South Asia Capacity Building Workshop on Indicators as part of NBSAP updating

Workshop Report

16 - 19 July 2012

Pegasus Reef Hotel, Hendala, Wattala, Sri Lanka

A workshop of the Biodiversity Indicators Partnership (BIP) co-convened by UNEP, UNEP-WCMC, with South Asia Co-operative Environment Programme (SACEP)

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1. Summary

The South Asia Capacity Building Workshop on Indicators as part of NBSAP Updating was held on 16 - 19 July 2012 Pegasus Reef Hotel, Hendala, Wattala, Sri Lanka. The overall objective of the workshop was to strengthen capacity in the production of indicators as part of the National Biodiversity Strategy and Action Plan (NBSAP) updating process.

The workshop brought together a total of 28 delegates from eight South Asian countries: Afghanistan, Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan and Sri Lanka. Participants included representatives from government ministries, national environmental agencies and, research centres. Representatives from the South Asia Cooperative Environment Programme (SACEP), the Secretariat of the Convention on Biological Diversity (SCBD), UNEP Regional Office for Asia and the Pacific, International Center for Integrated Mountain Development (ICIMOD), and Bird Conservation Nepal, also participated in the workshop and contributed their expertise in information sources and monitoring systems.

The workshop was funded by the European Commission through UNEP and implemented as an activity of the Biodiversity Indicators Partnership (BIP[1]). The logistics were organized by SACEP under the patronage of the Ministry of Environment, Government of Sri Lanka. The workshop was facilitated by Philip Bubb from the UNEP World Conservation Monitoring Centre (UNEP-WCMC) and the Biodiversity Indicators Partnership (BIP) Secretariat and by Haruko Okusu from UNEP Regional Office for Asia and the Pacific.

The programme consisted of a mix of presentations, interactive group work and training exercises designed to promote the development of national targets and indicators as part of the NBSAP updating process.

On the first day, after an inauguration ceremony, an introduction was given to the Strategic Plan for Biodiversity 2011-2020, followed by presentations and group discussions on updating NBSAPs, national target setting, and definition of indicators. The afternoon session was dedicated to a role play training exercise aimed at taking participants in mixed groups through the purpose and production steps of the Biodiversity Indicator Development Framework. During this exercise, which continued on Day 2, participants were provided with a series of six workbooks and worked in small groups to develop national targets and indicators for a fictional country. Each workbook exercise concluded with the groups reporting on their results and lessons learnt and consolidation of key learning points.

On Day 2, the role-play exercise focused on identifying indicators, gathering and reviewing data, and calculating and communicating indicators. On Day 3**,** a field trip was arranged to Negambo lagoon and Muthurajawella wetland with the aim to explore the application of the framework of pressures,

1 www.bipindicators.net

state, responses and benefits to categories issues and the use of indicators in management of the important coastal wetland.

Day 4 included presentations from ICIMOD, Birdlife-Nepal and SACEP, followed by a group exercise where each country team drafted and shared their next steps, including stakeholder involvement, capacity and information needs. Towards the end of the day, participants exchanged information on their needs and the expertise they could offer to support each other in the region. In the afternoon, participants worked in small groups to examine the information needs and possible indicators for each of the 20 Aichi Targets. Participants explained and discussed their results in a marketplace-like session. The day concluded with an evaluation of the workshop by the participants, thanks from Philip Bubb and the official closing of the workshop.

Copies of the presentations and workbooks used during the workshop were made available to the participants on a CD.

21 participants completed the workshop evaluation form and the average rating for the question 'How useful was this workshop in developing your capacity to update your NBSAP with indicators, on a scale of 0 to 10?' was 8.0.

2. Background

With the adoption of the Strategic Plan for Biodiversity 2011-2020 at CBD COP-10 in Nagoya, Japan, Parties to the CBD have been requested to update their NBSAPs with the new Aichi Biodiversity Targets, including reporting on their adopted national targets at COP-11 in October 2012 and their adopted strategies at COP-12. To support this process a workshop for South Asian countries on indicator capacity building, as part of updated NBSAPs, was organized.

The workshop was funded by the European Commission through UNEP and implemented by UNEP-WCMC and the UNEP Regional Office for Asia-Pacific (ROAP) as an activity of the Biodiversity Indicators Partnership (BIP[2]). It was hosted by the South Asia Co-operative Environment Programme (SACEP), an intergovernmental environmental organization mandated to undertake capacity building initiatives within the region. The workshop was designed in co-ordination with the Secretariat of the CBD.

The workshop format focused on interactive group work and training exercises, focusing on the information needs and use of indicators in setting and monitoring national targets. It was designed to complement the regional capacity-building workshops on updating NBSAPs organized by the Secretariat of the CBD in Xi'an, China, in May 2011 and Dehradun, India, in December 2011.

3. Workshop Objectives

Government agencies, NGOs and academic institutes in South Asian countries that are involved in updating NBSAPs have:

- Increased skills and confidence in developing and using indicators as part of NBSAP updating and implementation.
- Improved understanding of the information needs and availability of data to develop national targets and indicators within the Strategic Plan for Biodiversity 2011-2020;
- Gained new ideas, inspiration and opportunities for NBSAP updating from the experience of other countries in the region.

In addition to the above, each participating country had an opportunity to have the workshop resource persons review and provide inputs on the indicator needs of any draft national targets for their NBSAP. In this regard the workshop had a secondary set of objectives that included: Understand that 'Indicators are Purpose Dependent'; Confidence to use the 'Biodiversity Indicator Development Framework'; Confidence to develop indicators for NBSAPS, including Aichi Targets; increased collaboration – national, regional, global levels.

[2] www.bipindicators.net

4. Day 1

4.1. Welcome

The workshop inauguration was conducted on Monday, 16 July 2012 under the patronage of Mr *B.M.U.D.* Basnayake, Secretary, Ministry of Environment, Government of Sri Lanka. The Hon Secretary while welcoming the delegates acknowledged that this workshop is a critical part of that process aiming to assist countries in the process of designing national biodiversity indicators based on the Aichi targets. Mr Basnayake further stated that the problems and challenges in almost all countries in South Asia are more or less similar and therefore the delegates had common experiences to share and common problems to discuss. Participating in this type of capacity building initiatives not only demonstrates commitment in countries to implement the Convention on Biological Diversity but also helps countries in a better position to prepare the upcoming National Reports and to update National Biodiversity Strategies.

Mr. Philip Bubb, UNEP-WCMC, welcomed and thanked all delegates for attending the South Asia Capacity Building Workshop on Indicators in Updating NBSAPs. He thanked SACEP and the Government of Sri Lanka for hosting the workshop. Dr Haruko Okusu, from the UNEP Regional Office for Asia thanked the delegates for their participation and stated that the UNEP has worked closely with the countries of South Asia, as well as with SACEP, over many years in the fields of regional seas, climate change, assessment, national planning, hazardous waste management, among others. She also mentioned that in the effort to support countries in their NBSAP process it is important to keep in mind the synergistic programmatic implementation of biodiversity-related Conventions.

Ms. Jacintha Tissera, on behalf of the Director General of SACEP welcomed the participants to workshop and highlighted that since its inception, SACEP has been undertaking number of initiatives in the field of biodiversity conservation in South Asia region. Ms Tissera recalled the Ministerial Declaration on "South Asia's Biodiversity Beyond 2010" which was declared at the 12th meeting of the Governing Council of SACEP held in November 2010 at Colombo, Sri Lanka just after the COP10 of the CBD. In that resolution, Hon. Ministers re-iterated their collaborative commitments towards conservation of South Asia's rich biodiversity. She further expressed the organizations willingness and readiness to join with UNEP and WCMC in their all future activities in the field of biodiversity conservation in South Asia region.

The vote of thanks was given by Mr W.K Rathnadeera, Senior Programme Officer of SACEP.

From left to right: Haruko Okusu (UNEP DELC), Ms Jacintha S. Tissera (Administrative Officer, SACEP), Mr B.M.U.D. Basnayake (Secretary, Ministry of Environment), Philip Bubb (UNEP-WCMC) and Mr. W. K. Rathnadeera (Senior Programme Officer, SACEP) welcoming participants to the Southeast Asia Capacity

4.2. Introduction

Following the opening and welcome statements and a short coffee break, the workshop participants were invited to introduce themselves briefly to the group. A complete list of participants is available in Annex 1.

Philip Bubb introduced the Biodiversity Indicators Partnership (BIP), which was initiated in 2007 and its work on capacity strengthening for national indicator development. He provided information on the National Indicator web-portal www.bipnational.net, a tool and source of information including guidance materials to assist indicator developers. He further stated that UNEP-WCMC as the Secretariat for this initiative was looking for partners to take its activities forward.

He then outlined the objectives of the workshop and described the programme of activities (attached in Annex 2 of this report). To help lay the foundations for the workshop, the participants were invited to share with the rest of the group their expectations and requests regarding the style and content of the workshop. Their responses included:

Expectations from the workshop

- How to use indicators to monitor biodiversity
- Get more information and experience from other countries in the region
- Develop indicators to monitor changes in ecosystems
- What are the best indicators for my country?
- Indicators that are useful (timeline with action targets)
- How to initiate planning process and use indicators for monitoring
- Clarify targets/indicators to translate into national context
- How to incorporate indicators in the national planning process
- Identify indicators for wildlife trade (legal and illegal) at national level
- Improve biodiversity monitoring and contribute to regional process
- Share experience in region
- How to harmonize top-down (policy) and bottom-up (values)
- Information gathering for indicators
- Private sector and other stakeholders
- Indicators for monitoring and planning
- How to choose best indicators (community, national, regional priorities)
- Any protocols for monitoring and reporting
- Choose effective indicators that reflect communities and multiple stakeholders
- Indicators for marine biodiversity
- Using existing data – realistic and simple
- Baseline settings
- Downscaling global to national
- Process of identifying indicators
- Possible regional indicators
- Monitoring regional resources (marine/coastal)

Workshop Agreements

- Mobile phones in silent mode
- Warm up activities
- Stick to time
- Everybody is heard and nobody is left behind
- Interactive
- Allowed to move within the room

Lastly, participants were asked four self assessment questions regarding their understanding of the Aichi targets and confidence in updating NBSAPs. Instead of giving a verbal response, participants were asked to express their understanding and confidence by 'voting with their body': they were

invited to place themselves on a line with either end of the line representing the extremes of the responses. The questions asked and the results are depicted below.

Q1: I understand the Aichi Targets

No understanding at all *Completely understand all targets*

Range : 0 - 7

Q2: How much relevant information is available in my country for NBSAP updating?

No information *All the information needed*

Range : 3 / 4 - 8

Q3: How ready is my institution for updating our country's NBSAP?

Not ready at all *Completely ready*

Range : 3 - 7.5

Q4: How confident am I in developing indicators for NBSAPs?

Not confident at all *Completely confident*

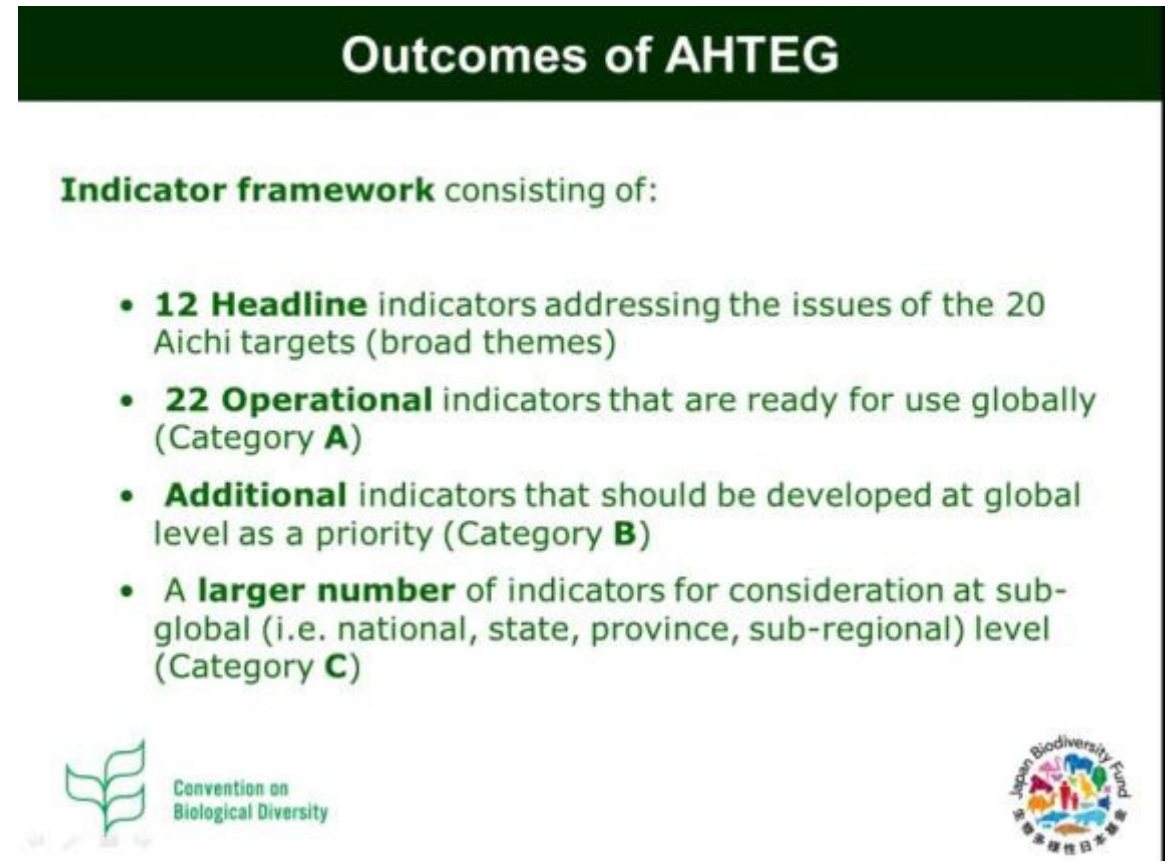
Range : 3 - 8

The outcomes show a variation in answers across countries but also among participants from the same country. The response to question s 1 and 4 shows that, for most participants, the level of understanding of Aichi targets or the confidence in developing indicators for NBSAPs is not very high at this stage.

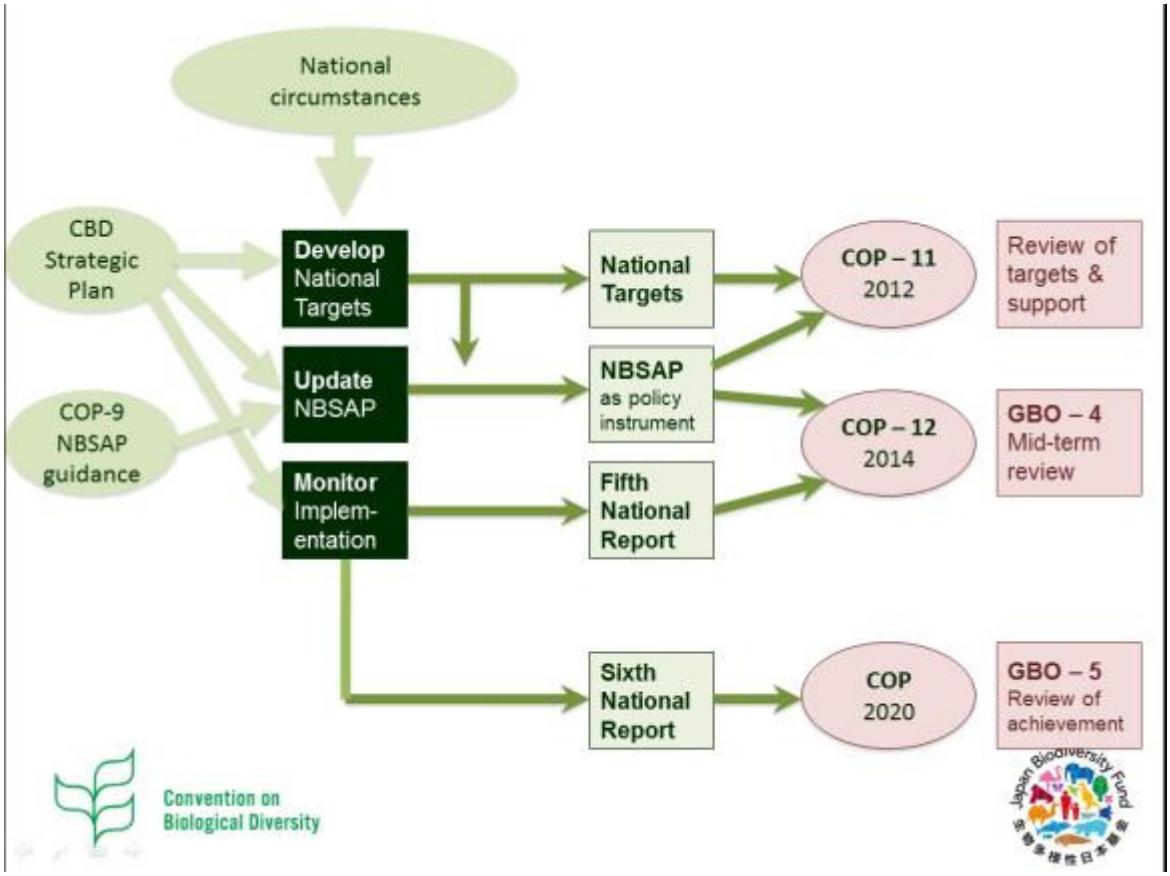
4.3. Presentations

4.3.1. Introduction to the Strategic Plan for Biodiversity 2011-2020

David Duthie from the Secretariat of the CBD, presented an overview of the Strategic Plan for Biodiversity 2011-2020, its vision and mission, the Strategic Goals and how they relate to each other, the Aichi Targets, the recommendations of SBSTTA-15, the outcomes of AHTEG and the framework of global indicators.



A summary of the next steps for countries in revising NBSAPs was provided:



4.3.2. Progress in Updating NBSAPs at National Level

Participants were invited to provide a brief update on their country's NBSAP revision process, including the challenges they faced. It was stressed that the process in very important than the product, while involving all stakeholders in a stepwise process is vital.

Summary of the participants' responses on challenges:

Major challenges
1. How to incorporate the role of corporate bodies and NGOs – what a major role they can play 2. Not mainstreaming biodiversity targets with other sectors – we are on economic survival and achieving prosperity, therefore how to mainstream biodiversity in the overall development planning 3. Finding ways how biodiversity plays a role in poverty eradication – have to build on the strengths of biodiversity 4. Working on a synergistic process especially with UNFCC. Some issues are national, but other impacts are global

4.3.3. Target setting as part of national planning

After an overview of important considerations for target setting, a short discussion was held on what makes a successful national target

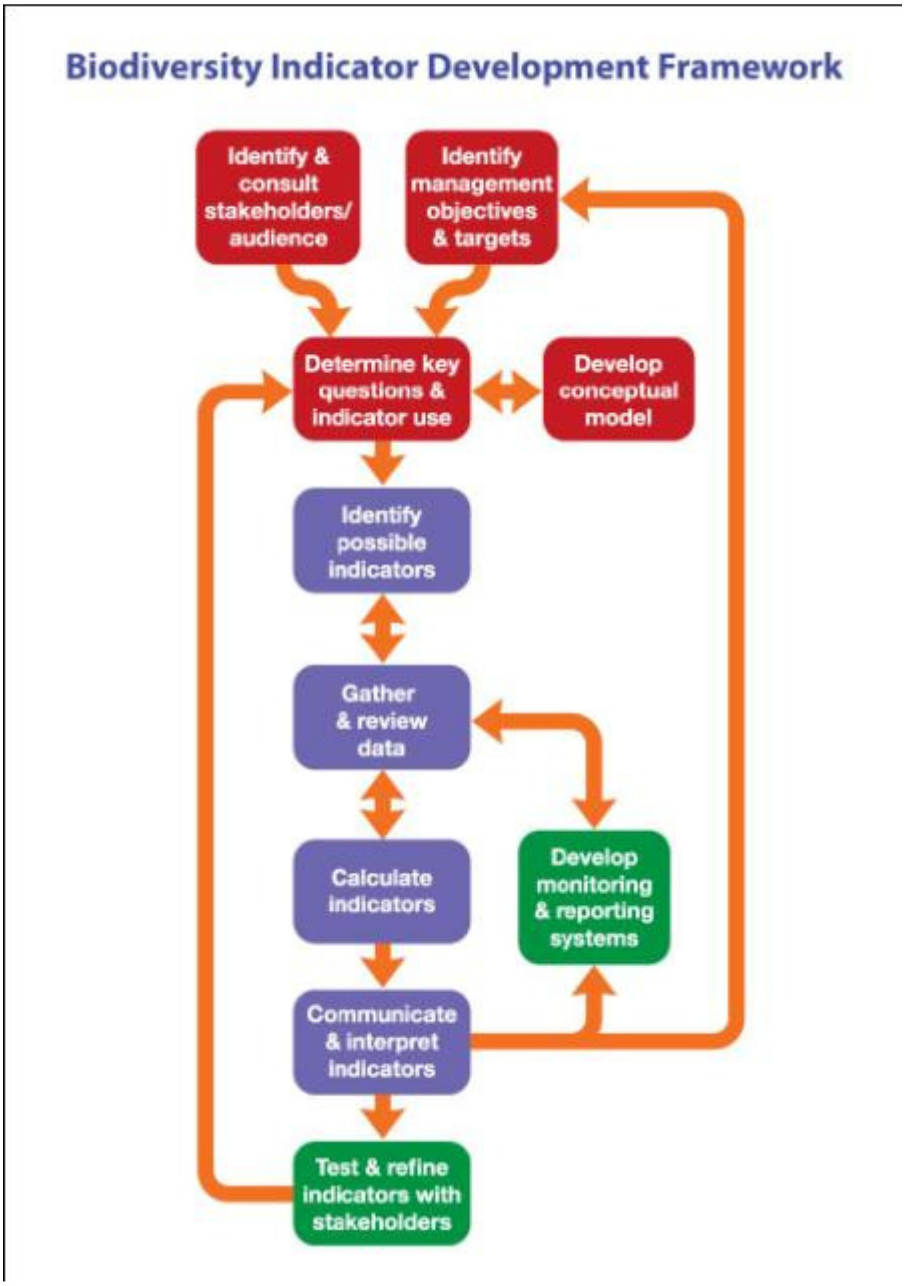
1. **Targets have to be applicable at the national level and on the ground**
2. **Targets must be generic enough to be applicable to different sectors**
3. **A target needs to meet its purpose**
4. **There needs to be a follow up**
5. **There needs to be enough funding to ensure implementation/follow-up**
6. **The target has to be time-bound**
7. **Targets need to be 'owned', they are often more successful if someone or an organization is responsible for their achievement**
8. **There needs to be coordination between different levels (e.g. Federal Government and State)**
9. **There needs to be cross-sectoral planning**
10. **There needs to be good baseline data**

Participants also discussed examples of successful or unsuccessful national target from different sectors as indicated below

Successful Targets
• Household electricity • Education • Protected Areas – issues on quality vs quantity • Phase out of CFCs –Alternative available, Government commitment
Unsuccessful Targets
• Human-Elephant Conflict • Afforestation – Livelihoods vs National accounting for resource allocation, awareness, lack of capacity on ecosystem management • Controlling Poverty • Population targets – lack of baseline for monitoring, political issues, awareness, lack of commitment

4.3.4. Indicator definition and the uses of indicators

Haruko Okusu (UNEP-ROAP) gave a presentation on indicators and their uses. The Biodiversity Indicator Development Framework (below) which contains key steps for developing successful indicators was shared with the participants.



This framework has been developed from the capacity-building experience of UNEP-WCMC and its partners including the BIP. The framework can be divided into three areas:

1. **Purpose** – actions needed for selecting successful indicators

2. **Production** – essential stages for indicator development

3. **Permanence** – mechanisms for ensuring indicator continuity and sustainability

Indicator developers often start at the production stage by looking at the available data first. However, this approach has been found to be less effective and can be unsustainable. The BIP encourages indicator developers to start at the **purpose** stage. From experience, this has been found to be successful in helping developers select and produce indicators that respond to national priorities.

Further information on the framework and each of its steps is available in the document 'Guidance for national indicator development and use' which can be downloaded on http://www.bipnational.net. An interactive online version of the framework is available on: http://www.bipnational.net/biodiversityindicatordevelopmentframework.

The participants were invited to share their thoughts on what makes a successful indicator. Their responses included:

A good indicator must:

1. **Be measurable, quantifiable**
2. **Go beyond proxy, qualitative sensitivity**
3. **Be comprehensive**
4. **Be simple enough to provide an understanding of national trends**
5. **Incur minimum cost/effort (e.g. follow up & monitoring)**

Phillip Bubb provided a summary of the multiple purposes of indicators and outlined some of the most common obstacles to successful indicators. A key element to remember is that **"Indicators are purpose dependent"**: the interpretation or meaning given to the data depends on the purpose or issue of concern.

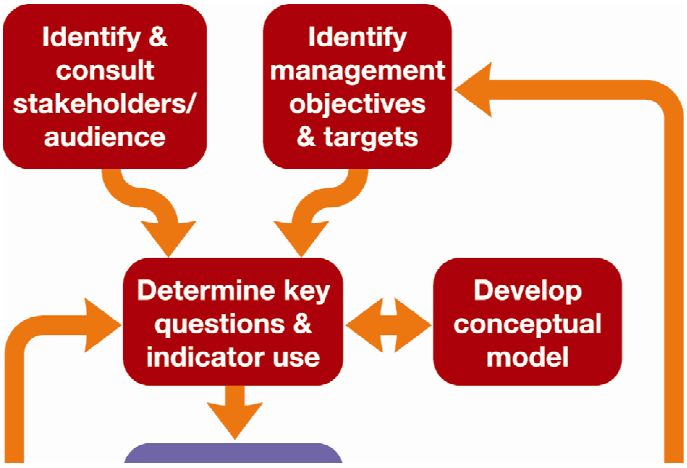
What is an indicator?

What makes a successful indicator:

Purposes of indicators:

The Biodiversity Indicators Development Framework

Purpose – actions needed for selecting successful indicators



4.3.5. The distinctions between targets and indicators

Participants discussed distinctions between Targets and Indicators using the example shown below:

Indicator 1 is not an indicator because it includes a value (15%), and so the name of this indicator has been confused with the Target.

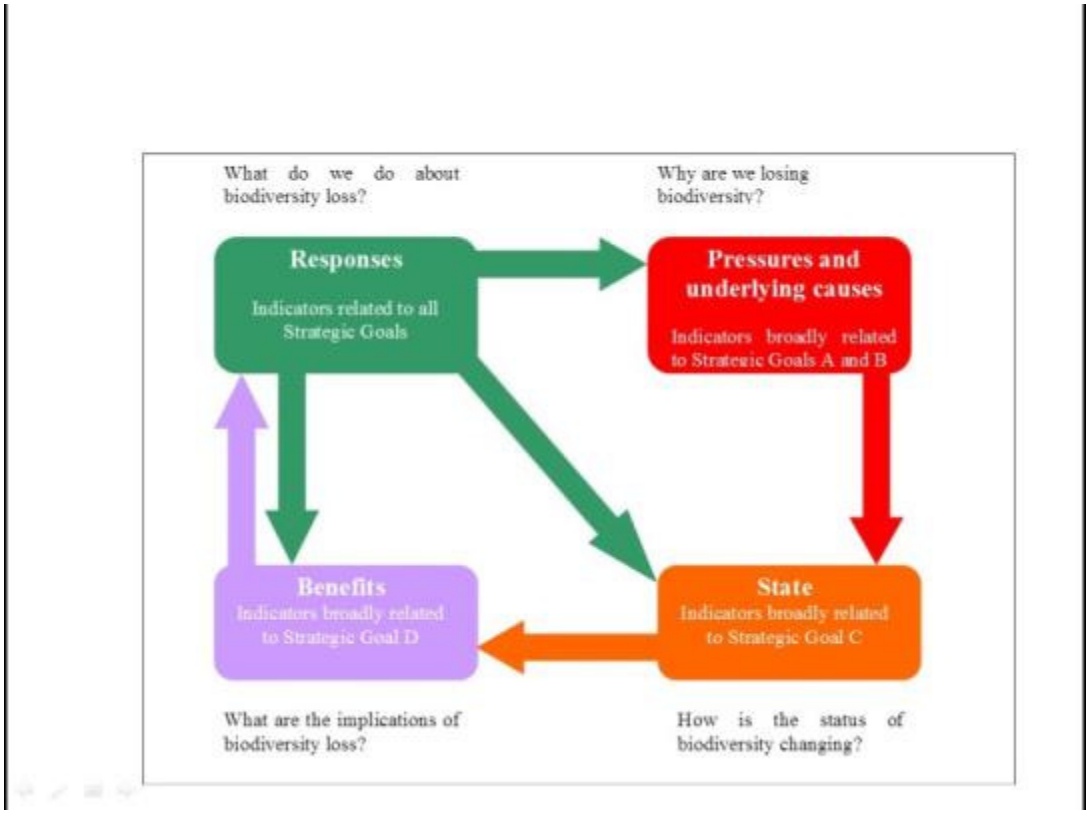
Indicator 2 is not a good name of an indicator because it defines that the value of the indicator should increase, and so has been confused with the Target.

Indicator 3 is an acceptable indicator name.

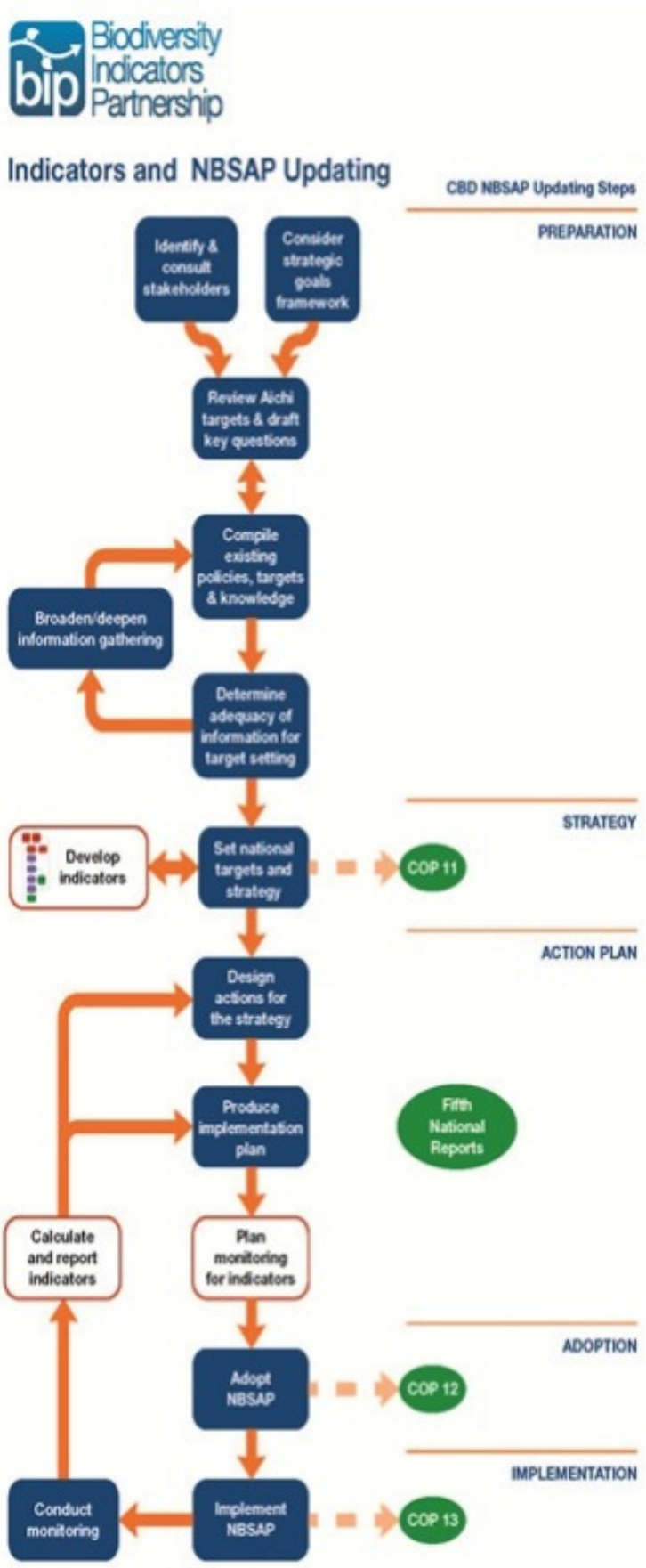
Indicator 4 could be considered a better indicator name because it includes the units of measurement.

4.3.6. Steps in updating NBSAPs with the Aichi targets and the roles of information on biodiversity and ecosystem services

The 2011 CBD Ad Hoc Technical Expert Group (AHTEG) on indicators conceptual model (below) was described to the participants. The model, or framework, is used to assist the selection, development and communication of information and indicators for biodiversity conservation and management.



The following NBSAP Updating Framework was presented to the participants. The steps up to national target setting and developing indicators were emphasized.


Biodiversity Indicators Partnership
Indicators and NBSAP Updating
CBD NBSAP Updating Steps
PREPARATION
Identify & consult stakeholders
Consider strategic goals framework
Review Aichi targets & draft key questions
Compile existing policies, targets & knowledge
Broaden/deepen information gathering
Determine adequacy of information for target setting
STRATEGY
Develop indicators
Set national targets and strategy
COP 11
ACTION PLAN
Design actions for the strategy
Produce implementation plan
Fifth National Reports
Calculate and report indicators
Plan monitoring for indicators
ADOPTION
Adopt NBSAP
COP 12
IMPLEMENTATION
Conduct monitoring
Implement NBSAP
COP 13

4.4. Training Exercise – Setting 2020 targets and choosing indicators

The afternoon session was dedicated to a training exercise entitled "Setting 2020 Targets and choosing indicators - A day in the life of an NBSAP target and indicator developer". The exercise, which started on Day 1 and continued on Day 2, used role play to take participants through both the NBSAP Updating framework introduced above and the **purpose** and **production** steps of the Biodiversity Indicator Development Framework shown on p.12 of this report. During this exercise, participants worked in small groups to develop national targets and indicators for a fictional country. Participants were divided into four mixed groups that represented four fictional countries, namely Lamar, Kamland, Balasia and Ponei. A total of six workbooks were used to guide participants throughout the exercise:

1. **Workbook 1**: Defining the purpose of indicators
2. **Workbook 2**: Target setting
3. **Workbook 3**: Developing a conceptual model
4. **Workbook 4**: Identifying indicators
5. **Workbook 5**: Gather and review data
6. **Workbook 6**: Calculate indicators

Each workbook contained background information and a specific task or question. The country teams were asked to write or illustrate their results on a flipchart and present them to the other participants.

Workbook 1: Defining the purpose of indicators

During this exercise participants in each fictional country were tasked with identifying three priority key questions regarding habitat loss and conservation and setting a national version of Aichi Target 5[3] that are likely to be important for their fictional country. In order to determine the key questions participants were asked to take into account stakeholder comments presented in the workbook. They were also requested to provide a reason/justification for each key question they selected.

Kamland's team of indicator developers

Ponei's team presenting their results

[3] By 2020, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.

Workbook 1: Exercise Results

Key Questions	Reason/Justification for key question selection
Lamar	
1. What are the major ecosystems under threat in Lamar? 2. What are the threats that lead to loss/fragmentation/degradation? 3. What are the rates of loss of different ecosystems?	• To prioritize actions - Resource concerns are there – so where will you put your money? • Identify actions • To quantify/set up the benchmark to define the target and set up the indicators
• **Kamland**	
1. What are main drivers of change? 2. What are the impacts of people of Kamland including sustainable development of the country and its international connections? Mapping the status, and find out what is lacking, where most people are effected 3. What are the alternatives available	• To understand the main threats which lead to loss/degradation/fragmentation • As a developing nation, peoples priority should be taken in to consideration • To understand options for reduce/halt degradation with limited finances available
• **Balasia**	
1. What are the key habitats for biodiversity conservation in the country 2. What are the existing status, extent and conditions of habitats (mangroves, coral reefs, primary forests) 3. What are the major threats to the habitats	• Identify and prioritize the key biodiversity areas • To set out targets and baseline setting • We need to know the key drivers of biodiversity loss • We need to identify roles and responsibilities
Ponei	
1. What steps can help to reduce the pressures on mangrove ecosystem/habitats in the context of shrimp farming+ important habitat for other species 2. How we can protect coral reefs from intensive tourism and climate change 3. Is control over on forest fire will help to reduce the level of forest degradation and	• Identifying actions to mitigate pressures • Identify pressures (Anthropogenic/development activities

fragmentation?	

Lessons learned from workbook 1

Participants were asked to comment on the lessons they learned from this first exercise.

Participants' observations:

"We need to respond to different stakeholders/interests/expertise/mandates" to reach a common stage"

"We need to make questions as specific as possible"

"In some cases we may need to include all ecosystems while in others focus on specific ecosystems"

"We need to make sure that there is a system in place so we don't miss important ecosystems"

"We need baseline data and information on ecosystems, habitats and key stakeholders"

5. Day 2

5.1. Exercises

Setting 2020 targets and choosing indicators - A day in the life of an NBSAP target and indicator developer (continued)

Workbook 2: Target Setting

Participants were asked to select one of their key questions and work to propose three potential targets that respond to this question. In order to propose targets participants needed to consult existing policies, targets and knowledge provided in workbook 2.

Workbook 2: Exercise Results

Targets
Lamar
Selected key question: What are the rates of loss of different eco-systems?

Targets:

- Declare all primary forests as protected areas by 2013 to halt further reduction
- Restore mangrove forests 50% by 2020 from the baseline
- Restore coral reef 50% from the baseline by 2020

Kamland

Selected key question:

What is the status of the habitat? (Forest, mangrove, coral reef)

Targets:

- By 2020 reduce forest loss rate to 1.3% per year on the average (reason – present rate is 2.6% per year)
- Reduce the mangrove loss rate to 5% per year on the average (presently 10% per year loss)
- Reduce coral reef loss rate to 2.5% per year on average (presently 5% per year loss)

Balasia

Selected key question:

What is the existing status, extent and conditions of primary forests?

Targets:

- By 2020 increase forest area previously under primary forest by 25%
- By 2020 reduce rate of loss of primary forests by 40%
- By 2020 increase connectivity of fragmented forests

Ponei

Selected key question:

What steps can help to reduce pressure on mangrove eco-system/ habitat?

Target:

- By the year 2020, illegal mangrove cutting/deforestation would be minimized at zero by providing alternatives to local communities.
- By the year 2020, all sources of pollution would be controlled in cooperation of industries, town administration and local fisherman communities.
- By 2020 up to 80% of the existing mangrove areas would be designated as protected areas

Lessons learned from workbook 2

Participants' observations:

"Targets should be more practical than ambitious"

"There could be an overall target that can have sub-targets"

"Writing the questions will probe thinking about the targets more and create the big picture"

Workbook 3: Developing the indicator – conceptual model

For this exercise, each team was asked to develop a simple conceptual model, which will aid the selection and communication of their indicator. The starting point for this exercise was the selected key question and target. Each team was requested to pick one of the targets identified in the previous workbook exercise and then draw a conceptual model on the flip chart provided

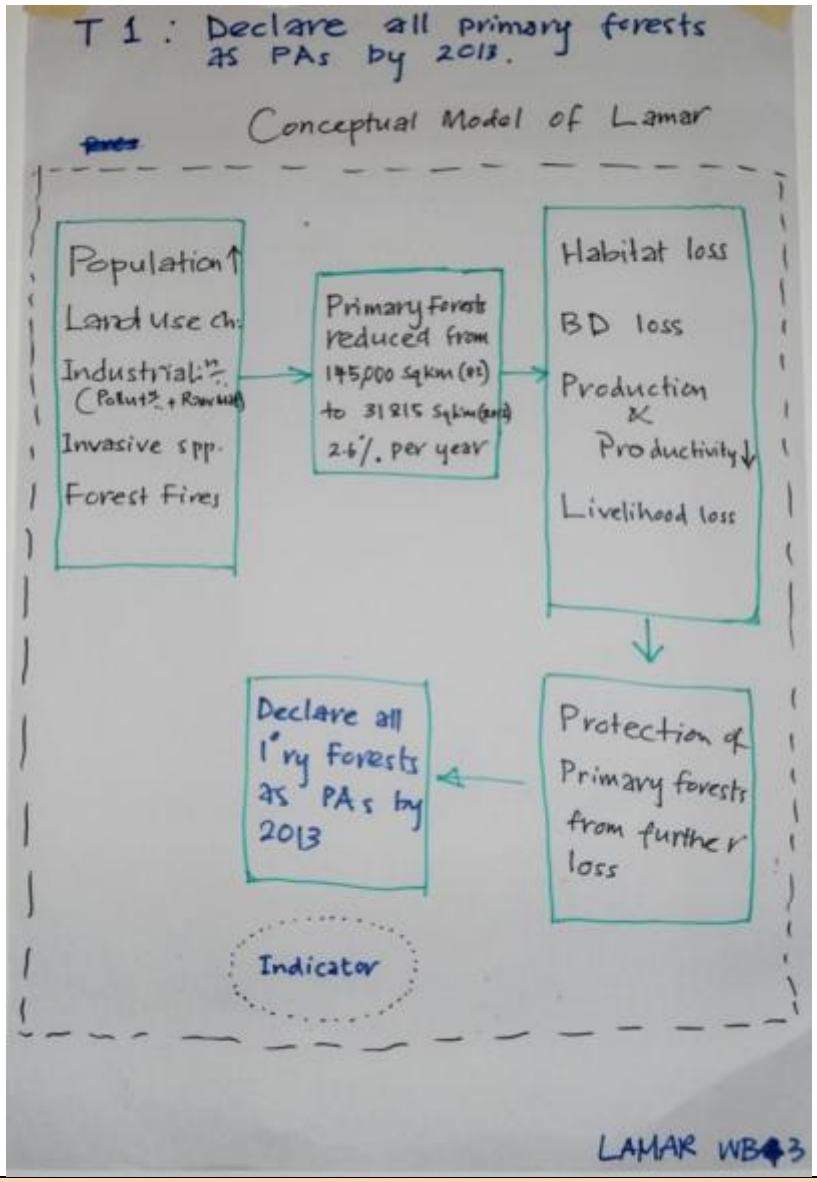
Workbook 3: Exercise Results

Conceptual Model
Lamar

Selected Target:

Declare all primary forests as PAs by 2013.

Conceptual Model:

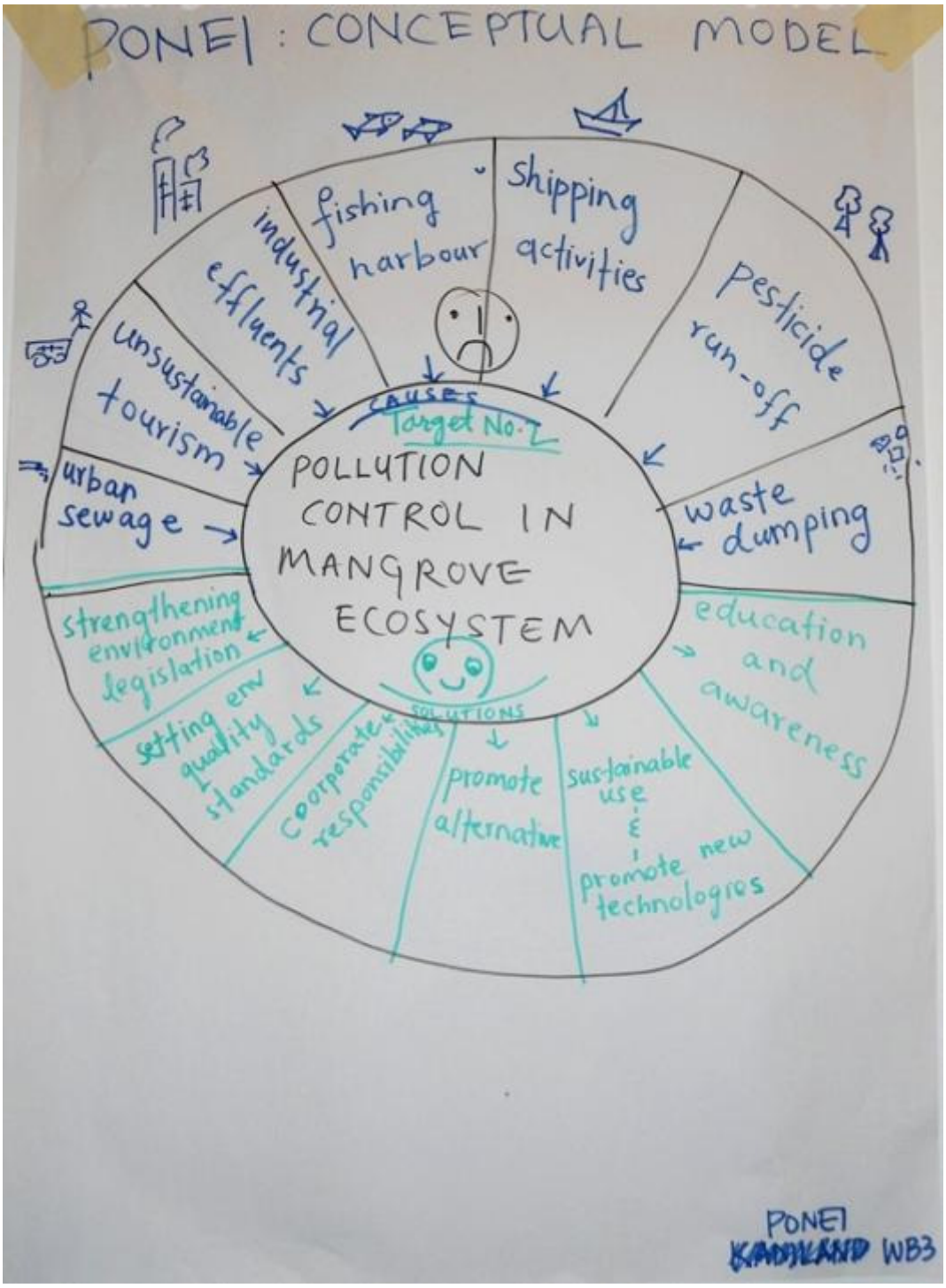


Ponei

Selected Target:

All sources of pollution in mangroves will be controlled.

Conceptual Model:

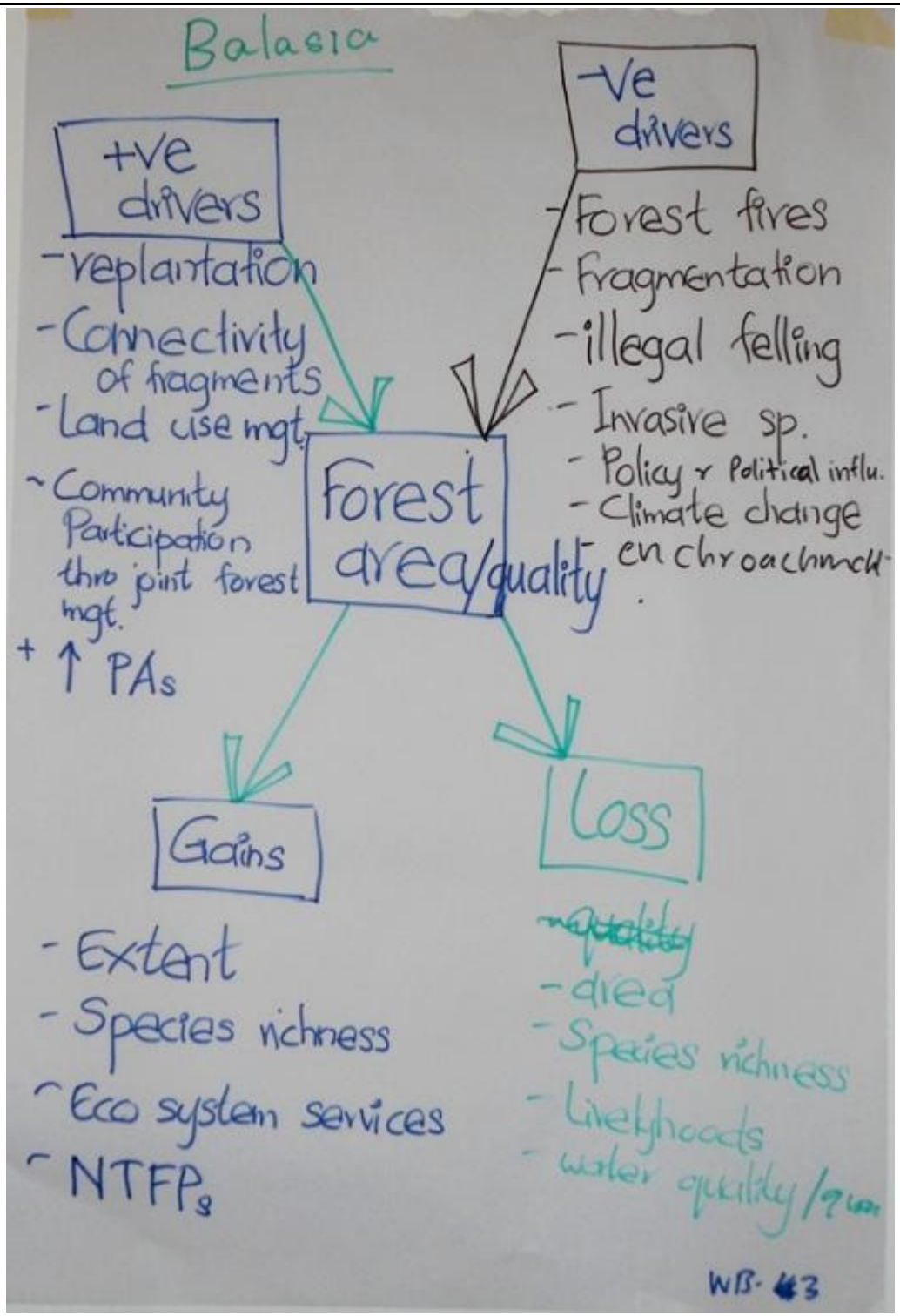


Balasia

Selected Target:

By 2020 reduce the annual rate of loss of primary forests by 40% of the current 30 year average.

Conceptual Model:

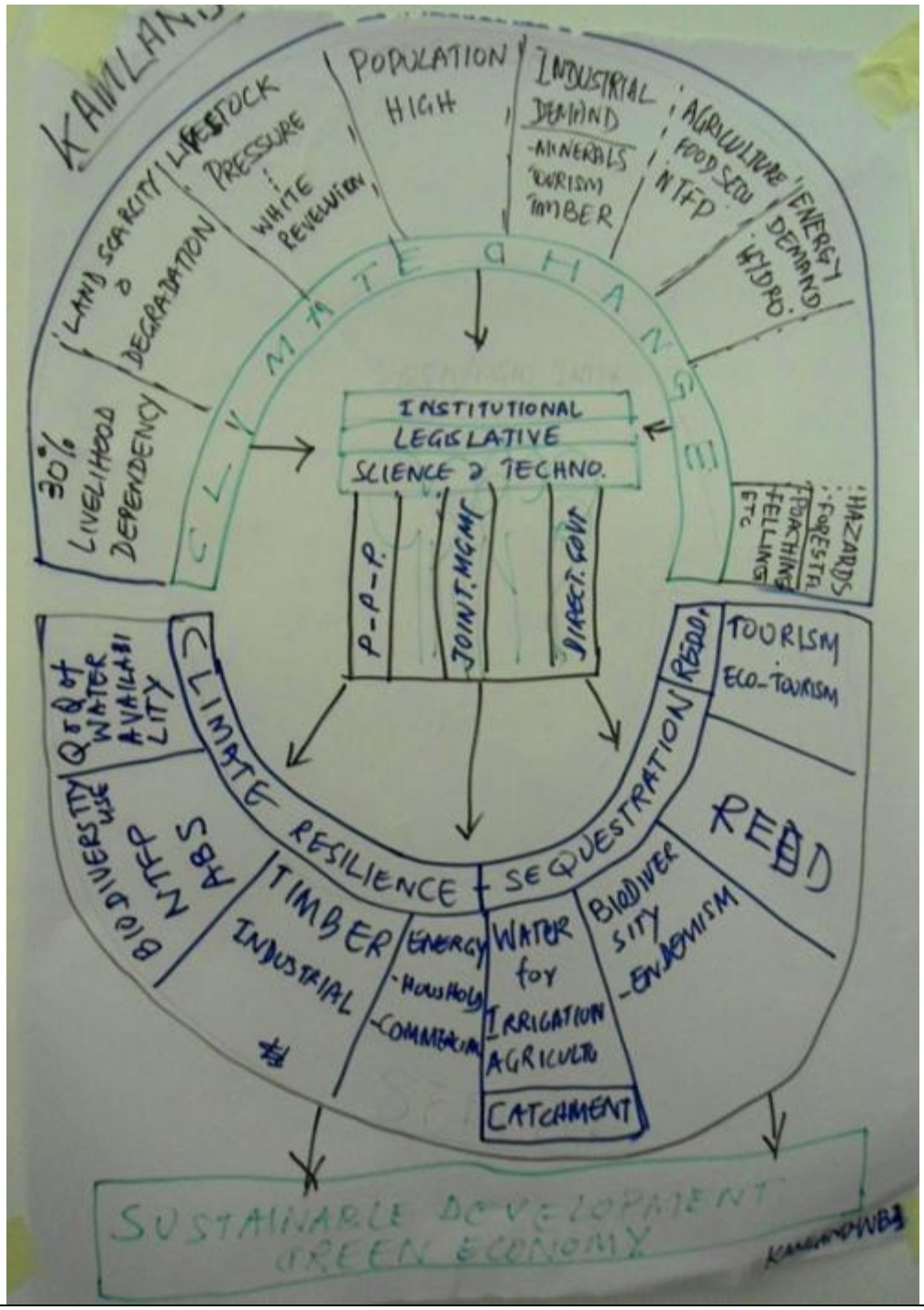


Kamland

Selected Target:

Rehabilitate/restore at least 10% of total degraded area by 2020

Conceptual Model:



Lessons learned from workbook 3

<u>Participants' observations:</u>

“There is no right or wrong model; what matters is how useful the model is”

“This exercise supports logical thinking and helps defining accurate targets”

“This is good for brainstorming in many areas, involving different sectors”

“One model per target seems more convenient than one model for all targets”

“It helps clarify how indicators respond to a particular target”

“Got more focused on the key questions”

Workook 4: Identifying Indicators

During this exercise, each country team was asked to consider their conceptual model and propose three potential indicators that could be used to monitor progress towards their chosen target. They were also asked to justify why they had selected the indicators by relating them to the target and key question.

Workbook 4: Exercise Results

Proposed Indicators
Lamar

Selected Target:

Declare all primary forests as PAs by 2013.

Indicators:

1. Primary forest area under PAs
2. Species richness/BD – not a very helpful indicator
3. Forest based livelihoods

Reasons/justification for indicators:

Easily understandable indicators and they should be dynamic and measurable

3rd indicator will increase with the implementation of management plan for other areas

Kamland

Selected Target:

By 2020 the forest cover will be 20,00 sq km

Indicators:

1. Change in forest cover with reference to baseline(2012)
2. Per capita income from all alternative livelihood option
3. Certified forest area

Reasons/justification for indicators:

Monitor restoration progress; determine follow-up activities; the higher number of stakeholders participating, the higher the chance of success

Balasia

Selected Target:

2020 reduce the annual rate of loss of primary forests by 40% of the current 30 year average.

Indicators:

1. Annual rate of change of the primary forest cover % (overall indicator)
    - 1.1. No and extent of forest fires per area
    - 1.2. No, extent and category of PAs
    - 1.3. Extent of replanted areas as buffers around primary forests
    - 1.4. Forest area under joint management
    - 1.5. No of forest offences of illegal felling – encroachment

Reasons/justification for indicators:

Easy to monitor if baseline is known

Ponei

Selected Target:

By the year 2020, all sources of pollution would be controlled

Indicators:

1. Relevant legal instruments in place(e.g. laws, standards)
2. No of treatment plants installed (industries, sewage disposal)
3. No of awareness programs/campaigns initiated/conducted
4. Spatial map of the mangrove habitat

Reasons/justification for indicators:

Monitoring water quality is difficult due to the geographic distribution

Indicators of pollution must be considered as well to make sure, considering the time factor because

a spatial map takes a minimum of 3 years

Lessons learned from workbook 4

Participants' observations:

"It is a challenge to reach a common agreement with different stakeholder priorities"

"We cannot see on target in isolation"

"Understanding the target need preparation"

"Defining key questions with stakeholders build ownership"

Participants working in their respective fictional country team

For this exercise each country team was presented with invented data sheets containing protected area site, species population, protected area management and ecosystem services data. Participants were tasked with reviewing the data to see if it would be possible to calculate their proposed indicators.

Workbook 5: Exercise Results

Proposed Indicators
Lamar
Can any of the identified indicators be calculated with available data: Yes ***Selected Indicator/s:*** • Primary Forest Area under PAs • Population level of Hornbills • Forest based livelihoods ***Data fields used:*** 1. Habitat data 1.1. Primary Forest area 1.2. Total Land area of the country 1.3. Terrestrial PAs
Kamland
Can any of the identified indicators be calculated with available data: Yes ***Selected Indicator:*** Change in forest cover with reference to baseline(2012), % of certified forest area (change) ***Data fields used:*** Habitat data(primary forest); Land certified data - Extent of certified forest
Balasia
Can any of the identified indicators be calculated with available data: Yes ***Selected Indicator:*** *Annual rate of change of the primary forest cover* *No and extent of forest fires per year* ***Data fields used:*** Total area under primary forest cover 1992 to 2011
Ponei
Can any of the identified indicators be calculated with available data: Yes ***Selected Indicator:*** New indicators/indirect indicators • Total area of land use for aquaculture (e.g.) shrimp farming

- Extent of best practice aquaculture

Data fields used:

1. Total area of Mangroves (sq km)

Lessons learned from workbook 5

Participants' observations:

"To ensure that enough data is available to create indicators

Indicators should meet the needs of a country and be realistic

Indirect indicators can be used

Indicators are scientifically valid"

Workbook 6: Calculate Indicators

Due to time constraints country teams were not asked to calculate the indicator. Instead each fictional country indicator development team was asked to identify potential options for presentation that could help to guide the calculation process.

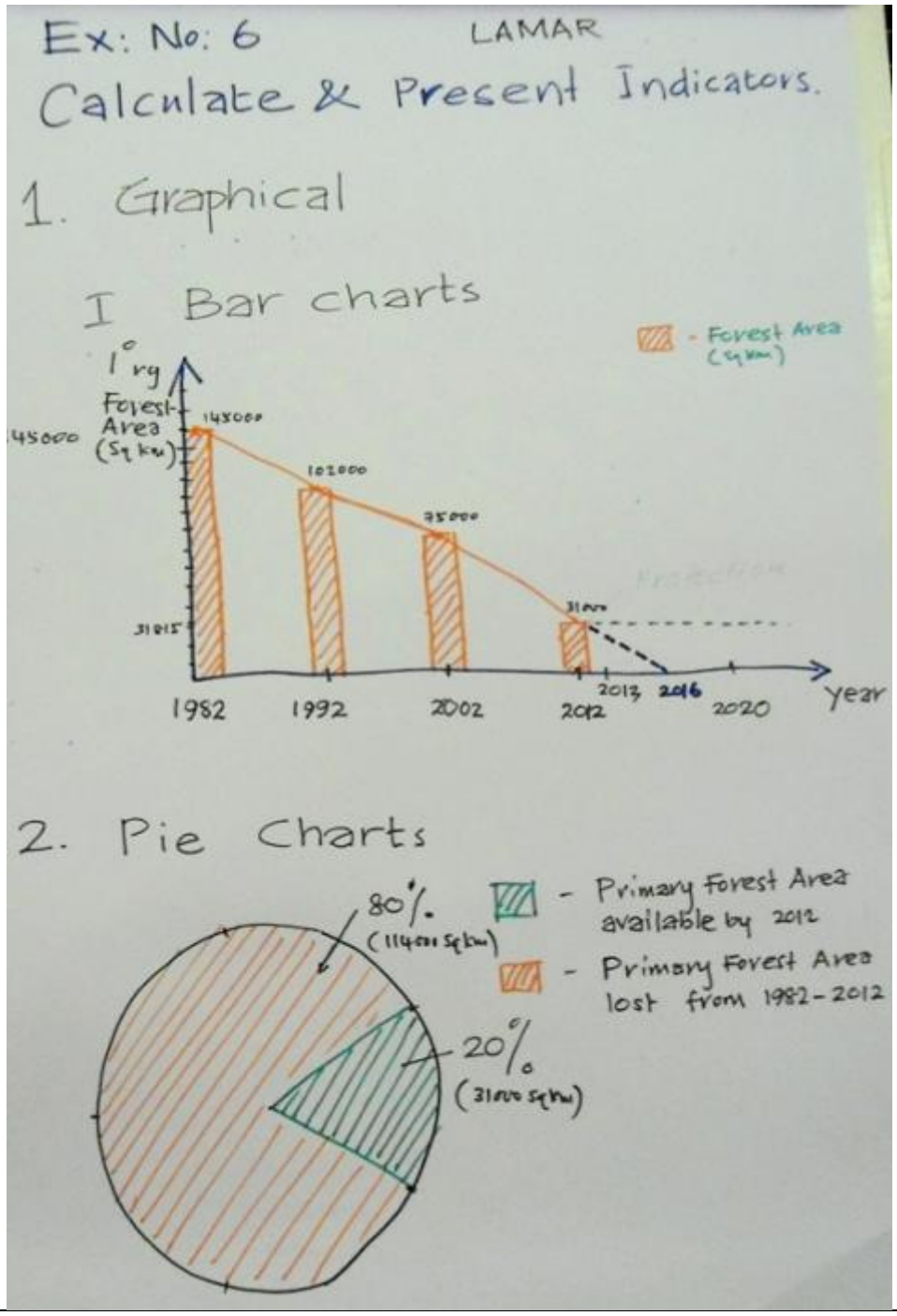
Workbook 6: Exercise Results

Indicator Presentation
Lamar

Selected Indicator:

Change in Primary Forest Area

Presentation Options:

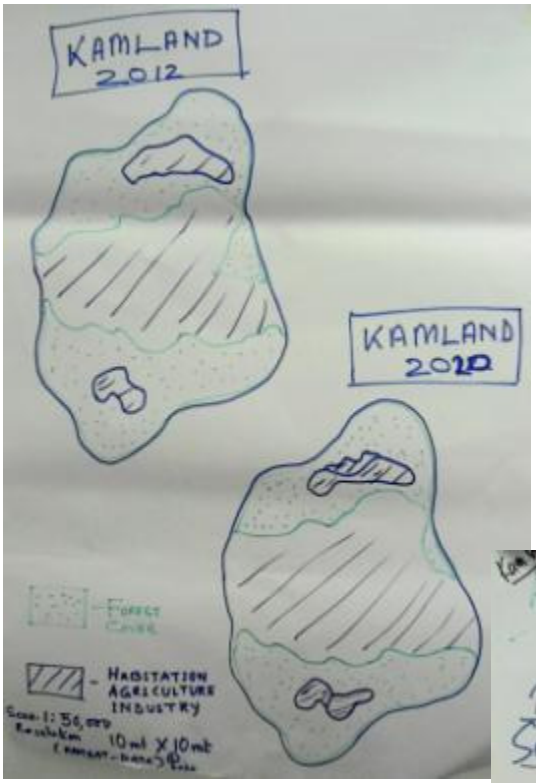


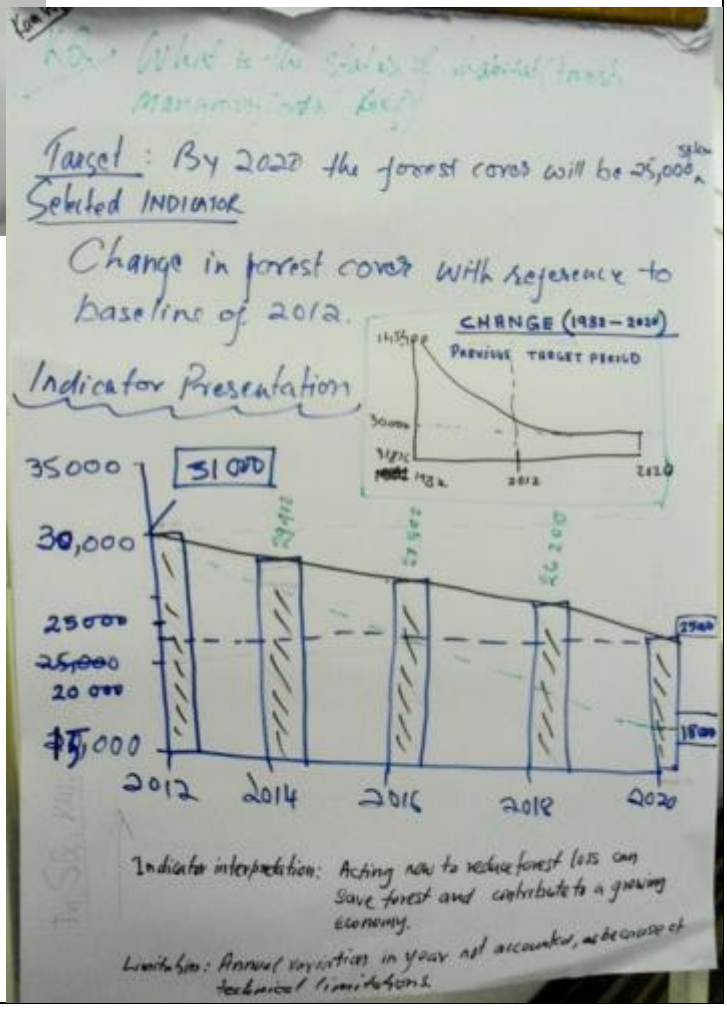
Kamland

Selected Indicator:

Change in forest cover with reference to baseline of 2012

Presentation Options:



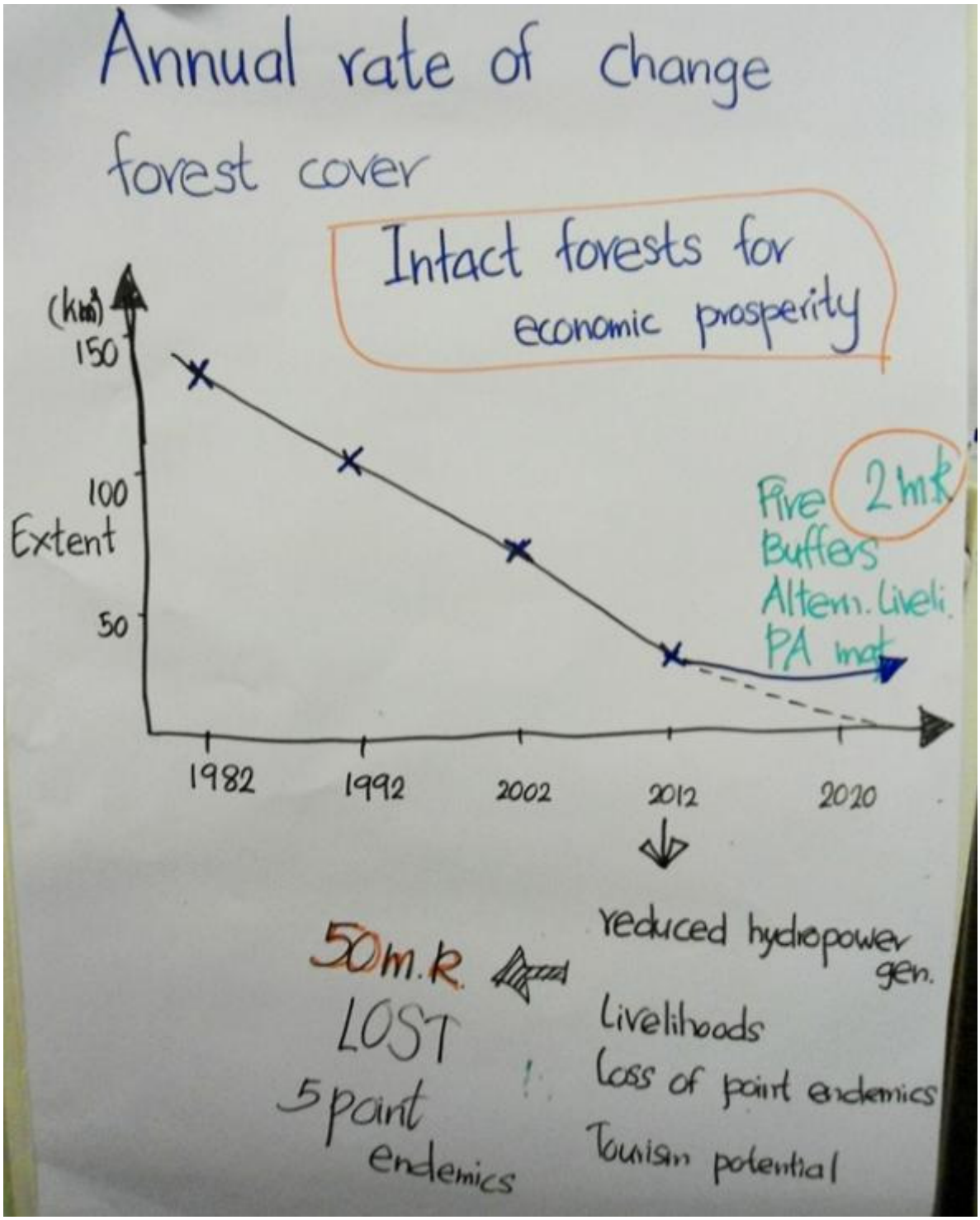


Balasia

Selected Indicator :

Annual rate of change of forest cover

Presentation Options:

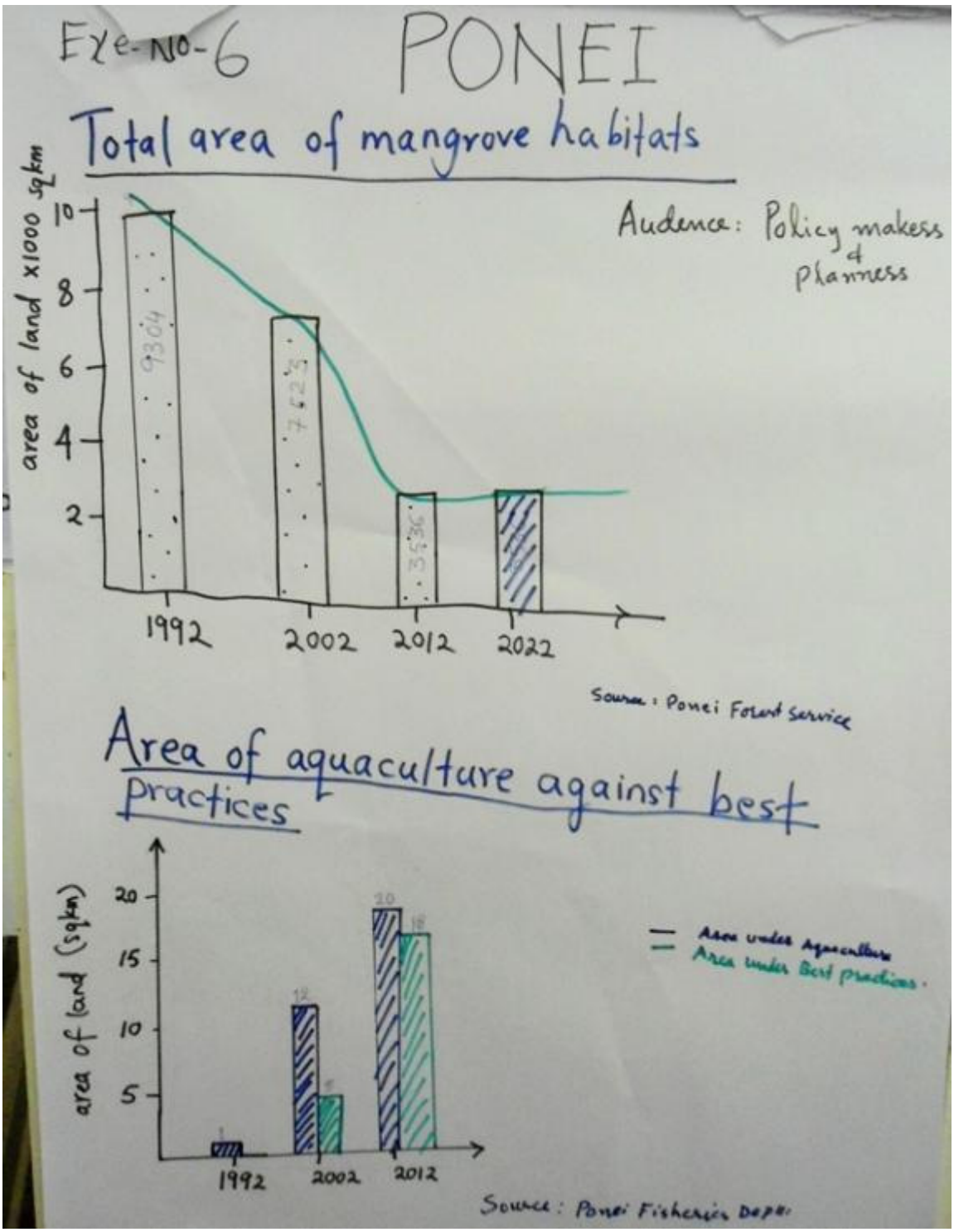


Ponei

Selected Indicator:

1. Total area of mangrove habitats.
2. Area of aquaculture against best practices.

Presentation Options:

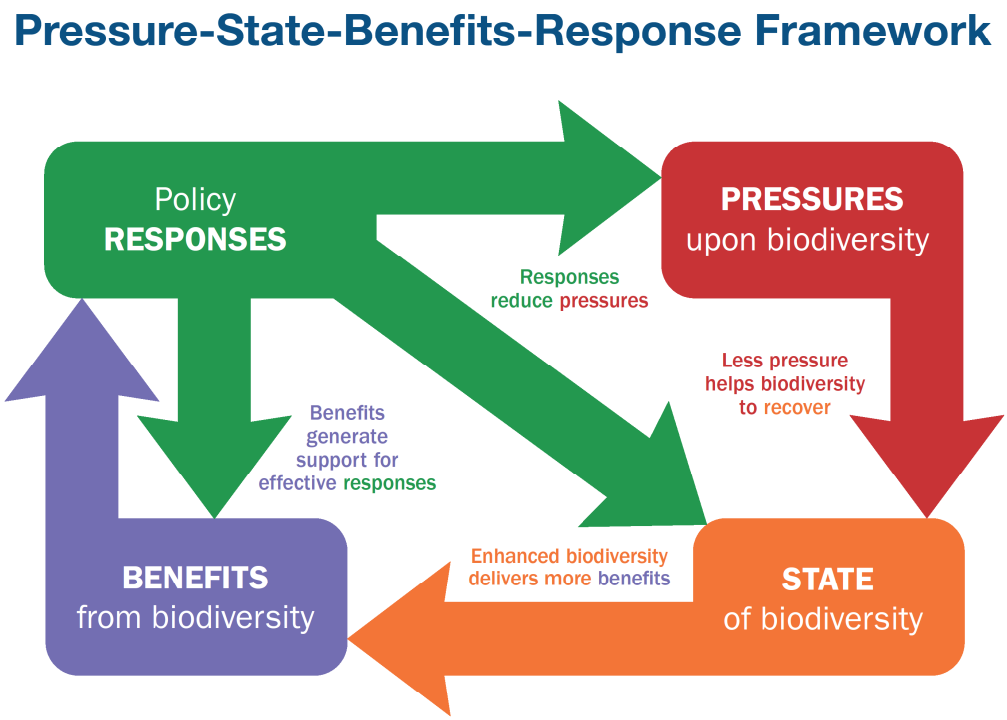


To conclude the role-play exercise, Philip Bubb summarised the exercises and lessons learned. He referred to the Biodiversity Indicators Development Framework, reminded that indicators are purpose-dependent, that they need to be used to be successful, and that it is important to clarify the purpose of the indicator and its user(s).

6. Day 3

6.1. Field Trip

On the morning of day three a field trip to Muthurajawela Marsh and Negambo lagoon was arranged and this event was fully sponsored by Dilmah Conservation (http://www.dilmahconservation.org/). The field trip provided an opportunity to apply some of the concepts covered in the workshop in an external environment. Participants were referred to an earlier conceptual model (below) that was



presented on Day 1 of the workshop, which illustrates how analyses and indicators of Pressures/State/Benefits/Responses can be linked. This conceptual model can be used as a basis for selecting indicators and also communicating indicators at a later stage.

Participants were separated into four groups. Each group was assigned with one of the conceptual model boxes (Pressures/State/Benefits/Responses) and tasked with identifying applicable information regarding the management of Muthruajawela marsh and Negambo lagoon that could be used to aid indicator development for the Park management. As part of this process, the participants were given the opportunity to meet with the Site manager of the wetland, and the Department of

Wildlife officials. Upon returning to the workshop venue, each group shared their findings and comments with the other participants.

Field Trip Results
State
1. Area: Approx: 6,000 ha (2,569 ha of marsh and 3,500 ha lagoon)
2. No of Plant species found in different habitats (Shrub- 115; Lentic – 57; marshland-57; Riperine-23; Mangrove-23; Reed/swamp – 94)
3. State of Fauna (Fish-35; Amphibian-14; Reptiles-31; Birds -83; Mammals -22)
4. Status indicators
4.1. Quantity of fish (kg)
4.2. No of migratory Bird species
4.3. Availability of NTFPs (food/medicine/industry)
Responses
1. A management plan has been developed, yet not implemented
2. Declaration of a Sanctuary under Flora and Fuana Protection Ordinance
3. Declaration of an Environmental Sensitive area under Environment Act
4. Declaration of a Fishery Management Area under Fisheries Act
5. Indicators
5.1. No of illegal cases apprehended
5.2. No of households participated in and benefited from community management (ecotourism ect)
5.3. Joint management committees formed and no of meetings held
5.4. No of activities implemented under the management plan
5.5. Population status of key stone species
5.6. No of EIA conducted in the area
Pressures
1. Population increase and encroachment
2. Urbanization, Industrialization
3. Siltation, overexploitation, salinity intrusion
4. Indicators
4.1. Population growth
4.2. Water quality, pollution
4.3. Invasive species, migratory birds
Benefits
5. Indicators
5.1. No of fisher family living in Muthurajawela
5.2. No of families benefiting from NTFPs
5.3. Revenue derived from tourism
5.4. No of flash floods effecting surrounding areas
5.5. Total area of healthy mangroves

5.6.	No cages used for fish breeding

Participants in Muthurajawela wetland on Day 3

Participants compiling information

7. Day 4

7.1.1. Analyzing the Aichi Targets: Information needs, possible indicators and national level constraints

Phillip Bubb provided an overview on Aichi Targets and stated that it provides a framework for all conventions and stakeholders within the UN Network. The vision is living in harmony with nature, and therefore people are put at the center. The participants were then divided into 4 groups and each group was given a different set of Aichi targets, asked to review the target and write information on a flipchart under the following sub-headings:

1. Essential information needed to set a national target or targets under this Aichi Target
2. Possible indicators for the Target
3. Information feasibility issues for national target setting and reporting

Participants were provided with the following resources to assist in the evaluation of the targets:

4. CBD Aichi Target Rationale: NEP/CBD/COP/10/INF/12/
5. Conceptual and knowledge issues for Aichi Targets 1 to 19. Taken from the Annex of the report, *National Indicators, Monitoring and Reporting for the Strategy for Biodiversity 2011-2020*

Each group presented their results back to the other participants. This activity took the form of a 'marketplace'- i.e. next to each flipchart a designated spokesperson explained the results found by their group to another group. After a given time, spokespersons would be replaced by another team member and each group moved on to the next flipchart.

Participants discussing the information needed to set a national target under an Aichi Target, possible indicators for the Target and information feasibility issues for national setting and reporting.

A participant expressing his views.

Exercise Results - The Aichi Targets: Information needs, possible indicators and national level feasibility

Target 1
Target Text
By 2020, at the latest, people are aware of the values of biodiversity and the steps they can take to conserve and use it sustainably.
Essential information needed to set a national target or targets under this Aichi Target
• Number and size of stakeholders (Direct/indirect) • Status of Bio-diversity - List of flora / fauna endangered • Number of NGO/CBO working in BD awareness • BD related programs included in Local development agencies • Value of Biodiversity included in formal education • Electronic and print media dissemination • Guidelines for general people • Number and type of tools and process for awareness
Possible indicators for the Target

• Number of forest/water user groups • Biodiversity Data base • No of Participants taken BD related training • Budget allocated for BD related program at local development agencies • Number of NGOs/CBOs working in BD related programmes
Information feasibility issues for national target setting and reporting
• Information available 5.1.1. National Data base of user groups 5.1.2. BD data base/IUCN Red book 5.1.3. Training Data base

Target 2
Target Text
By 2020, at the latest, biodiversity values have been integrated into national and local development and poverty reduction strategies and planning processes and are being incorporated into national accounting as appropriate and reporting systems.
Essential information needed to set a national target or targets under this Aichi Target
• Constitution, Perspective Plans including NBSAP 2004, 4th Report on NBSAP, NSDFS, Five year Plans, IUCN Red data books, Biodiversity status reports, National Conservation Strategy and Action Plan reports, NAPA, BCCSAP
Possible indicators for the Target
• Number of existing documents revised incorporating conservation of Biodiversity -Check box incorporated in the Documents especially project format to ensure BD conservation included and mainstreamed 5.2. NBSAP updated and customized with Aichi Targets and adopted by the Government and complied with the number of relevant departments
Information feasibility issues for national target setting and reporting
5.3. Lack of information on economic value of biodiversity

Target 3
Target Text
By 2020, at the latest, incentives including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimise or avoid negative impacts and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio-economic conditions.
Essential information needed to set a national target or targets under this Aichi Target
5.4. Extent of waste and degraded land 5.5. Existing water use efficiency and tends in availability 5.6. Existing use of pesticides (persistent and non-persistent) 5.7. Use of ground and surface water – domestic/agriculture/industry 5.8. Area available for social/community forestry 5.9. Biodiversity policy/Acts/ Rules and regulations/status of implementation 5.10. Use of fuel wood (from forests)/CNG 5.11. Policy/legislation/incentives for social forestry/community forestry/water harvesting/organic farming
Possible indicators for the Target
5.12. % of population using CNG/non conventional energy sources 5.13. Water use efficiency and % use of ground water 5.14. Use of non-biodegradable/persistent pesticides 5.15. % of organic farming 5.16. Formulation of biodiversity committees – local, national and sub-national 5.17. % completion of PBR and collection of user fees/cess 5.18. Amendments of Acts/rules/Executive orders/MoUs
Information feasibility issues for national target setting and reporting
• Land use data • Energy use data • Water use data • Pesticide use data • BD authority, SBD data, BMC data • Organic farming data • Fuelwood/CNG data

Target 4
Target Text
By 2020, at the latest, Governments, businesses and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of

use of natural resources well within safe ecological limits.
Essential information needed to set a national target or targets under this Aichi Target
5.19. No and quantity of species consumed - Harvesting Process, Plans for sustainable consumption 5.20. Reporting/Accountings systems for ecosystem services 5.21. No of permits (eg: CITES) issued 5.22. Status of Species
Possible indicators for the Target
• No of related concepts implemented • Extent of ecosystem services incorporated into original reporting • Trends of the status of species • No of incidents of CITES incorporated
Information feasibility issues for national target setting and reporting
5.23. Lack of information on current sustainable production and consumption practices and patterns

Target 5

Target Text
By 2020, at the latest, the rate of loss of all natural habitats, including forests, is at least halved and where feasible brought close to zero, and degradation and fragmentation is significantly reduced.
Essential information needed to set a national target or targets under this Aichi Target
• Major natural habitats in the country • Conditions of natural habitats • Main causes for habitat loss 5.24. Land use patterns
Possible indicators for the Target
• No of threatened habitats • % of ecosystems and habitats • No of PAs • Population of species in the habitat • Budget allocated for conservation activities
Information feasibility issues for national target setting and reporting
• No direct information available – No data bases • No monitoring done, so no data is collected • Reluctance/unwillingness in data sharing • Weak legislation

Target 6
Target Text
By 2020, at the latest, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem-based approaches, so that overfishing is avoided, recovery plans and measures are in place for all depleted species-fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems and the impacts of fisheries on stocks, species and ecosystems are in safe ecological limits.
Essential information needed to set a national target or targets under this Aichi Target
• Fish stock assessment baselines • Annual fish catch and types of fish harvested • Categories of gear/craft used • Fishing population information • By catch information • Information on vulnerable ecosystems and their threats • Existing laws, policies, plans and institutional structures and their gaps • Other pressures including international poaching, subsidies, pollution, invasive species
Possible indicators for the Target

• Marine tropic index – too complicated to calculate • By catch – No and species composition • Catch per unit effort • Annual fish catch • No of schemes to award certificates and standards for sustainable utilization • Legal instruments
Information feasibility issues for national target setting and reporting
• Lack of baseline information – especially scientific assessments of the status of stocks • Information sharing

Target 7
Target Text
By 2020, areas under agriculture, aquaculture and forestry are managed sustainably ensuring conservation of biodiversity
Essential information needed to set a national target or targets under this Aichi Target
• Information on Agriculture o Area under different farming systems (traditional, subsistence, commercial) o Types of verities/breeds o No of people engaged o Agriculture/land use policy • Information on Aquaculture o Area under different aquacultural practices o No of species used (exotic/local) o Rules/regulations imposed o % under aquaculture on subsistence farming /commercial o Adverse impacts of introduced species • Information on Forestry o Areas under different forests (types/management) o Protection and conservation status o No of species and quality of species harvested (NTFP) o Other income generation activities
Possible indicators
• Agriculture o Area under organic farming

- Area brought under land management plans
- Aquaculture
  - No of breeding programmes launched
  - No of management plans (sustainable)
  - Proportion of products certify as sustainable
- Forestry
  - % of Areas under different protection/management
  - No of Forests (area) under JFM
  - Trends in proportion of products "certified"
  - Population status/trends of forest depended species

Information feasibility issues for national target setting and reporting

- Reliability of certified schemes
- Agreement on "sustainability"
- Access, uniformity and sharing of data
- Institutionalization of reporting mechanisms

Target 8

Target Text

By 2020, pollution, including from excess nutrients, has been brought to levels that are not detrimental to ecosystem function and biodiversity.

Essential information needed to set a national target or targets under this Aichi Target

- Types and amounts of nutrient pollutants released by different stakeholders (agriculture, aquaculture, livestock etc)
- Reports of eutrophication/dead zone areas and the types of ecosystems affected
- Existing mechanisms (policy and institutional) to address the issues and their gaps
- Land use maps
- Annual information on: area under agriculture, livestock and aquaculture

Possible indicators for the Target

5.25. Incidence of eutrophication/hypoxia
5.26. Annual utilization of nutrients
5.27. Area under organic farming practices

Information feasibility issues for national target setting and reporting

- Lack of scientific information
- Issues in data compilation and sharing

Target 9

Target Text

By 2020, invasive alien species and pathways are identified and prioritized, priority species are controlled or eradicated and measures are in place to manage pathways to prevent their introduction and establishment.
Essential information needed to set a national target or targets under this Aichi Target
• No of invasive species and extent of their spread • Origin of particular species • Existing Laws/regulations • Possible methods to control the invasives
Possible indicators for the Target
• Trends of invasive alien species pathways • Trends in No of IAS • Trends in their impacts on native species • No of native species
Information feasibility issues for national target setting and reporting
• Information about most threatening species/ number of AIS • Impact of invasive spp • Extent of invasion/spread

Target 10
Target Text
By 2015, the multiple anthropogenic pressures on coral reefs and other vulnerable ecosystems impacted by climate change or ocean acidification are minimized so as to maintain their integrity and functioning.
Essential information needed to set a national target or targets under this Aichi Target
• Types of pressures and drivers of ecosystem degradation • Rate of decline of extent/quality of reefs • Trends in oceanic acidification • Types of actions needed to reduce/mitigate pressures • Trends of climate change • Trends of species extinction • Existing positive actions such as reef restoration
Possible indicators for the Target
• Extent of coral reefs and other vulnerable ecosystems • Condition of coral reef (quality) • Populations/composition • Trend of extinction
Information feasibility issues for national target setting and reporting

- Human pressures having greater impact
- Existing provisions to address pressures
- Effectiveness of exiting process
- Stakeholders concerned
- Status of coral reef and vulnerable ecosystems
- Sources of funding
- Existing harvesting practices
- Efforts to control IAS
- Climate change trends

Target 11
Target Text
By 2020, at least 17 per cent of terrestrial and inland-water areas and 10 per cent of coastal and marine areas, especially areas of particular importance for biodiversity and ecosystem services are conserved through effectively and equitably managed, ecologically representative and well-connected systems of protected areas and other effective area-based conservation measures and integrated into the wider landscape and seascape.
Essential information needed to set a national target or targets under this Aichi Target
• Extent of PAs/biodiversity coverage • Effectiveness of PAs • GAP analysis of PAs- Eco-regions/ biologically important area identification • Participatory management approaches • Financing
Possible indicators for the Target
• Trends of PA coverage vs species and populations • Population trends of key species • User group satisfaction
Information feasibility issues for national target setting and reporting
• Extent of current PAs • Population trends of key species • Finances availability figures for PA system • Information on resource persons

Target 12
Target Text
By 2020, the extinction of known threatened species has been prevented and their conservation status, particularly of those in decline, has been improved and sustained.
Essential information needed to set a national target or targets under this Aichi Target
• List of threatened species • Status of habitats of the species • Threats and causes of extinction of species
Possible indicators
• Trends in abundance of selected species (T/S)

• Trends in Status of Species (Red list)
Information feasibility issues for national target setting and reporting
• Lack of research • Lack of BIMS/CHM • Sharing data and information

Target 13
Target Text
By 2020 ,the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives including other socio-economically as well as culturally valuable species is maintained and strategies have been developed and implemented for minimizing genetic erosion and safe guarding their genetic diversity.
Essential information needed to set a national target or targets under this Aichi Target
• Extent of cultivated varieties of crops/livestock breeds • Information on wild relatives • Information on GMOs/LMOs • Other socio-economically important species • In-situ and ex-situ conservation measures • Traditional knowledge
Possible indicators for the Target
• Number of variety of crops • Number of breeds of livestock • Number of effective policies to control genetic erosion • Loss of crop varieties/breeds of livestock
Information feasibility issues for national target setting and reporting
• Lack of Research outcomes

Target 14
By 2020, ecosystems that provide essential services, including services relating to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities and the poor and vulnerable.
Essential information needed to set a national target or targets under this Aichi Target
• Which ecosystem services mostly contribute to livelihoods • Which ecosystems provide the vital ecosystem services to maintain livelihoods
Possible indicators for the Target
• Status of important ecosystems that provide essential ecosystem services

• Trends in status of soil micro-organism diversity • Trends in status of pollinator diversity
Information feasibility issues for national target setting and reporting
• Lack of research

Target 15

Target 17
Target Text
By 2015, each party has developed, adopted as a policy instrument, and has commenced implementing, an effective participatory and updated NBSAP thereby contributing to climate change mitigation and adaptation and to combating desertification.
Essential information needed to set a national target or targets under this Aichi Target
Essential information needed to set a national target or targets under this Aichi Target • Information on carbon stock in each vegetation type • List of degraded ecosystems (area) • NBSAP – Preparation or updates at national level • Progress at states, districts and local levels • Process followed (meetings and stakeholders' participation) • Establishment of CEPA &CHM
Possible indicators for the Target
Possible indicators for the Target • No of NBSAP Docs at state, district and local levels • No of meetings held and stakeholders involved • No of outreach materials prepared and use of CHM • No of National Reports
Information feasibility issues for national target setting and reporting
Information feasibility issues for national target setting and reporting • Information is lacking on Carbon stock, sequestration capacity
Information feasibility issues for national target setting and reporting

• Information available
  • NB SAPs documents of the past
  • Progress reports – national reports 1-4
  • Aichi strategic plans and targets
  • Target guidelines
  • Policy documents on valuation of ES/ABS/National accounting
  • Invasive species/PA coverage and extends

Target 18
Target Text
By 2020, the traditional knowledge, innovations and practices of indigenous and local communities relevant for the conservation and sustainable use of biodiversity, and their customary use of biological resources, are respected, subject to national legislation and relevant international obligations, and fully

integrated and reflected in the implementation of the Convention with full and effective participation of indigenous and local communities, at all levels.
Essential information needed to set a national target or targets under this Aichi Target
• ABS and IPO legislation • Indigenous community areas legally protected • TK inventory developed • Consensus to organize local communities organizations • Mountain areas conservation fund • Mountains of markets project initiated • Relevant industries have been sensitized • Local communities capacity
Possible indicators for the Target
• TK of practices respected under the law • Indigenous and LC livelihood status improved • Participation of LC in NRM initiative ensured • Trends in the practice of TK enhanced
Information feasibility issues for national target setting and reporting

• Information available
  • NBSAP, NCS, NSD Strategy, MFF-NSDAP, Provincial CS's
  • ABS Law, IPO ordinance, CITES Law/Act
  • 4th National Report(CBD)
  • Medicinal plants Reports and publications

Target 19
Target Text
By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred and applied.
Essential information needed to set a national target or targets under this Aichi Target
• Current status of knowledge e.g. assessments, surveys and maintaining systems • Knowledge sharing – publications, CHMs, websites, mass media communication • Science base improvements – Training of scientists, funding for researches • Sharing and transfer Science base(Publications, websites, academic and research programmes, conferences, W/S s etc) • Improve required technologies/researches – grant collaborate capacity building
Possible indicators for the target
• No of national bio-diversity information networks • No. of technical publications/research findings • No. of databases on bio-diversity storage/sharing • No. of related centers of excellence
Information feasibility issues for national target setting and reporting

• Available information
  • National status reports (Regional/Provincial)
  • Past national reports on Biodiversity
  • National Red List
  • National list of invasive species
• Issues
  • Lack of research
  • Lack of CHM

Target 20
Target Text
By 2020, at the latest, the mobilization of financial resources for effective implementation of the Strategic Plan for Biodiversity 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from current levels. This target will be subject to changes contingent to resources needs assessments to be developed and reported by parties.
Essential information needed to set a national target or targets under this Aichi Target
• The resources mobilized should come from : International organizations, governments, private sectors, etc
Possible indicators for the Target
• International financing for BD has been increasing and estimated to grow its budget
Information feasibility issues for national target setting and reporting
• Information Availability o Annual budget of NEPA/M of agriculture o Support of local people

Participants were given a chance analyze the Aichi Targets and following comments were given

Comments on Aichi Targets
• Some targets are very ambitious. Requires strong coordination and political will e.g. No 10 is almost impossible. • Some targets aren't relevant to all the countries and therefore need to identify which targets are most important to your country. • No specificity in the targets. It has become diluted. If there was a step by step procedure for it would have been more effective • There are some overlaps amongst the targets (e.g Target 1 and 20, targets on fisheries) • Targets are difficult to translate into action • Bio diversity has been divided into many sectors and in most countries so its extremely difficult to convince most sectors and people • Regional cooperation could help in implementing some targets • Lessons from GBO3 needs to be incorporated • Some National (existing) sectors can contribute to multiple targets

7.2. Presentations

7.2.1. Information sources and monitoring systems for NBSP updating and implementation

Presentation from International Center for Integrated Mountain Development (ICIMOD)

Nakul Chettri from ICIMOD, made a presentation on Biodiversity Conservation in the Hindu Kush Himalayan region. He stated that their work extends across eight countries. Established in 1983, ICIMOD is an Inter-governmental non-political international organization is involved in activities related to applying ecosystem approach for integrated conservation. Regional centre like ICIMOD could play a pivotal role in addressing and facilitating the countries to move towards the 2020 targets (www.icimod.org).

Presentation from Bird ConservationNepal

Dr. Hum Gurung of Bird Conservation Nepal talked about how birds and BirdLife can help set, meet, and monitor, national biodiversity targets. Dr Gurung stated that NBSAPs NBSAPs can provide a framework for other MEAs: CITES, CMS, Ramsar, WHS, UNFCCC. He further stated that birds can be used in the process to set targets — identifying priorities for action; Meeting targets — mobilizing civil society, local communities and NGO expertise; andTracking targets — reporting progress between now and 2020. As the BirdLife Partnership monitors birds and Important Bird Area locally following a standardized framework, the data generated can be used to track the Aichi targets nationally, regionally and globally (www.birdlife.org).

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Presentation from SACEP

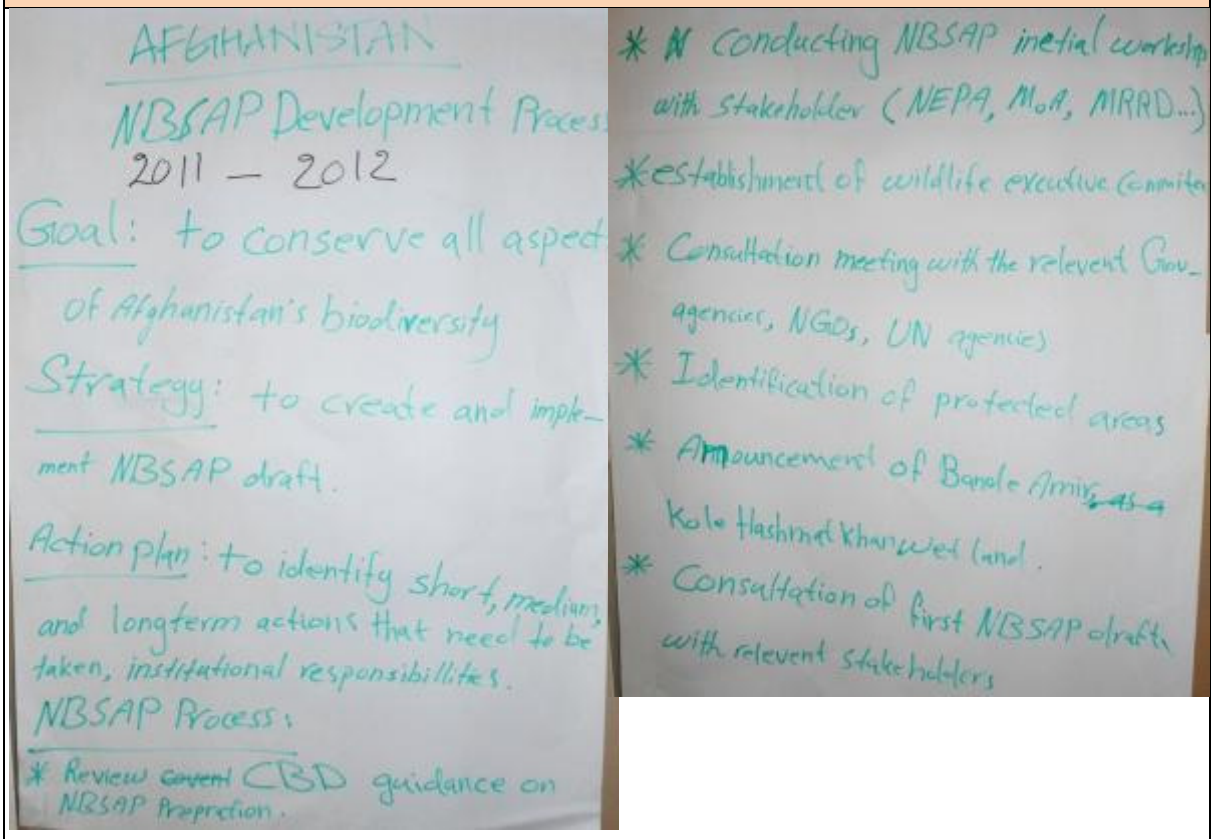
L.K Rathnadeera made a presentation on behalf of SACEP titled "SACEP's role in Biodiversity conservation in South Asia. He stated that Biodiversity Conservation has been high priority in SACEP's Work Plan for many years, while theMinisterial Declaration on 'South Asia's Biodiversity beyond 2010' highlight the political commitment of the region. Possible involvement of SACEP in the NBSAP process could be through cooperating with relevant institutions to strengthen an build necessary capacity needs of member countries; development of regional indicators based on national indicators; develop its own skills to act as trainers; and facilitate and coordinate to share the experiences among member countries (www.sacep.org).

7.3. Exercises

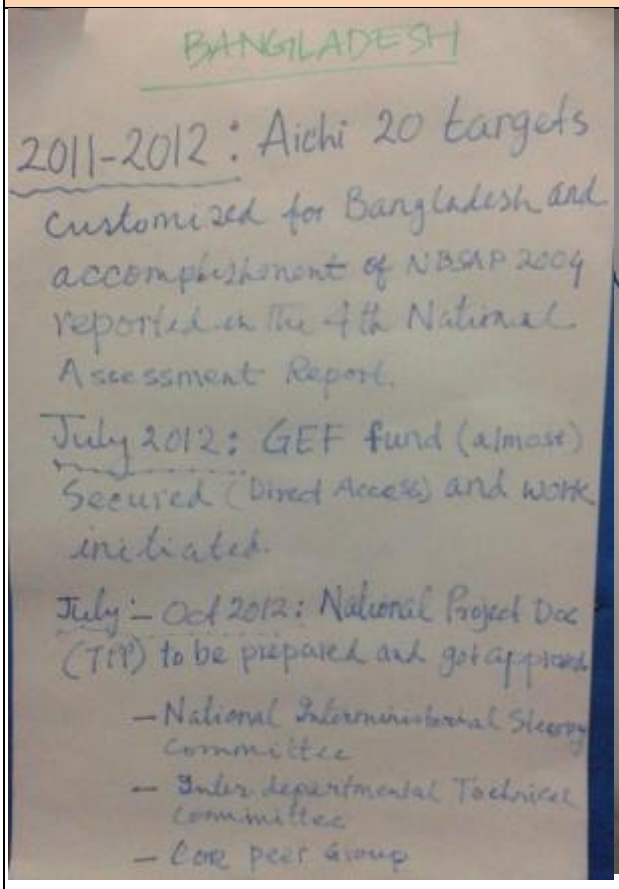
7.3.1. Next steps in developing NBSAP indicators

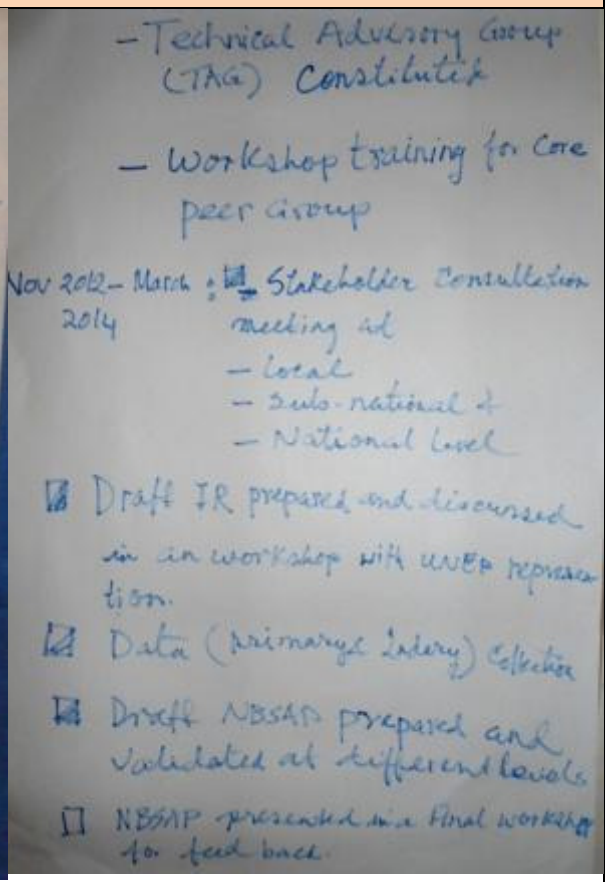
In the afternoon of Day 4, each country team was asked to draft and share their next steps, including stakeholder involvement and addressing capacity and information needs.

Results of the exercise:

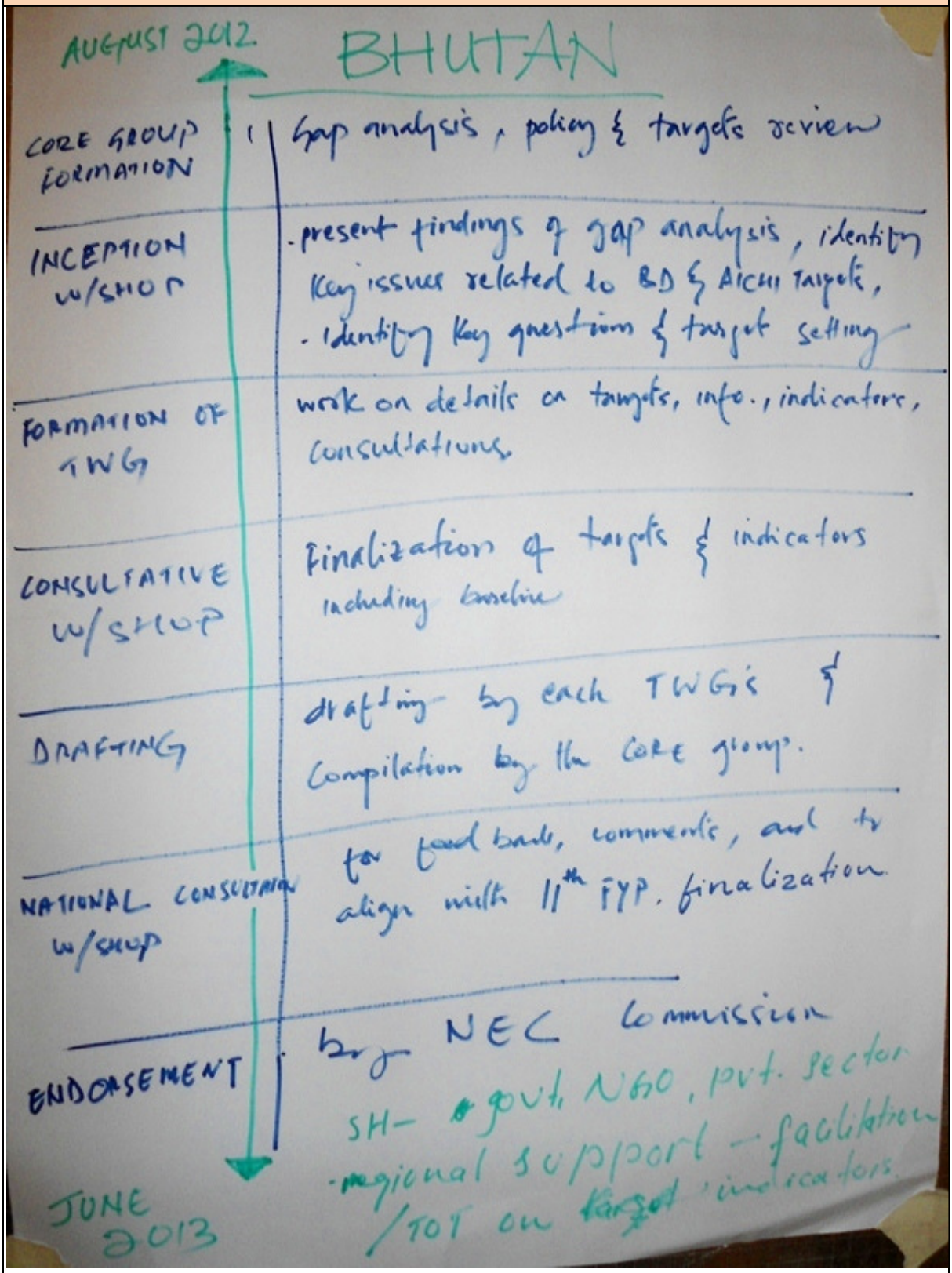
Next steps in developing NBSAP indicators
Afghanistan


Bangladesh

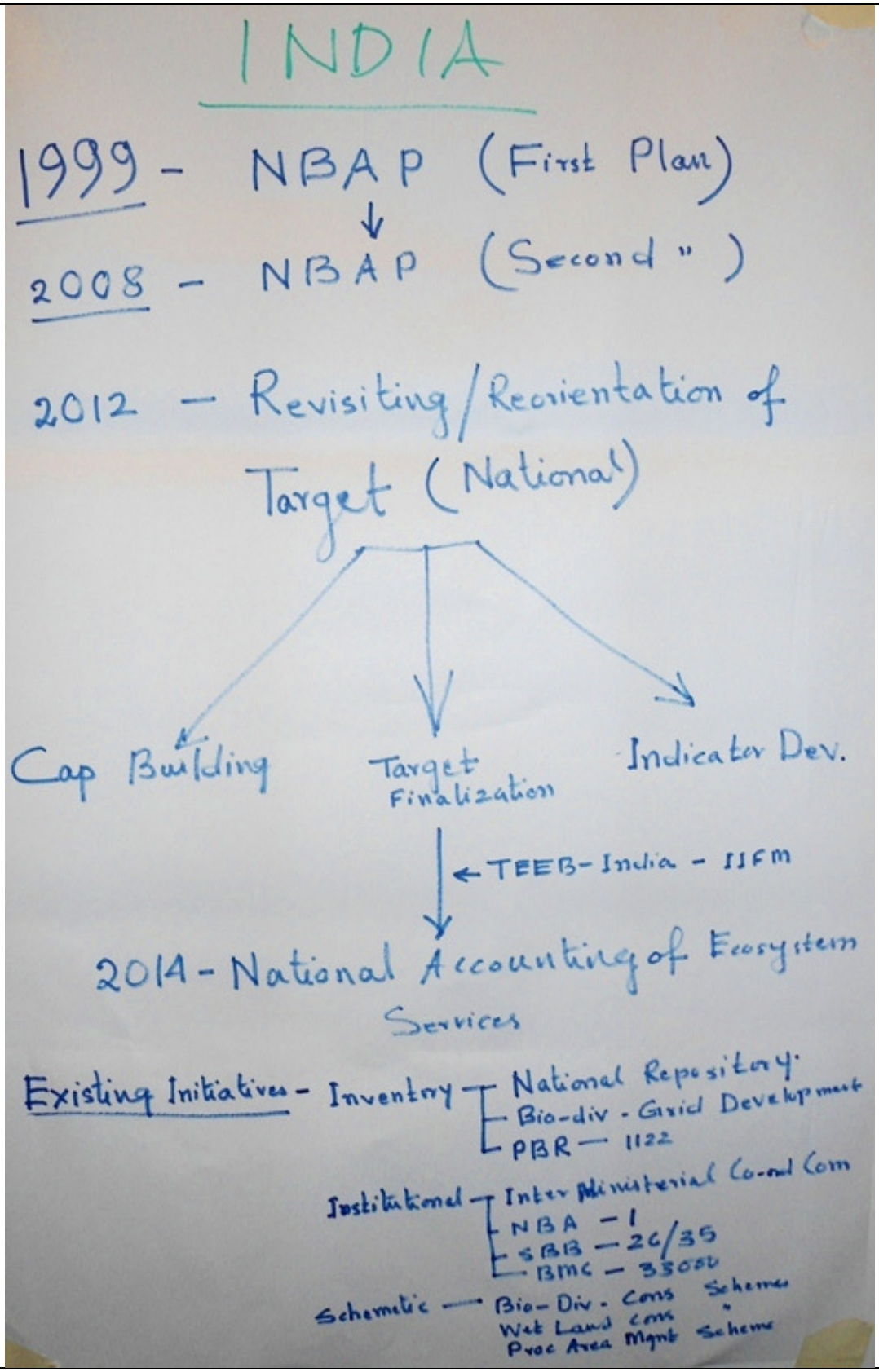

BANGLADESH
2011-2012: Aichi 20 targets customized for Bangladesh and accomplishment of NBSAP 2004 reported in the 4th National Assessment Report.
July 2012: GEF fund (almost) Secured (Direct Access) and work initiated.
July – Oct 2012: National Project Doc (TPP) to be prepared and get approved
– National Interministerial Steering Committee
– Inter departmental Technical Committee
– Core peer Group

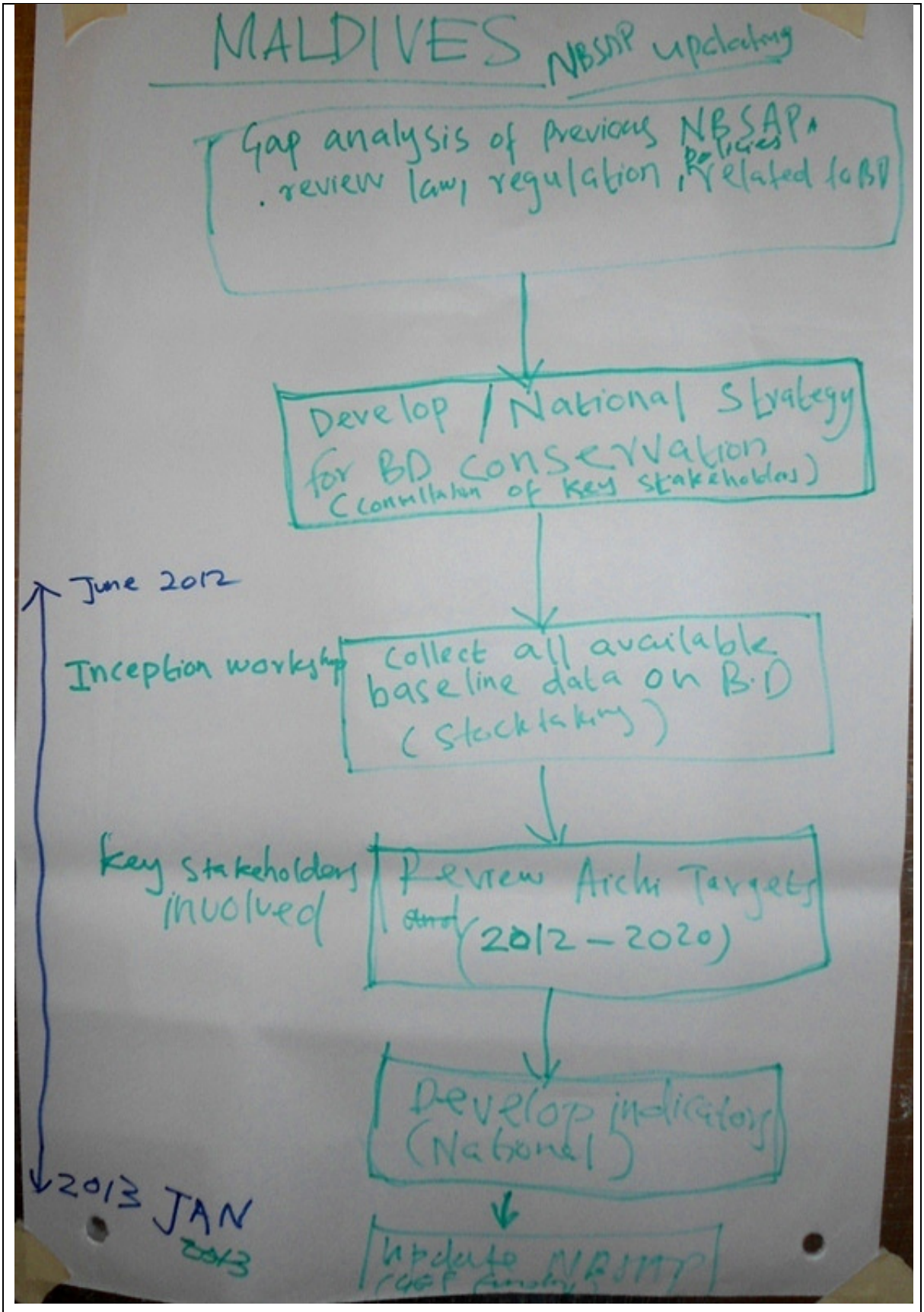

– Technical Advisory Group (TAG) Constitution
– Workshop training for Core peer Group
Nov 2012 – March 2014: Stakeholder Consultation meeting at
– local
– Sub-national &
– National level
Draft IR prepared and discussed in an workshop with UNEP representation.
Data (primary & secondary) Collection
Draft NBSAP prepared and validated at different levels
NBSAP presented in a Final workshop for feed back

Bhutan

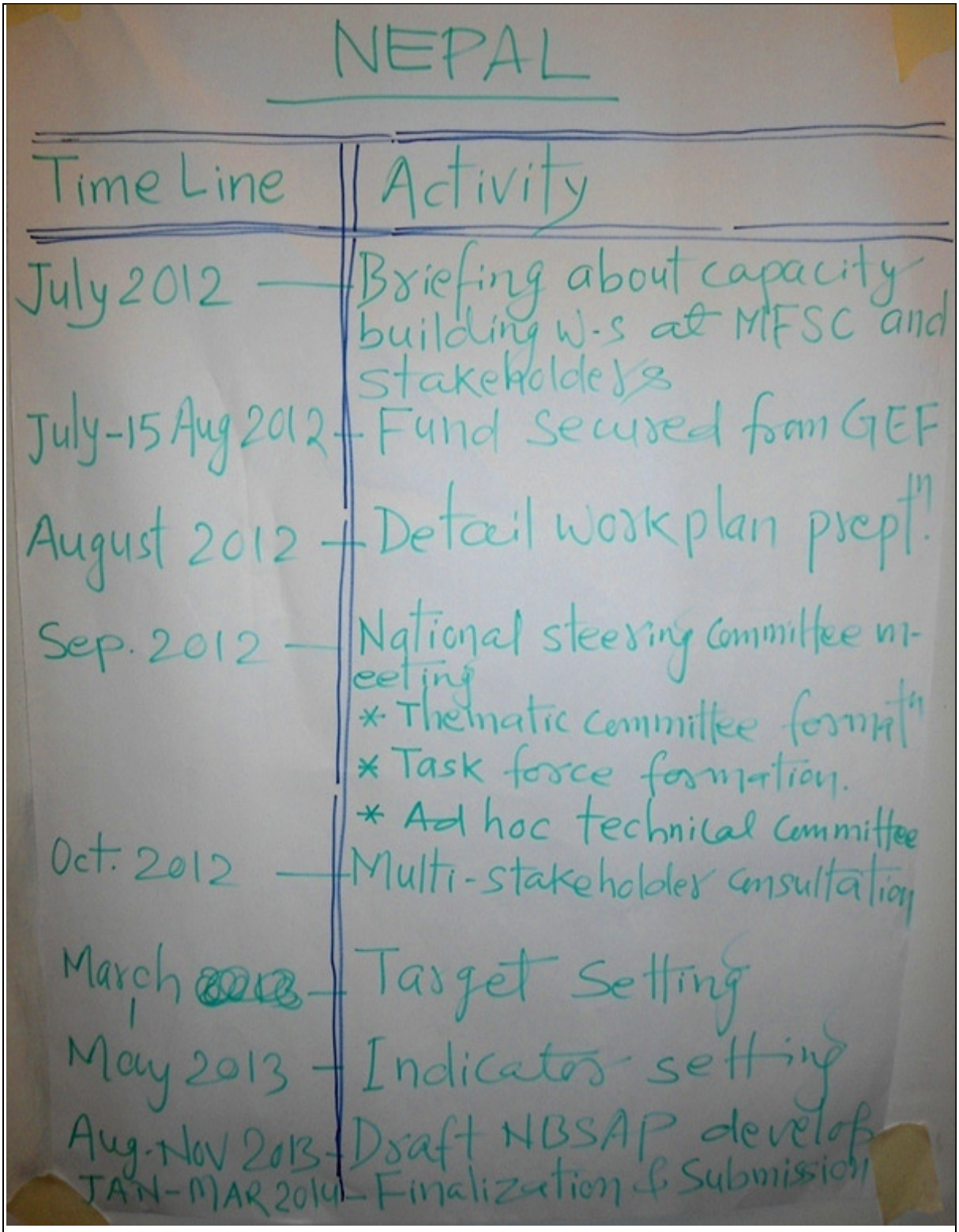


India

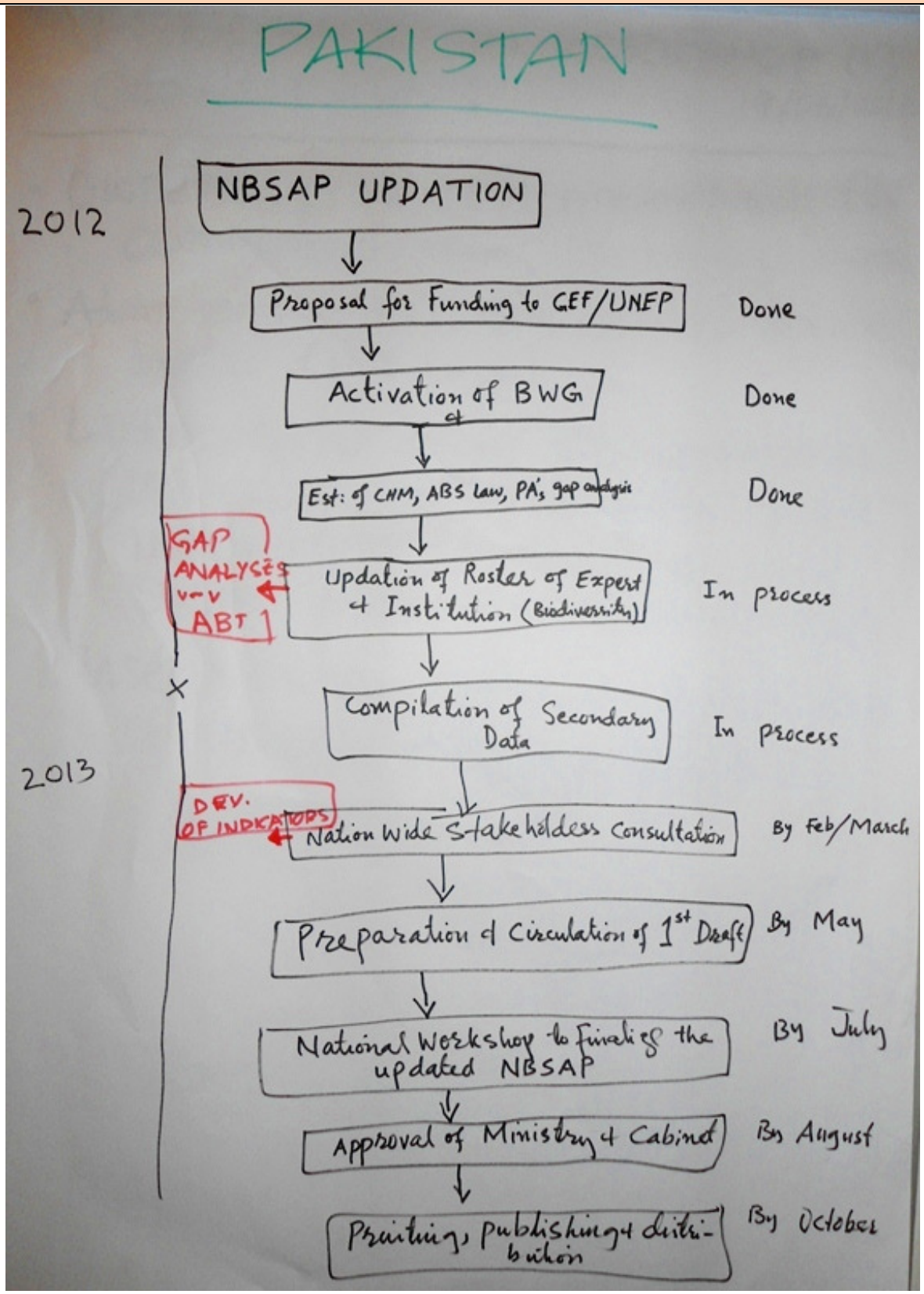

INDIA
1999 - NBAP (First Plan)
2008 - NBAP (Second ")
2012 - Revisiting/Reorientation of Target (National)
Cap Building
Target Finalization
Indicator Dev.
TEEB-India - IIFM
2014 - National Accounting of Ecosystem Services
Existing Initiatives - Inventory
National Repository
Bio-div - Grid Development
PBR - 1122
Institutional
Inter Ministerial Co-ord Com
NBA - 1
SBB - 26/35
BMC - 3505
Schematic
Bio-Div - Cons Schemes
Wet Land cons Scheme
Proc Area Mgmt Scheme


MALDIVES NBSAP updating
Gap analysis of Previous NBSAP
. review law, regulation, Policies related to BD
Develop / National Strategy
for BD conservation
(Consultation of key stakeholders)
June 2012
Inception workshop
Collect all available
baseline data on B.D
(Stocktaking)
key stakeholders
involved
Review Aichi Targets
(2012 – 2020)
Develop indicators
(National)
2013 JAN

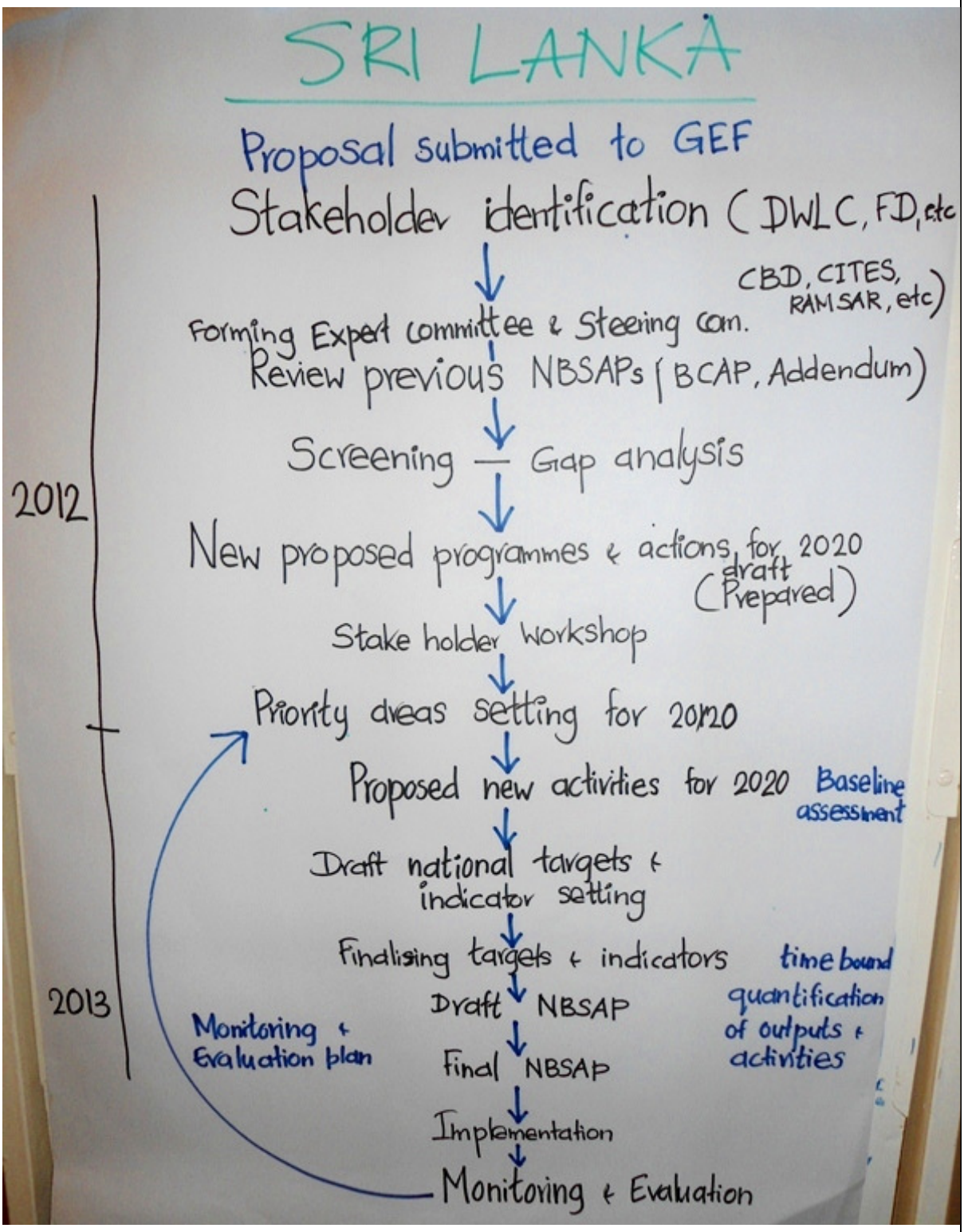
Nepal


NEPAL
Time Line
Activity
July 2012
Briefing about capacity building W-s at MFSC and stakeholders
July-15 Aug 2012
Fund Secured from GEF
August 2012
Detail workplan preptn.
Sep. 2012
National steering committee meeting
* Thematic committee formtn
* Task force formation.
* Adhoc technical committee
Oct. 2012
Multi-stakeholder consultation
March
Target Setting
May 2013
Indicators setting
Aug-Nov 2013
Draft NBSAP develop
JAN-MAR 2014
Finalization & Submission

Pakistan



Sri Lanka


SRI LANKA
Proposal submitted to GEF
Stakeholder identification (DWLC, FD, etc
CBD, CITES, RAMSAR, etc)
Forming Expert committee & Steering com.
Review previous NBSAPs (BCAP, Addendum)
Screening — Gap analysis
2012
New proposed programmes & actions for 2020 draft (Prepared)
Stake holder workshop
Priority areas setting for 2020
Proposed new activities for 2020
Baseline assessment
Draft national targets & indicator setting
Finalising targets & indicators
time bound quantification of outputs & activities
2013
Draft NBSAP
Monitoring & Evaluation plan
Final NBSAP
Implementation
Monitoring & Evaluation

7.4. Workshop conclusions

The last session of the workshop consisted in a group discussion on the main conclusions generated from participating in the workshop. These can be summed up as follow:

Feedback on the Workshop:

- Ownership is most important for ,commitments, mainstreaming and financing
- Linkages to other Rio Conventions (UNFCC, UNCCD) – lobby for NBSAP involvement of these sectors
- Share information and experiences
- Use skills to involve and change views of private sector for biodiversity conservation
- More time for the workshop to “digest” better

8. Annexes

8.1. Annex 1: Workshop participants

Name	Country	Designation and Organization	E-mail
Mr. Abdul Qaiyoum Afghan	Afghanistan	Herat Provincial Director National Environmental Protection Agency	qaiyoum.afghan2008@gmail.com
Mr. Shah Mir Amiri	Afghanistan	Director, National Environmental Protection Agency (DAIL)	shahmir_amiri@yahoo.com
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Mr. Thinley Dorji	Bhutan	Chief Environment Officer National Environment Commission	thinleydorji@nec.gov.bt
Dr. Biswajit Banerjee	India	Director (Forestry) Planning Commission	biswajit.banerjee@nic.in
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Ms. Muhusina Abdul Rahman	Maldives	Environment Analyst Ministry of Housing and Environment	muhsina.abdulrahman@mhe.gov.mv
Mr. Hassan Azhar	Maldives	Environment Analyst Ministry of Housing and Environment	hassan.azhar@mhe.gov.mv
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Mr. Buddhi Rijal	Nepal	Under Secretary (Technical) Department of Forests	buddhirijal@ymail.com brejal16@hotmail.com
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Mr. Abdul Munaf Qaimkhani	Pakistan	DIG-Forest (Forestry Wing) Ministry of Climate Change	amqaimkhani@yahoo.com
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Mr. R. S. S. Ratnayake	Sri Lanka	Snr. Environment Management Officer, Ministry	champikakariyawasam@yahoo.com

		of Environment	
Prof. S. W. Kotagama	Sri Lanka	National Expert, Department of Zoology, University of Colombo	fogsl@slt.lk
Mr. H. D. Ratnayake	Sri Lanka	Director (Operations), Department of Wildlife Conservation	dayawanratnayake@yahoo.com
Dr. Lakshman Peiris	Sri Lanka	Assistant Director, Department of Wildlife Conservation	lakshman_peiris@ymail.com
Mr. Dhammike Pebotuwa	Sri Lanka	Assistant Director, Department of Wildlife Conservation	dhammikepebotuwa@gmail.com
Dr. Hum Bahadur Gurung		Chief Executive Officer Bird Conservation Nepal	hum@birdlifenepal.org humguru@gmail.com
Dr. Nakul Chettri		Team Leader- Biodiversity Conservation and Management (BCM), International Centre for Integrated Mountain Development (ICIMOD)	nchettri@icimod.org
Mr. Ghulam Nabi Hamidullah Akbary		UNEP – Afghanistan, National Programme Officer and Focal Point for NBSAP	hamidullah.akbary@unep.org
Mr. Philip Bubb		Senior Programme Officer Ecosystem Assessment Programme UNEP-WCMC	philip.bubb@unep-wcmc.org
Dr. (Ms.) Haruko Okusu		Programme Officer UNEP/DELC Biodiversity MEA Focal Point for Asia/Pacific, UNEP Regional Office for Asia Pacific	haruko.okusu@unep.org
Mr. David Duthie		Senior Programme Officer Secretariat of the Convention on Biological Diversity	david.duthie@cbd.int
Ms. Jacintha S. Tissera		Administrative Officer, SACEP	sacep@eol.lk
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Ms. N .M .P . Perera		Programme Officer, SACEP	po_sacep@eol.lk
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Ms. D. M. Sudarshani		Secretary, SACEP	sacepsec@eol.lk
Mr. W. M. Dinendra Thilaka		Database Assistant, SACEP	dba_sacep@eol.lk
Ms. Upekkha Basnayake		Intern, SACEP	upekkhab88@gmail.com

8.2. Annex 2: Workshop programme

15th July – Arrival of participants

16th July, Day 1 - Understanding indicators in NBSAP updating and Training Exercise

9.00	**Welcome** **Introductions, agree workshop programme**
9.45	**Rapid assessments** of plans for NBSAP updating & capacity for indicators.
10.00	**Introduction to the Strategic Plan for Biodiversity 2011-2020** A quick overview of its vision, mission, the strategic goals and how they relate to each other, the Aichi Targets, the recommendations of SBSTTA-15, and the framework of global indicators.
10.30	**Updating and implementing NBSAPs,** A brief discussion on making NBSAPs an effective part of cross-sectoral government policy and planning and supported by other sectors of society (mainstreaming).
11.00	*Break*
11.20	**Target setting as part of national planning** What is required for successful target setting and 'ownership', including the role of information? Including sharing the experiences of the participants to date.
11.40	**What is an indicator and the uses of indicators** A brief introduction and discussion. This subject will be further developed in the role-play exercise.
12.20	**The distinctions between targets and indicators** Presentation and discussion. This subject will be developed in the role-play exercise.
13.00	*Lunch*
14.00	**Steps in updating NBSAPs with the Aichi Targets and the roles of indicators** An introduction, to be developed in the role-play exercise.

14.20	**Training Exercise– Setting 2020 Targets and choosing indicators** This role-play exercise will start on Day 1 and continue on Day 2. In the exercise participants will develop national targets and indicators for a fictional country. Workbook 1. Analyse a given Aichi Target and determine relevant key questions to guide national target setting.
15.20	*Break*
15.40	Workbook 2. Draft national versions of the Aichi Target.
16.30	Workbook 3. Develop a conceptual model to guide indicator selection & communication.
17.30	End of Day 1.

17th July, Day 2 – Training Exercise Part 2 and Analyzing the Aichi Targets

9.00	**Continue Training Exercise– Setting 2020 Targets and choosing indicators** Workbook 4. Identify possible indicators.
10.30	Workbook 5. Gather and review data.
11.20	Break
11.40	Workbook 6. Calculate and communicate indicators.
12.30	**Identify conclusions from the Training Exercise**
13.00	Lunch
14.00	**Analysing the Aichi Targets** Working groups will examine the information needs and possible indicators for the Aichi Targets, including common relationships and needs between the Targets.
16.00	**Indicators for NBSAPs** – examples and analysis from the region
17.15	Prepare for Field Trip
17.30	End of Day 2

18th August, Day 3 – Field Trip to Muthurajawela wetland and Negambo lagoon to explore the application of ecosystem services concepts and the use of indicators in management.

19th July, Day 4 – Biodiversity monitoring, information sources and next steps.

09.00	**What makes a successful indicator?** Analysis of examples from the region of successful indicators.
11.00	*Break*
11.20	**Review and inputs on the indicator needs of any draft national targets.**
13.00	*Lunch*
14.00	**Next steps in developing NBSAPs** Each country team will draft and share their next steps, including stakeholder involvement and addressing capacity and information needs.
15.30	*Break*
15.50	**Regional co-operation and international support** Identification of opportunities for 'South-South' co-operation, exchange of expertise, and international support to NBSAP updating and indicator development.
16.40	**Workshop conclusions and thanks.**
17.00	**End of workshop.**