Aiding the transition from awareness to action, the rapid development of the cross-cutting, multi-disciplinary approach of Education for Sustainable Development (ESD) is of seminal relevance to this process, for ESD can provide valuable tools, skills, methodologies, pedagogies and expertise for biodiversity conservation as part of the search for a sustainable future. (Outcome Document, 2012)
Biodiversity Education

Integrating Education for Sustainable Development with Strategic Plan for Biodiversity

A Tool for Developing
National Biodiversity Education Strategies

Supported by

CEE
Centre for Environment Education
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The views presented in this publication do not necessarily reflect the views of MoEFCC, NBA, Government of India; UNESCO or CBD.

Centre for Environment Education (CEE) is an internationally recognised institution engaged in programmes with a mandate to promote education for sustainable development. CEE is a Centre of Excellence, supported by the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India.
### Evaluation

While evaluation is essential for the programme improvement, it is important to allocate adequate time and separate budget for this. Evaluation indicators must represent all the important concerns of the Aichi Biodiversity Targets while also integrating ESD concerns. Simple, Measurable, Achievable, Result-oriented, Time-bound (SMART) indicators will be able to extract the essential information to assess the contribution of education in the achievement of the Aichi Biodiversity Targets.

<table>
<thead>
<tr>
<th>Aichi Biodiversity Targets</th>
<th>1 (Example)</th>
<th>2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicators</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Status indicator</td>
<td>% of each stakeholder group possess knowledge about biodiversity and action to be taken for its conservation</td>
<td></td>
</tr>
<tr>
<td>Context indicator</td>
<td>Organisational structure (description) in place to reach out to each stakeholder group</td>
<td></td>
</tr>
<tr>
<td>Process indicator</td>
<td>Educational programme, communication strategy, resource institutions, communication tools, materials, time, budget planned for each stakeholder group</td>
<td></td>
</tr>
<tr>
<td>Learning indicator</td>
<td>% of each stakeholder group learn biodiversity values and steps to conserve it</td>
<td></td>
</tr>
<tr>
<td>Output indicator</td>
<td>% of each stakeholder group possess knowledge on biodiversity and actions to conserve and use it sustainably</td>
<td></td>
</tr>
<tr>
<td>Outcome indicator</td>
<td>% of each stakeholder group participate in NBSAP processes for biodiversity conservation</td>
<td></td>
</tr>
<tr>
<td>Impact indicator</td>
<td>Number of opportunities created for each stakeholder group to participate in NBSAP processes</td>
<td></td>
</tr>
<tr>
<td>Performance indicator</td>
<td>Extent of enhancement in the implementation of the strategic plan of UNDB</td>
<td></td>
</tr>
</tbody>
</table>

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 – Aichi Biodiversity Target 1

The Convention on Biological Diversity (CBD) has set education high on the agenda in the Strategic Plan for Biodiversity 2011–2020, recognising its crucial role in facilitating the implementation of the Aichi Biodiversity Targets. Joining hands with the CBD Secretariat for the furthear of biodiversity education, Centre for Environment Education, a Centre of Excellence of the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India, during its Presidency (2012-2014), has developed A Comprehensive Framework for an Educational Strategy for Biodiversity Conservation and Sustainable Use with the support from the UNESCO. This Framework is expected to serve as a tool for developing National Biodiversity Educational Strategies by the Countries for biodiversity conservation and sustainable use and its implementation. It has attempted to integrate the concepts of Education for Sustainable Development (ESD) with the Strategic Plan for Biodiversity, thus contributing to both - United Nations Decade on Biodiversity (UNDB 2011-2020) and United Nations Decade of Education for Sustainable Development (UNDES 2005-2014) - and beyond. The Framework treats education as cross cutting and addresses it in every Aichi Biodiversity target for effective implementation. Considering the focus of each Aichi Biodiversity target, the timeline for its achievement, available resources and investments, the stakeholders have been prioritised. Case studies from across the Globe are presented in the Framework to inspire and enhance the understanding of the stakeholders, especially the practitioners, regarding the depth of the impact and the change that education can bring about in the achievement of Aichi Biodiversity Targets.

This is an abridged version of the Comprehensive Framework for an Educational Strategy for Biodiversity Conservation and Sustainable Use, prepared to help countries get a snapshot of the educational actions that may be planned with the various stakeholders to promote each Aichi Biodiversity Target.

Hem K. Pande
Background

Education is the most powerful weapon which you can use to change the world.
- Nelson Mandela

The Convention on Biological Diversity has clearly recognised the critical need of education to engage society in biodiversity conservation as early as 1998 (Article 13). It has reemphasised its crucial role by placing it as one of the Aichi Biodiversity Targets in its Strategic Plan (2011-2020).

‘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’: Aichi Biodiversity Target 1.

While the Communication, Education and Public Awareness (CEPA) programme of CBD in partnership with UNESCO has attempted to create awareness on biodiversity, the critical need of the hour is to accelerate the momentum and to move society from awareness to concerted action, taking advantage of Education for Sustainable Development (ESD), in facilitating the implementation of Aichi biodiversity Targets for a sustainable future.

The Outcome Document of the International Conference on Biodiversity Conservation and Education for Sustainable Development; Learning to Conserve Biodiversity in a Rapidly Changing World, a parallel event at the COP 11, Hyderabad, India (October 2012), has urged CBD to adopt its recommendations, integrating ESD and Strategic Plan for Biodiversity.

Appreciating the contribution of the conference, and to take the recommendations forward, the Secretariat CBD, signed a Memorandum of Understanding (MoU) with the Centre for Environment Education, a Centre of Excellence of the Ministry of Environment, Forests and Climate Change (MoEFCC), Government of India, at COP 11 to cooperate, collaborate and facilitate the educational efforts in the promotion of Aichi Biodiversity Targets at the global level in the UN Decade on Biodiversity (2011-2020).

CBD – CEE Joint Initiative

This tool is prepared as a part of the Memorandum of Understanding (MoU) between the CBD Secretariat and CEE. This is an abridged version of ‘A Comprehensive Framework for an Educational Strategy for Biodiversity Conservation and Sustainable Use’. The areas of co-operation under this MoU are:

1. Cooperate to promote the development and implementation of educational strategy and plans of action that are supportive of the objectives of the CBD, the Strategic Plan and the Decade on Biodiversity and of the objectives of education for sustainable development
2. Collaborate on foundational research and desk studies that would assist CBD in development of strategies, guidelines, tools and materials to support relevant communication and learning objectives
3. Collaborate to engage relevant partners and stakeholders, including existing international educational initiatives for wider sharing of information, learning, implementation and scaling up;
4. Collaborate on innovative concepts and practices to educate and engage stakeholders, particularly children and youth, such as the Handprint and The Green Wave initiatives, in order to advance their objectives and strengthen their implementation and effectiveness;
5. Collaborate to encourage participation of local communities, children and youth and other stakeholder groups in decision making processes and implementation actions related to biodiversity and other related issues;

Planning Communication and Evaluation

Communication

While communication plans need to include advanced technology interventions, traditional methods which are innovative, interesting and exciting also ought to be explored and applied, particularly in the developing world.

Communication needs to be planned taking into account the educational objectives of the stakeholder group to be addressed; literacy, knowledge and skill levels of the group; expected results; real time; available resources and so on. Motivation and attitude also play a major role in deciding the communication approaches.

Major elements of the education and communication plan

- Stakeholder group to be addressed
- Stakeholder background
- Policies and practices related to education for this group
- Goal and objectives
- Content framework and information needs
- Communication approaches
- Resources including materials and facilities – available and to be developed
- Experts/ex expert institutions
- Monitoring and evaluation
- Time availability and planning
- Service providers/human resources
- Financial planning and resources
Legal Professionals

- Improve the understanding of current biodiversity related national and international laws/acts including Common/Intellectual Property Rights to help the group identify gaps
- Engage legal professionals in framing user-friendly legal proceedings for communities, particularly benefit claimers
- Seek professional help in disseminating simplified legal information to stakeholders, particularly to local/indigenous communities
- Motivate the group with incentives to participate in legal proceedings related to biodiversity, particularly Aichi Biodiversity Target 16 (Access to Benefit Sharing – ABS) in greater numbers

2 Preparation Process

Status of education in biodiversity conservation

Analyzing trends and challenges

Review of key reports

Aichi Targets

Meetings and discussions

1. What are the Educational strategies adopted?
2. What are the resources and extent of investments?
3. What are the impacts?

1. What do 20 defined Aichi Biodiversity targets address?
2. What is the timeframe for achieving the targets?
3. Which stakeholders do these targets focus?
4. Which major global challenges do targets link?

1. What lessons have been learnt from CEPA activities 2002-10?
2. Is ESD integrated?
3. What are educational challenges for UNDB (2011-2020)?
4. How can these be addressed?

Objectives
Priority areas

ESD processes

Framework for an Educational Strategy for Biodiversity Conservation
The Purpose of the Tool

This tool has been prepared integrating the concepts of ESD and Strategic Plan for Biodiversity with the aim to support Countries in the development of an educational strategy for facilitating implementation of the 20 Aichi Biodiversity Targets in the UN Decade on Biodiversity (UNDB).

| **Media** | • Give precise data/information on CBD, UNDB, Aichi Biodiversity Targets, NBSAP and the International Day for Biodiversity, key messages and the data sources to aid media to develop and disseminate innovative, technically sound and effective mass communication programmes/events/campaigns at regular intervals
• Emphasise roles and responsibilities of media in biodiversity conservation, particularly in communicating key messages to various stakeholder groups
• Provide incentives to increase efforts and the extent of coverage on biodiversity in both print and visual media |
| --- | --- |
| **General Public** | • Improve public awareness on biodiversity, its values in daily life and livelihood, erosion and impacts, and conservation efforts through mass media, upgrading public facilities such as parks and zoos
• Disseminate key messages using innovative advertisements, art work, folk media, theatre, social media networks and other popular methods to stress the need of public participation in biodiversity conservation
• Introduce CBD, UNDB, Aichi Biodiversity Targets by increasing public participation in events such as International Day for Biodiversity and World Environment Day
• List and explain practices leading to conservation and sustainable use of biodiversity and encourage public to adopt them
• Motivate to share experiences, practices, data/information related to biodiversity using their networks, social networks in particular, to strengthen the NBSAP processes
• Provide platform to enhance public participation in information dissemination and sharing |
| **Research Group** | • Foster their understanding of educational efforts and their participation especially in prioritising the research needs in different disciplines to enhance the utility of research supporting Aichi Biodiversity Targets
• Develop mechanisms for sourcing scientific and technical data
• Identify platforms, opportunities and mechanisms for the group to share their knowledge, information and database including technology interventions like workshops and conferences
• Explore the possibility of their contribution to link specialised/technical/scientific database with national information, enabling wider sharing of information |
| **Raise awareness on biodiversity, its values, commercial utility, CBD and NBSAP processes, Nagoya Protocol and its ratification in particular, to engage this group in legal awareness programmes** |
### Level 4 (Higher Secondary: Students from 16 to 18 years)
- processes and best practices at local/regional level
  - Train youth in data collection and dissemination through modern information technologies and Management Information System (MIS)
  - Create opportunities enabling youth to participate in the documentation process

### Level 5 (Tertiary undergraduates and post graduates - Students above 18 years)
- Expose youth to experiential and participatory learning to encourage students to initiate projects related to any of the Aichi Biodiversity Targets
- Train youth in modern information technologies and Management Information System (MIS) and involve them in strengthening geo-referenced database and national accounting system
- Introduce research methods and tools in social sciences, ecology, science and technology, related to biodiversity such as modeling and use of the remote sensing data, thereby enabling youth to participate in biodiversity research
- Discuss their roles and responsibilities in the NBSAP processes to increase their participation, especially in the area of research and documentation and outreach activities
- Increase opportunities to enable youth to participate in conservation projects

### Teachers / Teacher trainers / educators
- Enhance the understanding of biodiversity, its values including ecological interactions, status, decline, causes and impact, to assist teachers in facilitating strengthening / inclusion of biodiversity in the curriculum
- Expose to CBD, Aichi Biodiversity Targets, UNDB, NBSAP, and the International Day for Biodiversity to engage teachers in facilitating outreach and research activities
- Enhance capacities in innovative teaching - learning approaches, discipline integration, research and communication methods to inspire them to create / enhance co curricular and extracurricular opportunities
- Introduce related materials, data sources
- Emphasise their role as facilitators to ensure and maximise learning opportunities of students / youth for conservation, nurturing changes in their attitudes and behaviour towards biodiversity
- Engage teachers to facilitate data collection and dissemination by involving students / youth

### Sensitise media to biodiversity, its values, status, decline, causes and impacts
- Train stakeholders, particularly youth, teachers and NGOs, enabling them to contribute to media campaigns, through writing, production, information sharing, photography and so on

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### Major Stakeholders Addressed

All sections of the society are involved directly or indirectly in the harvest, use and management of biodiversity. Hence education is important for all stakeholders.
### Strategic Goals and Aichi Biodiversity Targets for the UN Decade on Biodiversity

#### Strategic Goal A

**Address the underlying causes of biodiversity loss by mainstreaming biodiversity across government and society**

<table>
<thead>
<tr>
<th>Aichi target 1: Awareness increased</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>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.</td>
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</table>

<table>
<thead>
<tr>
<th>Aichi target 2: Biodiversity values integrated</th>
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</thead>
<tbody>
<tr>
<td>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.</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Aichi target 3: Incentives reformed</th>
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<tbody>
<tr>
<td>By 2020, at the latest, incentives, including subsidies, harmful to biodiversity are eliminated, phased out or reformed in order to minimize or avoid negative impacts, and positive incentives for the conservation and sustainable use of biodiversity are developed and applied, consistent and in harmony with the Convention and other relevant international obligations, taking into account national socio economic conditions.</td>
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<table>
<thead>
<tr>
<th>Aichi target 4: Sustainable consumption and production</th>
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</thead>
<tbody>
<tr>
<td>By 2020, at the latest, Governments, business and stakeholders at all levels have taken steps to achieve or have implemented plans for sustainable production and consumption and have kept the impacts of use of natural resources well within safe ecological limits.</td>
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</tbody>
</table>

#### Other Stakeholders

<table>
<thead>
<tr>
<th>Possible actions</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 1</strong> (Primary: Students from 5 to 10 years)</td>
<td></td>
</tr>
<tr>
<td>• Improve / Include in the curriculum simple biodiversity concepts to inculcate among students a sense of interest / appreciation towards diverse life forms in and around their neighborhood.</td>
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<tr>
<td>• Introduce simple field activities</td>
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<tr>
<td>• Prepare and / or supply simple biodiversity related extracurricular materials such as story booklets, puzzles, information posters, activity booklets, simple field guides</td>
<td></td>
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</tbody>
</table>

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<thead>
<tr>
<th><strong>Level 2</strong> (Higher Primary: Students from 10 to 13 years)</th>
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<tbody>
<tr>
<td>• Improve the curriculum with respect to biodiversity</td>
<td></td>
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<tr>
<td>• Build basic skills of measuring, mapping and documenting biodiversity linking with other subject areas (e.g. social sciences) to engage students in documenting biodiversity in their neighborhood</td>
<td></td>
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<tr>
<td>• Help students link biodiversity with other disciplines they study</td>
<td></td>
</tr>
<tr>
<td>• Prepare and / or supply biodiversity related curricular / extracurricular materials such as field guides, survey forms, information booklets, activity manuals</td>
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</table>

<table>
<thead>
<tr>
<th><strong>Level 3</strong> (Secondary: Students from 13 to 16 years)</th>
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</thead>
<tbody>
<tr>
<td>• Strengthen curriculum on biodiversity, its complex ecological interactions, relationship with sustainable development and conservation efforts at local, national and international levels</td>
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</tr>
<tr>
<td>• Raise awareness about NBSAP, Aichi Biodiversity Targets, UNDB, CBD and the International Day for Biodiversity, and their roles in conservation to enhance students participation in outreach activities</td>
<td></td>
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<tr>
<td>• Create/ increase opportunities to engage them in conservation efforts</td>
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<tr>
<td>• Build capacities in scientific methods of measurements, mapping, documentation; communication skills including the use of ICT</td>
<td></td>
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<tr>
<td>• Illustrate holistic perspectives of conservation with discipline integration</td>
<td></td>
</tr>
<tr>
<td>• Develop and /or provide biodiversity related curricular and extracurricular materials such as case studies, best practices, field guides, survey forms, measuring tools, methodology manuals, data bank, key messages</td>
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</table>

#### Strategic Goal B

**Reduce the direct pressures on biodiversity and promote sustainable use**

<table>
<thead>
<tr>
<th>Aichi target 5: Habitat loss halved or reduced</th>
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<tbody>
<tr>
<td>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.</td>
<td></td>
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</tbody>
</table>
• Address current national legislation and institutional mechanisms of Nagoya Protocol implementation including benefit sharing mechanisms

Aichi target 6: Sustainable management of marine living resources

By 2020, all fish and invertebrate stocks and aquatic plants are managed and harvested sustainably, legally and applying ecosystem based approaches, so that overfishing is avoided; recovery plans and measures are in place for all depleted species; fisheries have no significant adverse impacts on threatened species and vulnerable ecosystems; and the impacts of fisheries on stocks, species and ecosystems are within safe ecological limits.

Aichi target 7: Sustainable agriculture, aquaculture and forestry

By 2020, areas under agriculture, aquaculture and forestry are managed sustainably, ensuring conservation of biodiversity.

Aichi target 8: Pollution reduced

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

Aichi target 9: Invasive alien species prevented and controlled

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.

Aichi target 10: Pressures on vulnerable ecosystems reduced

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.

Strategic Goal C

Improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity

Aichi target 11: Protected areas increased and improved

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.

Aichi target 12: Extinction prevent

By 2020, the extinction of known threatened species has been prevented and
their conservation status, particularly of those most in decline, has been improved and sustained.

**Aichi target 13: Genetic diversity maintained**

By 2020, the genetic diversity of cultivated plants and farmed and domesticated animals and of wild relatives, including other socio-economically as well as culturally valuable species, is maintained, and strategies have been developed and implemented for minimizing genetic erosion and safeguarding their genetic diversity.

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**Strategic Goal D**

**Enhance the benefits to all from biodiversity and ecosystem services**

**Aichi target 14: Ecosystems and essential services safeguarded**

By 2020, ecosystems that provide essential services, including services related to water, and contribute to health, livelihoods and well-being, are restored and safeguarded, taking into account the needs of women, indigenous and local communities, and the poor and vulnerable.

**Aichi target 15: Ecosystems restored and resilience enhanced**

By 2020, ecosystem resilience and the contribution of biodiversity to carbon stocks have been enhanced, through conservation and restoration, including restoration of at least 15 per cent of degraded ecosystems, thereby contributing to climate change mitigation and adaptation and to combating desertification.

**Aichi target 16: Nagoya Protocol in force and operational**

By 2015, the Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization is in force and operational, consistent with national legislation.

---

**Strategic Goal E**

**Enhance implementation through participatory planning, knowledge management and capacity-building**

**Aichi target 17: NBSAPs adopted as policy instrument**

By 2015 each Party has developed, adopted as a policy instrument, and has

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**Business Group**

<table>
<thead>
<tr>
<th>Strategic Goals</th>
<th>Possible actions</th>
</tr>
</thead>
</table>
| A               | • Raise awareness on the values of biodiversity, links with business, CBD processes, and roles and responsibilities of business community in conservation, to improve their participation  
• Influence them to support events and campaigns related to biodiversity conservation such as International Day for Biodiversity to reach out to a wider audience  
• Promote dialogues to include biodiversity conservation in their CSR agenda  
• Provide key messages and actions to the staff for facilitating behavioural changes  
• Develop package of best practices including technology options to accelerate the processes leading to green economy |
| B               | • Orient this group to bio-resources and the extent of dependency of people on these resources, indicators of over harvesting and sustainable resource management practices including pollution control measures  
• Expose them to the concept of green business  
• Influence this group to employ green business practices |
| C               | • Sensitise business group to threatened species, genetic diversity, impacts of erosion on business, ecosystems / habitats and communities  
• Explain strategies, guidelines and legal framework, their roles and responsibilities in conservation in the light of utility for respective business, to engage the group in conservation efforts  
• Illustrate in-situ and ex-situ conservation techniques of species / genetic diversity conservation to persuade the group (particularly those using living resources in their business) to take up conservation projects |
| D               | • Sensitise the group to the importance of ecosystems and the services they provide, pressures on ecosystems including climate change, and impacts on business and livelihood of local communities and biodiversity, linking desertification  
• Explain strategies and legal measures undertaken by the Government for safeguarding ecosystems  
• Discuss their responsibilities in reducing pressures and restoring ecosystems in order to establish partnership with Government, NGOs/ CBOs, communities promoting ecosystem restoration activities |
D
- Raise awareness on ecosystem services and livelihood to increase community participation in the restoration of ecosystem services
- Demonstrate ecosystem restoration methods and steps taken to address livelihood opportunities
- Discuss with communities the market utility of bio-resources and valuation, common property rights, intellectual property rights (IPR) and benefit sharing mechanisms
- Provide information on legal aspects of benefit sharing and train them in negotiating skills to empower communities, women in particular, to participate in the Nagoya Protocol mechanism

E
- Discuss roles and responsibilities of communities at various stages of NBSAP preparation and implementation to motivate them to participate in NBSAP processes
- Encourage indigenous and local communities to share relevant practices for biodiversity conservation
- Empower communities with legal education with respect to biodiversity conservation
- Provide access to information, enabling communities to improve conservation practices linking with their livelihood

commenced implementing an effective, participatory and updated national biodiversity strategy and action plan.

Aichi target 18: Traditional knowledge respected
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 the full and effective participation of indigenous and local communities, at all relevant levels.

Aichi target 19: Knowledge improved, shared and applied
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.

Aichi target 20: Financial resources from all sources increased
By 2020, at the latest, the mobilization of financial resources for effectively implementing the Strategic Plan for Biodiversity 2011-2020 from all sources and in accordance with the consolidated and agreed process in the Strategy for Resource Mobilization should increase substantially from the current levels. This target will be subject to changes contingent to resources needs assessments to be developed and reported by Parties.
Education is a prerequisite for the achievement of every Aichi Biodiversity Target and hence is treated as cross cutting. It has been featured in all the 20 Aichi Biodiversity Targets and not just in the first. While Aichi Biodiversity Target 1 is linked with all the other 19 targets, there are also links between several other targets.

The tool sets out a framework outlining the possible actions, broadly for the five strategic goals and for the four focussed stakeholder groups. However, the last column profiles other stakeholders including children, youth, general public, media and legal professionals.
### Government

<table>
<thead>
<tr>
<th>Strategic Goals</th>
<th>Possible actions</th>
</tr>
</thead>
</table>
| **A** | - Build a positive perception of the role and scope of ESD in achieving Aichi Biodiversity Targets  
- Assist Government in increasing trained personnel in biodiversity education integrating ESD  
- Facilitate the preparation of the educational strategy  
- Help improve formal education curriculum on biodiversity  
- Create data bank of experts, networks in ESD |
| **B** | - Influence Government to enrich and streamline database on ecosystems and major habits including their values in terms of biodiversity, ecological services and dependency of people  
- Hold consultations on types and extent of anthropogenic pressure on ecosystems/habitats; stakeholders responsible for such pressures, including the policy gaps  
- Facilitate the formulation of guidelines and measures / refine policies / acts including incentives to minimise anthropogenic pressures by exposing them to the best sustainable management practices  
- Organise discussions on and promote ecosystem based approaches |
| **C** | - Organise consultations with Government along with concerned stakeholders on the Protected Area (PA) network and also on species and genetic diversity  
- Facilitate dialogues with stakeholder affected in the process of PA expansion, regarding improved management plans, including alternate livelihood practices such as tourism  
- Assist Government in outlining opportunities of PA expansion by identifying key areas (with unique species, special ecosystem services, rapid decline, under represented or not represented ecological regimes) which need immediate protection  
- Prepare case studies of innovative strategies on PA expansion, species conservation and protection of genetic diversity |
| **D** | - Enhance their knowledge of ecosystem services focusing on climate benefits, combating desertification; UN conventions and related national policies and programmes  
- Improve NGO/CBO capacities in ecosystem restoration processes including partnership building using new age communication technologies to increase opportunities for their participation  
- Train the group in rapid assessment of bio-resource valuation to facilitate Nagoya Protocol implementation  
- Improve communication and negotiation skills in benefit sharing mechanisms to help benefit claimers  
- Motivate the group to facilitate simplification of legal procedures and spread awareness among communities on legal procedures and negotiations in benefit sharing mechanisms |
| **E** | - Empower NGOs/CBOs to aid the process of NBSAP development / update, integrating relevant traditional knowledge and ensuring multi-stakeholder participation  
- Encourage them to act as pressure groups for the adoption of NBSAP as policy instrument  
- Familiarise NGOs/CBOs with types of information available, source, access to different groups, and their utility  
- Empower them with skills of state of the art Management Information System (MIS) to strengthen data/ information storage, analysis and dissemination to stakeholder groups  
- Improve their capacities in fund mobilisation strategies for long term conservation activities including sourcing of CER (Corporate Environmental Responsibility) funds for conservation |
• Organise consultations to explore mechanisms for synergies between related conventions (CBD, UNFCCC, UNCCD, the UN Forum on Forests and others) to maximise benefits
• Develop criteria on ecosystem prioritisation for restoration in consultation with experts and document innovative practices which include climate change adaptation/ mitigation and combating desertification
• Organise dialogues to discuss simplification of the mechanisms of Nagoya Protocol in order to facilitate the ratification process and to strengthen its implementation including stakeholders and linking related legislation such as Intellectual Property Rights (IPR).

• Assist Government in engaging multi stakeholders through consultative processes in developing / strengthening / updating NBSAP and adopting it as policy instrument
• Illustrate available information sources, scope of utility and application in NBSAP update and implementation; accessibility to information by different groups, current knowledge sharing platforms
• Sensitise Government to diverse information needs of NBSAP targets and stakeholders, including traditional knowledge and practice, and to making information available through a single window
• Demonstrate innovative mechanisms and networks (including modern technology options) for data storing, wider sharing and application
• Assist Government in developing innovative fund mobilisation strategies for creating long term conservation funds exploring various opportunities such as integrating biodiversity into national development plans, green policies, incentives, Corporate Environmental Responsibility

<table>
<thead>
<tr>
<th>Strategic Goals</th>
<th>Possible actions</th>
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| A               | • Build strong partnership with Government to facilitate the development of educational strategy, enhancing their understanding of CBD processes and ESD in achieving Aichi Biodiversity Targets
• Engage them in the implementation of educational activities by enhancing their capacities in ESD
• Enhance their participation in outreach activities including popularising best sustainable production/consumption practices by exposing them to information, and modern communication skills and technologies including ICT |
| B               | • Raise awareness on ecosystems, pressures, dependency of communities, policies and practices, legislation, and potential sustainable measures to increase NGO/CBO engagement with Government in facilitating implementation of guidelines/measures to reduce anthropogenic pressures
• Train them in vulnerability assessment of ecosystems/habitats affected by climate change or ocean acidification and anthropogenic pressures to persuade stakeholders to reduce such pressures by effective measures
• Develop materials and tools on scientific methods of data documentation of ecosystems/habitats to engage them in documenting conservation practices and evaluating for sustainability
• Provide platform and improve information exchange mechanisms for empowering the group to disseminate sustainable/control measures to concerned groups |
| C               | • Foster the understanding of Protected Areas (PA), species and genetic diversity to strengthen their role in facilitating PA management, species and genetic conservation
• Raise capacities in identifying key areas for PA expansion and in documenting species and genetic diversity, to enhance cooperation between government and communities for conservation
• Organise consultations on improved PA management practices integrating traditional practices and alternate livelihoods plans
• Lend them support in communicating PA management strategies among the local/indigenous communities residing in and around the Pas, particularly alternate livelihood plans
• Motivate them to build strong community networks for species/genetic conservation through data support system |