on the incorporation and relevance of TEK (for example: Thailand; Sinai; Costa Rica; Himalayas);
- TEK can serve as verification for past trends in scientific knowledge and can reveal aspects of EA that may not be tangible, such as changes in HWB and cultural aspects;
- There are several areas through which the SGA Secretariat may support the utilisation and integration of TEK, such as:
  - The development of a TEK thematic group, possibly in parallel with regional hub arrangements;
  - The production of information and education materials targeted towards indigenous and traditional people to support assessments in these contexts;

- The development of a common set of guidelines for adapting MA methodologies to incorporate TEK, *a la*, the ‘MA Methods Manual’; and
- Encouragement of the inclusion of practitioners from other complementary fields at SGA meetings, such as anthropologists and sociologists, to better facilitate the discussions through which TEK can be incorporated.

## 9.0 Adding value through mainstreaming: the use of assessment by clients

This session was chaired by Monica Lopez and Alex Forbes of UNDP-UNEP Poverty Environment Initiative (PEI). The objectives of the session were set out as follows:

- To share assessment experiences and lessons learned;
- To explore how assessments can best:
  - meet the “perceived” needs of decision-makers; and
  - influence decision-makers to lead to change.

(N.B. “decision-makers” = public and/or private sector, and national/sub-national/local)

This session was kicked-off with a double presentation on Network experiences in narrowing the science–policy interface, more specifically, on how the needs of the end users can be discerned and integrated into the research process and outputs.

### 9.1 Narrowing the gap between researchers and users

Jean Lebeau of Secretaría de Planificación y Programación de la Presidencia (SEGEPLAN), Guatemala, spoke about the current Guatemalan SGA that is underway and its linkages with the development process at the policy level. At present there is great emphasis and focus on building a ‘new’ Guatemala within the next 20 years; a change agenda has been developed, within which the SGA can be positioned to provide a sound science-based background for land-





use, land planning and ecosystem management.

This experience from the network was followed by Thailand's experience, provided by Dr Suchada Wattana from Thailand's Ministry of the Interior. Suchada outlined the new process underway within Thailand, whereby there is a move towards a more collaborative style of governance at the regional level, in which national government is joined with the private sector and civil society to create a new growth model that is participatory. Towards the achievement of this new model, which will be dependent on needs-analysis and greater planning, three pilot sites for SGAs in Thailand have been selected, these will seek to provide information and demonstrate ecosystem services to feed into this new growth and planning model.

Following these two presentations there was a short question and answer period. Some of the primary points raised in this plenary included:

- SGAs need to be more strategic in becoming policy relevant, with the appreciation of the high bureaucracy that exists in most governance systems. One example of using discrete entry points within which to place an SGA, might be the current NBSAP review process, where an SGA can be used as a tool through which country NBSAPs can be reviewed;
- Government and policy-makers should be included at all levels, starting with the co-design of the policy question to be addressed, all the way to the production and dissemination of the findings, therefore ensuring that outputs are understood and taken up by the relevant decision-makers, which include not only government, but civil society as well; and
- There still exists some doubt as to the ability and capacity of SGA teams to do all of this, given that in many instances, SGA teams simply do not have the human or financial capacity to manage such an extensive process.

An interactive group discussion session was initiated after the first round of presentations and questions. The focus of this session was directed towards strengthening the linkages of ecosystem assessments with the needs and expectations of decision-makers. Specifically, participants were asked to share good examples of, or lessons learned on:

- How assessment results better match “perceived needs”?
- Which groups/stakeholders should be involved?
- What methods could be used for analysis of the drivers, trends and trade-offs?

The resultant discussions and report-back session was held in plenary; some of the points raised included:




- There is a gap between decision-makers and end users; conducting a survey of the relevant stakeholders could be a useful tool to address this. It is also important to think strategically and

use SGAs as entry points to wider issues, for example, linking to the current NBSAP review process.

- SGAs should be co-designed with decision-/policy-makers, as part of an iterative process, such that both the science and policy sides agree on the key questions to be addressed.
  - Decision-makers should be engaged with from the outset of an assessment.
  - Key questions should recognise (and address) the policy gaps that exist.
- A consideration for the final product of an assessment: ‘report-based’ versus ‘process-based’ approaches.
- Communications should be easily understandable for policy-makers.
- It is important to engage with civil society in an SGA process; this group of stakeholders can exert significant pressure upon policy-makers.
- Caution expressed as to whether or not researchers themselves can implement the linking of science and policy circles.
- The perceived needs of assessments are not confined just to policy-makers; should also consider NGOs, universities, private sector etc.
- There was a ‘reductionist approach’ to the Guatemala assessment, this involved consideration of some non-monetary values; a multi-disciplinary analysis approach could be considered in future assessments.

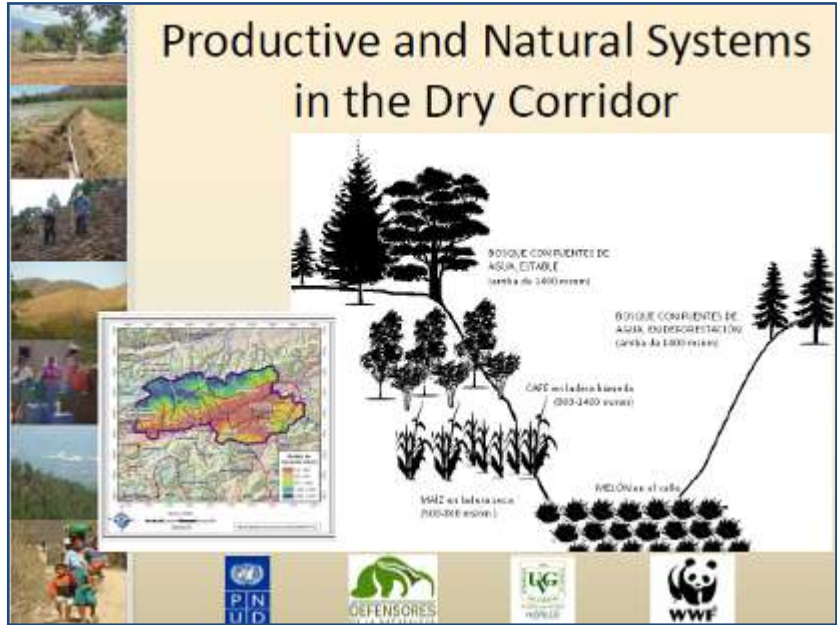
## 9.2 SGAs and National Development Planning Processes

In the first presentation, Dr Louis Lebel of Chiang Mai University illustrated the use of ecosystem assessment within the policy making environment in Thailand, specifically within three main provinces – Khon Kaen, Nan and Samut Songkhram. Within the assessment, he noted that meaningful participation of stakeholders, especially the community, remained limited, while ecosystem services in general are not often regarded with high priority. However, from a planning and policy perspective relating to poverty reduction in these key areas,

Use of assessments		
Khon Kaen	Nan	Samut Songkhram
Sub-district scenario exercises highlight non-agricultural interests and concerns  Assessment team doing related follow-up work	Advocacy by groups wanting ‘something to be done about upland Maize’  Scenario exercise used by Provincial Agricultural Office to inform its 10 year plan	Key assessment team members role in 4 year provincial plan process strengthened with evidence and community-based research experiences
		

successful ecosystem assessment can help to better understand the relationships between poor/vulnerable groups and changes in ecosystem services, which have long-term implications for growth and development in these regions.

The second presentation of this section of the session focussed on the perspective of the Guatemalan SGA experience, which was presented by Dr Edwin Castellanos. Edwin sought to describe an SGA that was closely linked to policy and decision making, with direct input from the decision-makers in the crafting of the policy question and follow-up. The SGA in Guatemala is centred on the Dry Corridor of Guatemala, which is characterised by high food insecurity, poverty and



deteriorating environmental conditions. In his presentation, Edwin outlined the assessment’s scenario building process that focused on private/public investment towards the improvement of these conditions, which resulted in the following policy recommendations: development of specific investment programmes such as ‘Forests for Water Security’; the creation of an economic fund linked to food security and agricultural protection; and, increasing the participation of ‘communities of municipalities’ in the planning and implementation process.

Deon Nel (WWF) went on to showcase the use and inclusion of assessments from the perspective of private sector business, and more specifically its usage and importance in the insurance industry in considering natural systems. The presentation focused greatly on the African concept of ‘Ubuntu’ and its relation to the ability of business to contribute to sustainability.



# Ubuntu

*A person can only be a person through others*



*“Ubuntu does not mean that people should not enrich themselves. The question is: Are you going to do so in order to enable the community around you to be able to improve?”*

President Nelson Mandela

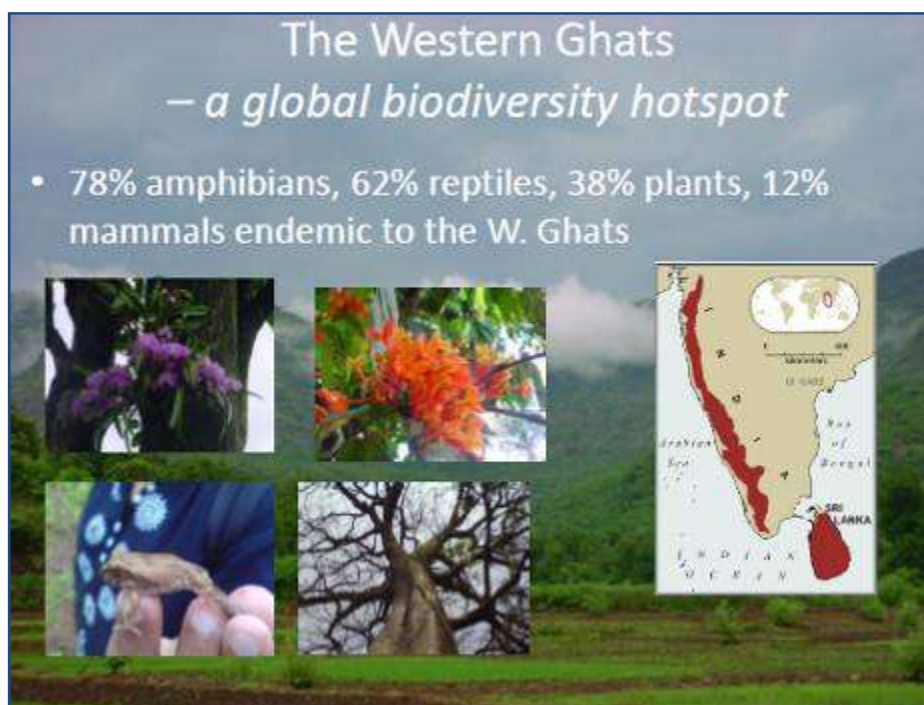


## The Ubuntu of Business

1. **Identify business Motives**
2. **Identify leverage points for Shared Value Creation with society**
3. **Use a network approach to enhance the Self-organising capabilities of the system**

Jayant Sarnaik (AERF India) closed this session by taking participants through a process in the Western Ghats of India, where ecosystem assessments are being used in the demarcation of ‘Ecologically Sensitive Zones’, towards eco-regional economic development. Jayant stated that *“Eco-regional Economic Development (EED) is a spatial concept aimed at integrating economic development and biodiversity conservation within the boundaries of a defined geographical area”*.

Jayant went on, stating that overall, these zones are meant to: control ecological damage to the Western Ghats; maintain a balance between economic development and ecological sustainability; and identify areas of rich biodiversity and cultural importance within the Western Ghats.



### 9.3 Mainstreaming wrap-up

This session was closed by the delivery of a few remarks by the Chairs, discussing how SGAs can best influence decision-making, and posing an open-ended question to the participants: *“what more can be done to support SGAs in mainstreaming initiatives?”*

## 10.0 Capacity Building Workshop on developing Ecosystem Service Indicators

As one of the key areas for capacity development called for by participants at the 3<sup>rd</sup> Annual Meeting of the Network, Biscay, Spain, the final day of the 4<sup>th</sup> Annual meeting was dedicated to examining the current usage and applicability of ecosystem service indicators. The session kicked-off by looking at how indicators have been developed and used within several scenarios, such as: modelling and measuring ecosystem services and impacts on human well-being; metrics; the relationships between indicators and global biodiversity policy within the Aichi targets; and, generally approved processes for indicator development.

This introductory session was facilitated by Dr Matt Walpole of UNEP-WCMC and Dr Belinda Reyers of CSIR South Africa. Matt set the stage by illustrating, in general, the principles behind an indicator, using the annual meetings of the SGA Network as an example of what must be considered when developing indicators.

One of the main points of the introductory presentation was the focus on the relationship between the development of an indicator and a policy question that must be answered. While in many instances, researchers begin by looking at the data available, the process should begin with a question that must be answered, be it policy-oriented or otherwise. In his example of the SGA annual meetings, Matt posed the question – “Are these SGA meetings useful?” In illustrating a range of responses to this question, Matt elaborated on several possible indicators, such as:

- Has the network obtained more funding from donors over the past four years, and can this be used as an indicator of success?
- Can the increasing number of participants be used as an indicator of workshop value?
- Can general surveys be used as an indicator of met-expectations?
- Would a more in-depth and specific survey get to the heart of the meetings’ value to participants?

It was clear that each question depended on a different set of data, and therefore none can definitively answer the overall question posed. While the interpretation of data in response to the question might always be subjective, the onus lies on the researcher to be rigorous in ensuring that their question can be answered by the indicators they propose.

Belinda then took the baton from Matt and delved deeper into the applications of indicators to ecosystem services, based on experiences from South Africa and GEOBON. Belinda pointed out several key challenges that must be taken into account when carrying out such a process:

- The lack of generally accepted definitions for ecosystem service indicators;
- An inadequate tool-box of approved ecosystem service indicators;



- The inherent complexity of ecosystem services poses as a challenge to developing holistic indicator-sets for measuring ecosystem services and human well-being impacts; and
- That there is often an embarrassment of riches when it comes to available datasets and measures for the wide range of factors within ecosystem service assessment, but often there are inherent problems such as scaling, temporal relevance and establishing linkages between systems.

However, in wrapping up, the facilitators emphasised that the ecosystem service indicators field is still evolving and there exists large scope for further development and utilisation of the ever increasing availability of data that is being generated by ecosystem assessments and other related initiatives.

Following the introductory session, there was a lengthy plenary discussion on the ecosystem service indicator environment, and those indicators currently being used by SGAs. Many of the questions posed to the facilitators and the general audience focused on: scale and issues of data complexity; the applicability and usage of existing models (such as InVEST) in different country contexts; the issue of where nascent countries/assessments should start in the development process and what resources exist to guide them; and how can critical areas, such as cultural services and human well-being, be appropriately measured and integrated?

The facilitators then sought to answer and corral responses to these questions, the summary of which is provided below:

- The development of indicators should not wait on perfect datasets, as such a thing may never really come to exist;
- Indicators should be used to address questions as best as they can – the key lies in posing the right questions;
- It should be noted that the defining and elaboration of gaps in data is critical in informing and improving data collection and assessments; and
- Certain challenges may never completely go away, such as scale and data quality and these factors must always be considered in the development of any dataset.

## 10.1 Group Interactive Exercise – The National Ecosystem Assessment of the country of Torbveld

In this penultimate activity, participants were introduced to a fictional country, *Torbveld*, from the perspective of a fictional ecosystem assessment practitioner. In this scenario, groups were given a particular focal area, centred on ecosystem assessment, and asked to work through several exercises with the final goal of developing a set of indicators for this focal area (tourism and forests, for example).

This 5-hour activity concluded with group presentations highlighting the results of the group work, followed by a brief synopsis and synthesis of the experience working on such an indicator exercise. The following excerpts from the indicator workbook give a sample of what was used and undertaken.

### Background

The year is 2012 and Reg Nelson is a scientific advisor to the government of Torbveld, leading a team at the Ministry of Environment (MoE).

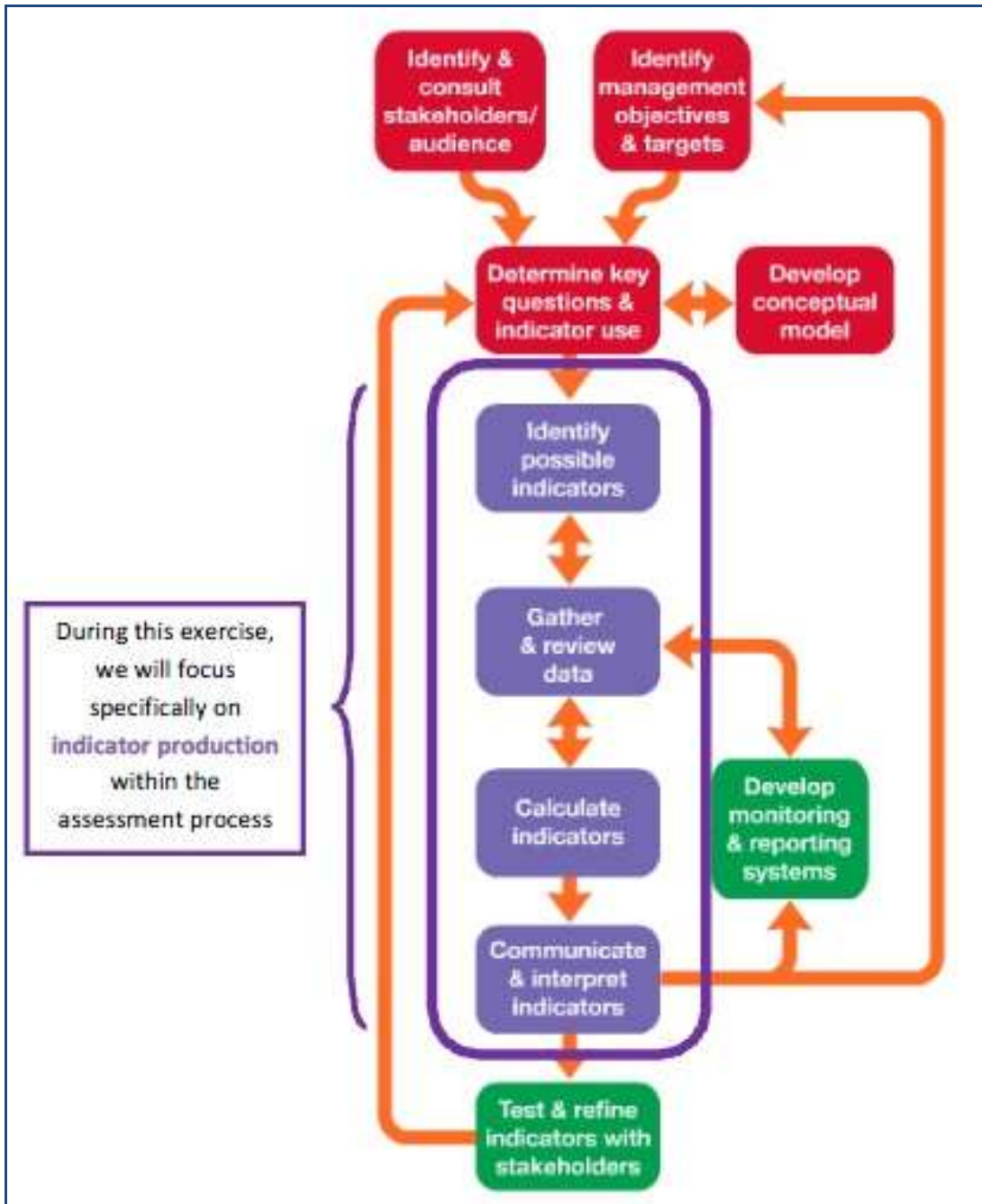


Torbveld is a developing country, and a signatory to a number of international environmental conventions, including the Convention on Biological Diversity (CBD), the United Nations Framework Convention on Climate Change (UNFCCC) and the United Nations Convention to Combat Desertification (UNCCD). In line with these international obligations, Torbveld's government has recently outlined new ambitious plans to achieve sustainable urban development, without environmental degradation.

This policy revision has led to a call for a better overall understanding of Torbveld's natural resources and their contribution to society. As a result, Reg has been commissioned to conduct a national ecosystem assessment, to provide the government with information to guide future policies. Reg is the overall co-ordinator of the project and, together with his team, is faced with the challenge of identifying and communicating the links between biodiversity, ecosystem services and human well-being.

Reg and his team are some way through the ecosystem assessment process. The exploratory stage has been completed and comprehensive **stakeholder consultation** helped to identify the overarching policy-relevant question for the assessment, based on the current cultural, environmental and socio-economic issues in Torbveld:

*How can urban development be better integrated with conservation efforts, to achieve development which is sustainable and enhances and maintains human well-being in the long term?*



## Communicate and interpret indicators

With most of the technical work completed, Reg reiterates to the working groups that indicators are primarily **communication tools** to help people understand complex issues. This means they need to be **presented** and **interpreted** appropriately for their intended audience.

He reminds each group that **text** needs to accompany the presentation of an indicator, including an explanation of **indicator purpose** and **interpretation of trends**. Communication of indicators should be designed in the form of a '**story**' or narrative about the subject, with additional information to put the indicator in context. Keep information **simple** and **useful**.

### Exercise 5

The working groups now think about how they can present their indicator and interpret trends.

1. Focussing on the same indicator selected in exercise 4, discuss in your groups how the indicator could be communicated and presented. In particular, think about the following questions:
  - i. Who is the *target audience(s)*?
  - ii. *Why* are they being targeted?
  - iii. How *familiar* with the subject is the audience?
  - iv. What *other information* might be available for the indicator subject?
  - v. What *medium* will be used to communicate the indicator?
  - vi. Will the indicator be best presented *visually*, for example using a map or graph?
2. Write down key points for communicating and interpreting the indicator in the space provided below
3. Discuss and invent an initial 'storyline' to explain the indicator and any trends. Write down a possible story line in the space provided below
4. Sketch a diagram (e.g. graph or map) if this is suitable for presenting your indicator
5. Identify a spokesperson and report back

## 11.0 Conclusion, and the way forward

At the end of the 3<sup>rd</sup> day, the meeting was brought to a close by Dr Matt Walpole of the SGA Secretariat. Matt synthesised and encapsulated the three days of reflection, interaction and forward-thinking with a special focus on the work of the members of the Network. It was also emphasised that the Network has grown and is continually growing from strength-to-strength, and that there is a collegiality that has developed and has become a trademark of the Network and its members.

In looking forwards, there still remains much to do from the perspective of the Secretariat; the following is a synthesis of both opinions expressed in plenary and group sessions, as well as from the ideas board installed during the course of the meeting (this can be found in its entirety in Appendix 4):

- Develop a strategy for communication and engagement with policy-makers, governments, knowledge holders, and other non-specialists;
- Improve quality and value of assessments;
- Improve outreach and web presence;
- Expand support for hubs;
- Facilitate training and capacity building;
- Create strong link to IPBES;
- Characterise relationships with other networks;
- Improve methodology; and
- Various suggestions tabled for future annual meetings.

## 12.0 Evaluation

Following the conclusion of the meeting, evaluation forms were distributed to all meeting participants to gain feedback on the overall organisation and content of the meeting. There was a generally positive response to the overall organisation, structure and outcomes, with some insightful suggestions for future meetings and workshops. This information is primarily for the benefit of the Secretariat in order to direct future Network activities, however further information is available on request ([assessment@unep-wcmc.org](mailto:assessment@unep-wcmc.org)).

## 13.0 Acknowledgements

The SGA Secretariat wishes to express their thanks and gratitude to all of the participants for their enthusiastic input throughout the whole meeting. We are grateful to all members of the Council for Scientific and Industrial Research (CSIR) for their assistance in organising this event. Financial support from the European Commission, the Swedish International Development Cooperation Agency and the United Nations Environment Programmes is also gratefully acknowledged.



## Appendices

### Appendix 1: List of Attendees

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## Appendix 2: Meeting Programme

### Meeting Objectives

1. To showcase progress and achievements of the network and its members throughout 2012 and outline a vision for 2013.
2. To continue to share information, lessons and experiences of undertaking ecosystem assessment
3. To highlight emerging tools, concepts and issues in the evolving field of ecosystem assessment

<b>Monday 26<sup>th</sup> November 2012 (Day 1 – An update on progress)</b>			
08.30-09.00	<b>Registration at conference venue</b>		
09.00-09.30	<b>Opening session</b>	Welcome remarks	Matt Walpole (UNEP-WCMC) Belinda Reyers (CSIR) Neville Ash (UNEP) Fundisile Mketeni (DEA, SA)
<b>As a whole – Progress of the network</b>			<i>Facilitator: Matt Walpole</i>
09.30-09.50	<b>Introduction to session</b>	Including round table introductions	Secretariat
09.50-10.10	<b>An update from The Secretariat</b>	Presentation with Q&A	Matthew Ling (UNEP-WCMC)
10.10-10.30	<b>An update on IPBES</b>	Presentation with Q&A	Neville Ash (UNEP)
10.30-11.00	Coffee break		
11.00-11.10	<b>Contribution of UNESCO Biosphere reserves to assessments and the Network</b>	Presentation with Q&A	Meriem Bouamrane (UNESCO)
11.10-12.00	<b>Discussion on where members would like to see the direction of the Network for 2013 and beyond</b>		All
<b>As individuals– Progress updates from the SGAs</b>			<i>Facilitator: Claire Brown</i>
12.00-12.30	<b>Assessment activities in South Africa</b>	Presentation with Q&A	Belinda Reyers & Amanda Driver (CSIR) (SANBI)
12.30-13.00	<b>Updates from selected SGAs</b>	Individual presentations	
		Ecosystem services evaluation approach:	Vytautas Naruševičius

		selecting of the protected area as one of the pilots for further national assessment in Lithuania (10mins)	(EPA, Lithuania)
		Lessons and Experiences from Japan <i>Satoyama Satoumi</i> Assessment (10mins)	Koji Nakamura (UNU)
		Q&A	
13.00-14.00	Lunch		
<b>As individuals cont.</b>		<i>Facilitator: Keisha Garcia</i>	
14.00-15.30	<b>Updates from selected SGAs</b>	Individual presentations	
		Landscape Diversity and Ecosystem Services in Agricultural Ecosystems: Implications for Sustainable Growth and Rural Poverty in China (10mins)	Xiangzheng Deng (CAS)
		Sao Paulo Greenbelt SGA: lessons learned, partial findings and challenges (10mins)	Rodrigo Victor ( <i>São Paulo</i> State Forest Institute)
		Arab Millennium Sub-global Assessments, Lesson Learned (10mins)	Adel Farid Abdel Kader (UNEP-ROWA)
		Q&A	
		Land management relationships to ecosystem services: Lessons from regional research projects (10mins)	Ralf Seppelt (Helmholtz Centre for Environmental Research UFZ)
		A model for assessing the environmental impact of agriculture on ecosystems: A 12-year experience in Argentina (10mins)	Ernesto Viglizzo (INTA)
		Bundles of Ecosystem services: support for optimising sustainable land-use (10mins)	Kees Hendriks (Wageningen University)
		Linking MA global scenarios to local scenario planning; a participatory approach from the Biscay SGA (10 mins)	Igone Palacios and Aitana Uria (UPV/EHU)
		Q&A	

15.30-15.40	<b>Concluding remarks</b>		Facilitator
15.40-16.00	Coffee break		
<b>As hubs</b> – Progress updates from the SGAs			<i>Facilitator: Matthew Ling</i>
16.00-16.20	<b>An update from the regional hubs</b>	Presentation with Q&A	Omar Mohammed (The Cropper Foundation)
16.20-17.20	<b>Moving forward with hubs</b>	Interactive group discussions with feedback to plenary	All
17.20-17.30	<b>Concluding remarks</b>		
<i>Evening: 18.30</i>	Pre-dinner drinks reception and poster session, followed by dinner in The Spier Hotel Restaurant		

<b>Tuesday 27<sup>th</sup> November 2012 (Day 2 – Emerging perspectives)</b>			
<b>Assessment tools</b> – <i>Discussing the latest tools in ecosystem assessment</i>			<i>Facilitator: Dolf de Groot</i>
09.00-09.10	<b>Introduction to session</b>		Secretariat
09.10-10.00	<b>Sharing tools</b>	Presentations: Ecosystem assessment tools from the network	
		Spatial analysis to integrate ecosystem-services tradeoffs into land-use options in Spain (10mins)	Fernando Santos Martin (Autonomous University of Madrid)
		Low carbon emission development strategies using land-use dynamics modelling (10mins)	Florence Bernard (ASB)
		Tools for assessing ecosystems in Europe (10mins)	Valerie Laporte (EEA)
		TEEB Guidance Manual	Hugo Van Zyl (Independent Economic Researchers consulting)
		Q&A	
10.00-11.00	<b>Discussion on tools</b>	Interactive group discussions with feedback to plenary - Which tools are being used? - Pros and cons - Support required - Gaps	All
11.00-11.10	<b>Concluding remarks</b>		Facilitator



11.10-11.30	Coffee break		
<b>Traditional knowledge – Introduction to indigenous, traditional and local knowledge in assessments</b>		<i>Facilitator: Million Belay</i>	
11.30-11.40	<b>Introduction to session</b>		Secretariat
11.40-11.50	<b>Connecting knowledge systems in ecosystem assessments</b> - previous experiences and looking ahead to IPBES	Presentation with Q&A	Pernilla Malmer (SRC)
11.50-12.00	<b>Benefits of knowledge diversity in assessments from community to global level</b>	Presentation with Q&A	Gathuru Mburu (ABN)
12.00-12.20	<b>Eco-mapping based on indigenous and local knowledge</b> - experiences, scenarios and community responses from the Venda Community, South Africa	Presentation with Q&A	Mphatheleni Makaulule & Mashudu Rubson Dima (Venda community)
12.20-13.00	<b>Using indigenous knowledge</b>	<b>Presentations: Case-study examples from the network</b>	
		Lessons from indigenous communities - how to realise our connections with nature and live sustainably (10mins)	Kamaljit Sangha (James Cook University)
		The Arctic Biodiversity Assessment and the importance of incorporating alternative knowledge systems (10mins)	Kari Larusson (CAFF)
		Traditional Knowledge in the Pantanal Millennium Ecosystem Assessment (10mins)	Michèle Sato (Pantanal Research Centre & Federal University of Mato Grosso)
		Q&A	
13.00-14.00	Lunch		
14.00-14.50	<b>Discussion on traditional knowledge cont.</b>	Interactive group discussions with report back to plenary - Challenges and solutions with TEK <ul style="list-style-type: none"> <li>- Where is TEK being used?</li> <li>- How it is being used?</li> <li>- How to take TEK forward <ul style="list-style-type: none"> <li>- Interfaces - bridging the gap between knowledge systems</li> </ul> </li> </ul>	All

		- Support required	
14.50-15.00	<b>Concluding remarks</b>		Facilitator
15.00-15.15	Coffee break		
<b>Mainstreaming – The use of assessments by clients</b>		<i>Facilitators: Alex Forbes and Monica Lopez</i>	
15.15-15.25	<b>Introduction to session</b>		Facilitators
15.25-15.50	<b>Narrowing the gap between researchers and users : Identify and meet the needs</b>	Presentations and Q&A: <ul style="list-style-type: none"> <li>- Needs of decision-makers</li> <li>- Expectations and uses of assessments</li> <li>- Approaches for addressing needs and expectations</li> </ul>	Jean Lebeau (SEGEPLAN Guatemala) Suchada Wattana (Ministry of Interior, Thailand)
15.50-16.50	<b>Strengthening the linkages of ecosystem assessments with needs and expectations of decision makers</b>	Interactive group discussions with report back to plenary <ul style="list-style-type: none"> <li>- Formulating a policy question</li> <li>- Scenario analysis</li> <li>- Target and stakeholder groups</li> </ul>	All
16.50-17.50	<b>Feeding into the national development planning process</b>	<b>Presentations: Case-study examples from the network</b>	
		Assessments of ecosystem services and human wellbeing: potential and limitations for strategic regional planning in Thailand	Louis Lebel (Chaing Mai University) & SGA Thailand
		SGA of the Dry Corridor in Guatemala: Environmental Services, Productivity and Human Well-Being (10 mins)	Edwin Castellanos (Universidad del Valle de Guatemala) & Miguel Martinez (WWF Guatemala)
		<b>Q&amp;A</b>	
		Ecosystem service integrity and business risks (10 mins)	Deon Nel (WWF SA)
		Biodiversity assessment – an important decision support tool for eco-regional economic development in the North	Jayant Sarnaik (AERF)

		Western Ghats. (10 mins)	
		Q&A	
17.50-18.00	Concluding remarks		Facilitators
Evening: 19.30	Buffet dinner in Moyo		

<b>Wednesday 28<sup>th</sup> November 2011 (Day 3) Capacity Building Workshop on developing Ecosystem Service Indicators</b>			
09.00-09.10	Introduction and objectives		Secretariat
<b>Measuring ecosystem services</b>			<i>Facilitator: Hal Mooney</i>
09.10-09.40	<b>Measuring ecosystem services from supply to value</b>	Presentation with Q&A - Current approaches for measuring and modelling ecosystem services - Capturing links to human well-being - Collecting data - The importance of indicator metrics	Belinda Reyers & Bob Scholes (CSIR)
<b>Ecosystem service indicators – Current approaches and a framework for future development</b>			<i>Facilitator: Hal Mooney</i>
09.40-10.45	<b>What is an ecosystem service indicator?</b>	Group discussions on ecosystem service indicators currently used by the SGAs - What is an ecosystem service indicator - Identify existing indicators - Discuss how they are used - Discuss pros and cons Report back to plenary	All (in groups)
10.45-11.00	<b>The Nature Index – An example from the network</b>	Presentation with Q and A - An introduction to the nature index and its relationship to ecosystem services - Online database - Indicators and Aichi targets	Signe Nybø (NINA)
11.00-11.20	<b>An introduction to a framework for indicator development</b>	Presentation with Q and A - A step-by-step guide for indicator development	Matt Walpole (UNEP-WCMC)
11.20-11.40	Coffee Break		
11.40-13.00	<b>Developing ecosystem service indicators</b>	Group exercise to include:	All (in groups)

		<ul style="list-style-type: none"> <li>- Key questions</li> <li>- Identifying indicator(s) to answer key questions</li> <li>- Reviewing data</li> <li>- Communicating indicators</li> <li>- Issues and challenges</li> </ul>	
<i>13.00-14.00</i>	Lunch		
<i>14.00-15.00</i>	<b>Developing ecosystem service indicators cont.</b>	Group exercise continues	All (in groups)
<i>15.00-15.15</i>	Coffee Break		
<i>15.15-16.45</i>	<b>Developing ecosystem service indicators cont.</b>	Group exercise continues with report back to plenary	
<i>16.45-17.00</i>	<b>Concluding remarks</b>		Facilitator
<i>17.00-17.30</i>	<b>Wrap up and Close</b>		Secretariat
<i>Evening: 19.30</i>	Braai dinner in the Courtyard		
<b>Thursday 29<sup>th</sup> November 2011 (Day 4) Field Trip – Ecosystem Service Sites around Cape Town</b>			
<i>09.30-20.30</i>	Full day field trip – Leaving after breakfast and returning after dinner		

## Appendix 3: Summary of Regional Hub discussions, by geographic group

### Africa

- Objective and value of hub?
- Where to from here? Start small and see versus let's start one and as it grows see if it needs to be broken down.
- Synthesis of what is going on in Africa (like an Assessment of Assessments)
- Facilitate capacity building – some are doing this versus others are not engaged as many researchers, practitioners, ESS community
- Develop capacity to do assessments i.e. encourage ownership of process
- Facilitate training of post docs
- How to implement?
- Need both people as well as funding for work
- Use existing networks
- Use workshops to grow the network
- Collaborations to build capacity to develop proposals

### Asia Pacific

- Update initial concept for AP hub
- Enhance capacity in region to undertake EAs
- Need to focus goal to using EA in policy planning
- Mechanism for communications in hub
- Proposal to be drafted for AP hub – using Japanese capacity
- Need \$ for meeting
- Collaborate research among members
- Sharpen tool
- Chinese Academy willing to host 1<sup>st</sup> meeting

### LAC

- Mainstreaming EA into decision-& policy-making – capacity development priority
- Diverse SGA focus in LAC – enhance sharing & learning
- Crystallise goals/objectives
- Expansion of mapping of civil society & private sector

### European

- Identify all networks already in existence
- Hub will harmonise initiatives
- Platform for scientists and policy makers to meet
- Map ESS trans-boundary
- How formal should the hub be?
- Do a TEEB-type assessment by 2020?

### Middle East/Arab region

- Using existing networks as a priority



- Build vision with stakeholders
- Secretariat must meet certain criteria to run the hub – mandate of institution? This must meet the needs of the hub. Capacity of institution?
- Institutional set-up in the regions must be defined
- Regional hub progress desired – support to multi-scale assessment
- Need resources to implement
- Need UNEP support from region

## Appendix 4: Future Directions – SGA Network Annual Meeting 2012

### **Develop strategies for communication and engagement with policy makers and other non-specialists**

- How to cascade lessons at SGA to policy makers and our government systems
- Need a communication strategy – use of website, approach to policy makers
- To influence government through SGA network (that are not involved in the Assessment yet)
- Better sharing of information and exchange on policy influence experiences – lessons learned and experiences in network, must be better articulated and documented, SGA Network could be better placed to facilitate dialogues at the science-policy interface
- Government engagement, links to national government
- More policy maker engagement, create a strategy for that audience – “clients”, though IPBES?, How many are present in this year’s meeting?
- Role of civil society?
- Supporting assessment on how to engage with policy makers
- SGA to help build knowledge base for assessment with indigenous people (TEK)
- Masters courses made available to non-ecologist/non-environmental graduate
- SGA play a role in improving communication of ES
- Policy/Practice and scientist reciprocal exchange visits, SGA facilitates matching and activities
- Strengthen dialogues between knowledge systems

### **Improve quality and value of assessments**

- Develop global network of “show cases” demonstrating that/how SGA (ES assessments) make a difference in practice – link with MAB and ESP
- Need to prioritize issues for assessment – geographical, thematic; identify gaps and address these with capacity in network
- Comparative studies of sub-national ES assessments focused on science-policy interaction (eg expert vs policy-driven)
- Help fill some of geographic gaps through resources and capacity in regions
- Make sure that analysis of assessments is delivered through the SGA Network
- Make “inventors” of examples where SGAs made a difference in policy and practice (and make available through SGA website)
- Distilling/dissemination of MA/SGA findings and information on a greater scale – providing resources for education, public, and policy makers
- Cultural values integration
- Genetic sources(?)
- Support for practice methodologies for connecting knowledge systems

- Address rigor and scientific credibility of process and outputs , rules and procedures to be developed based on MA documentation
- Need to identify key research questions for the network to help data collection process (common framework)
- Up-scaling from local to global
- More focus on scenarios development by the SGA Network
- Continuing to link biophysical and economic assessments
- Lack of existing national expertise in Francophone countries (esp. Morocco) – need to draw on existing available networks nationally
- Incorporating ES assessments in to NBSAP revision
- SGA secretariat should again start accreditation – approved and associated SGAs

#### **Improve outreach and web presence**

- More information on SGAs on websites, esp. their objectives
- Identify fund raising opportunities and influencing donor agencies
- Change the label – SGA is content-less. Try: Ecosystem Service Assessment (ESA)
- Strengthen roster of Assessments Experts (database)
- Need to properly document process and content – related issues to ensure learning amongst SGA (eg through portal)
- Identify mechanisms for exchange of learning and data – needs improving

#### **Expand support for hubs**

- Not only “regional hubs” but also “theme hubs” in the SGA Network (eg for developing the connecting knowledge systems)
- Expand regional hubs and promote more interaction involving local networks
- TEK hub within the SGA Network
- Building and strengthening regional hub for Asia-Pacific, developing sharing goals and methodologies for ecosystem assessment scenarios
- Mainstream tools, research results, monitoring → policy
- Need for regional hubs and link with existing similar regional networks (eg ESP, TEEB, IUCN, etc)
- Facilitating development of hubs/hub activities for better exchange of learning and experiences

#### **Facilitate training and capacity building**

- Exchange expertise for capacity building among the SGA Network members
- Training on communication of assessments
- Invite policy makers to the capacity building workshop or a lunch/dinner
- Training on scenario and trade off methods and tools as part of workshop
- SGA expert exchange to facilitate capacity development
- Capacity building on data collection and monitoring, including sharing experiences within network, link with issue of scale
- SGA fellowship, SGA fellows
- Capacity building – space to exchange methodologies
- Develop a group to address UNESCO resource group on cultural services
- Capacity building to become more regional and language sensitive
- Capacity building on MA framework for researchers and development work in biodiversity (Philippines), include TEEB

- Capacity assessment/building for ecosystem assessment – w/ policy makers, especially Philippines/Indonesia)

#### **Create strong link to IPBES**

- IPBES acknowledge the role of local assessments
- Clarify links between SGA and IPBES secretariat
- IPBES secretariat to attend next SGA Network meeting
- Strengthen IPBES links – members from SGA Network advisory panel in the MEP? (through country)
- IPBES work program very influential
- SGA must have as high a representation as possible in IPBES
- Influence IPBES work programmes as much as possible
- Strong links to IPBES, supporting local and regional level assessment studies
- Integrate SGA into IPBES work programme, regions, and nomination process
- Ensure SGA Network participation in the stakeholder negotiations prior to the IPBES meeting
- SGA must clarify its relationship to IPBES
- SGA to look into one synthesis report of assessments with regional focus for policy makers to be submitted to IPBES
- SGA secretariat to suggest partner teams to IPBES common queries data collection from all team (eg GMO(?), CDM, [?])

#### **Characterise relationships with other networks**

- UNSECO/SGA Chair-establish a professorship/chair on SGAs in universities to mainstream activities at graduate level
- Establish links with global/regional umbrella institutions representing cluster of decision makers, eg local government, land use planners
- Need to ensure that SGA Network activities are streamlined and better coordinated with other related initiatives (eg EEA) – avoid duplication
- Strengthen links between SGA Network and IPCC – much relevant climate adaptation knowledge from network that could feed into IPCC
- Differentiate between TEEB to make it more inclusive of values
- Clearer links between SGA Network and NBSAP forum
- Merge TEEB and SGA Network
- Proposal to create a GEF funded global project for National Biodiversity Assessment (NBAs) with IPBES/CBD and SGA Network, in line with South Africa NBA
- SGA linked to existing capacities/networks/tools/institutions – integration and updating

#### **Improve methodology**

- Step by step “cookbook” – more practical than methods manual institutional set up
- MA methodology to be developed. Difficult to apply on local level

#### **Suggestions for future annual meetings**

- Include one session of speed presentations (max 3 min each)
- Present lessons learned document for discussion (could be a working document that is built on each year?)
- Have an session in each annual meeting dedicated to help ID “clusters” of key challenges to deal with in more detail in future meetings

- Broadening disciplinary involvement (social scientist)
- Widen student access to workshops at SGA network meetings – students at host institutions and other students involved in ES assessments in host countries
- Continuing SGA network through meetings if sharing knowledge and information on tools
- SGA secretariat should recommend approved partner(?) to IPBES through country focal points