Convention on Biological Diversity

UNEP

THEMATIC CONSULATION ON CAPACITY-BUILDING
 AND TECHNICAL AND SCIENTIFIC COOPERATION
 FOR THE POST-2020 GLOBAL BIODIVERSITY
 FRAMEWORK
Rome, 1-2 March 2020

COMPILATION OF VIEWS ON CAPACITY-BUILDING, TECHNICAL AND SCIENTIFIC COOPERATION AND KNOWLEDGE MANAGEMENT FROM THE REGIONAL CONSULTATIONS ON THE POST-2020 GLOBAL BIODIVERSITY FRAMEWORK

Note by the Executive Secretary

1.   The Executive Secretary is pleased to circulate herewith, for the information of participants in the Thematic Consultation on Capacity-Building and Technical and Scientific Cooperation for the Post-2020 Global Biodiversity Framework, a compilation of views and suggestions on capacity-building, technical and scientific cooperation and knowledge management expressed during the five regional consultations on the post-2020 global biodiversity framework held between January and May 2019.

2.   The consultations were held for Asia and the Pacific (28-31 January 2019, Nagoya, Japan), Western European and Others Group and Other Members of the European Union (19-21 March 2019, Bonn, Germany); Africa (2-5 April 2019, Addis Ababa, Ethiopia); Central and Eastern Europe (16-18 April 2019, Belgrade, Serbia); and Latin America and the Caribbean (14-17 May 2019, Montevideo, Uruguay).

3.   The regional consultations included specific sessions and discussion groups (workstations) on capacity building and technical and scientific cooperation during which the participants analysed the regional situations, identified the priority needs and challenges and suggested possible solutions which will be considered in the long-term strategic framework for capacity-building beyond 2020. The participants included representatives of Parties to the Convention and its Protocols and relevant stakeholders, including indigenous peoples and local communities, youth and women organizations.

4.   The document is divided into the following three sections: I) Capacity-building; II) Technical and scientific cooperation; and III) Knowledge management. The information is extracted from the reports of each of the five regional consultations[1].

I.   CAPACITY BUILDING

5.   The following is a summary of the views and suggestions expressed by participants in regarding capacity-building.

(a)   Africa Regional Consultation

6.   Participants from the Africa region identified capacity-building as one of the critical means of implementation that will determine the success or failure of the post-2020 global biodiversity framework. They noted that most Parties in Africa lack adequate capacity at the individual, institutional and systemic

---

[1] The full reports of the regional consultations are available at: https://www.cbd.int/conferences/post2020

levels to effectively implement the Convention and its Protocols and it is partly the reason why they have been unable to meet most of the Aichi Biodiversity Targets.

7.   Participants from the Africa region also discussed the status of capacity-building in the region over the last 10 years and noted the following major weaknesses and challenges that need to be considered and addressed during the development of the post-2020 global biodiversity framework and the proposed long-term strategic framework for capacity-building beyond 2020:

(a)   *Lack of common understanding of the meaning and scope of capacity-building*: Several participants noted that there are varying views regarding the meaning of capacity-building. Sometimes it is simply equated to training. Multiple definitions and disparities in understanding of the term capacity-building cause confusion among donors, capacity-building providers and recipients.

(b)   *Lack of strategic guidance*: It was noted that the COP adopted a short-term action plan for capacity-building in 2016, more than six years after the Strategic Plan for Biodiversity 2011-2020 was launched. For a long time, the convention lacked a guiding framework to provide strategic direction and foster a comprehensive and coherent approach to capacity-building.

(c)   *Lack of country ownership*: It was noted that a number of capacity-building initiatives in the region are donor-driven and not fully owned by the concerned government agencies and target audiences. In some cases, the responsible government agencies provide endorsements for the initiatives, but are not fully involved in determining the scope of those initiatives. Consequently, some initiatives do not reflect the priorities, interests and wishes of governments and of a broad range of stakeholders. In some cases, capacity-building actions are determined by the donor funding available. Governments use the funds earmarked for capacity-building without a defined strategy, assessed need or clear desired outcomes.

(d)   *Gaps in thematic coverage*: A number of thematic areas under the Convention and its Protocols were still not well covered by capacity-building initiatives and require due attention. For example, technical capacity is required for thematic areas such as socioeconomic impacts of living modified organisms and access and benefit-sharing (especially the access permit processes) and for functional capacities such as institutional capacity-building, project development, resource mobilization, communications and national reporting.

(e)   *Imbalance in regional coverage*: It was noted that capacity-building initiatives are not equitably distributed in the region. For example, it was mentioned that West Africa lagged behind in terms of coverage of biodiversity capacity-building projects and learning opportunities.

(f)   *Lack of systematic needs assessment and stock-taking*: It was noted that capacity-building interventions are not always based on the expressed needs of Parties and other target audiences and do not take stock of, build on or utilize existing capacities. While some needs assessments and stocktaking exercises are carried during the design of specific projects and activities (such as training courses), such assessments are generally not systematized and analyzed at the organizational or systemic level.

(g)   *Lack of baselines and indicators to measure impact*: Participants noted that currently there are no established baselines and benchmarks that can be used to effectively monitor progress and measure the results and impact of capacity-building interventions and investments at the national and global levels. This had made it difficult to establish and communicate the important contribution of capacity-building efforts to decision-makers and donors.

(h)   *Short-term interventions*: Participants noted that many capacity-building initiatives are generally short-term in nature. They emphasized the need to promote long-term programmes, recognizing that capacity-building is generally a long-term endeavour whose impact cannot be realised within short time frames.

(i)   *Poor targeting of capacity-building interventions*: It was noted that capacity-building initiatives were often not well targeted. This had led to situations where the same persons are selected for most of the trainings offered, or the wrong participants being chosen to attend capacity-building activities

for which they are not qualified or not related to their work. It was also noted that there was limited focus on training young professionals. The participants highlighted the need for careful and strategic selection of participants. It was observed that the current process of selection of participants for capacity-building activities organised under CBD is ad-hoc and reliant on nominations from the national focal points. As it stands, the process is not effective in ensuring that the right persons are targeted.

(j)   *Limited expertise and high staff turnover*: Participants noted that many countries in Africa lacked experts in various fields. This problem is compounded by frequent skills drain due to the high turnover of personnel trained under CBD-related capacity-building initiatives. Some of the suggested solutions to this problem included institutionalizing coaching, mentoring and other on-job training, promotion of training of trainers programmes, provision of staff incentives and career development opportunities, and establishment of programmes for supporting young professionals.

(k)   *Limited focus on institutional and systemic level capacity-building*: Participants noted that over past years, there had been too much focus on developing capacity at individual level (mostly through training workshops) and limited focus at the institutional and systemic levels. Also, there had been too much emphasis on developing technical capacities and less attention to functional capacities such as project design and management, resource mobilisation, communication and others.

(l)   *Lack of sustainability*: Participants noted that many capacity-building initiatives had not led to sustainable outcomes and lasting solutions. Long-term sustainability of capacity-building programmes is critical to creating lasting change after the end of the specific interventions.

(m)   Other major limitations and constraints identified were: limited resource availability for capacity-building, mis-allocation and sometimes wastage of financial resources, limited attention to biodiversity in formal education programmes (including at masters and doctoral levels), too much dependence on external consultants to deliver capacity-building and ineffective use of capacities and existing opportunities (including expertise, tools and centres of excellence) within the region.

2.   Some of the solutions suggested to address the above limitations and challenges and to improve capacity-building to effectively support the implementation of the post-2020 framework included the following:

(a)   Develop a shared working definition of capacity-building and develop common understanding of the meaning and scope of capacity-building in the context of the post-2020 framework to, inter alia, help improve communication between actors.

(b)   Broaden the scope of capacity-building beyond training to address all three dimensions (individual, institutional and systemic/enabling environment), recognizing that capacity-building is an integrated and long-term process.

(c)   For capacity-building initiatives, always clarify what capacity and whose capacity is to be built and by who, and describe the theory of change, i.e. the logical linkage between the capacity-building actions and outputs and their contribution to the desired outcomes and ultimately to the substantive impacts in terms of halting biodiversity loss and living in harmony with nature.

(d)   Undertake participatory capacity needs assessments and inventories of existing capacities and opportunities prior to developing and implementing capacity-building interventions. Wherever possible, analyze the needs already identified in the NBSAPs and ensure the needs expressed by Parties and stakeholders are being met by having extensive communication between capacity-building providers and national implementing agencies and organizations; ensure that capacity-building interventions target the most urgent priority needs.

(e)   Based on needs assessments, develop capacity-building strategies and action plans outlining, among other things, the capacity-building targets and indicators, the timelines and the tools and approaches to be used.

(f)   Design and implement capacity-building that reflect and respond to the identified needs and priorities of Parties and stakeholders.

(g)   Adopt a holistic approach: capacity-building initiatives often address a range of different thematic and cross-cutting issues and involve a multitude of tasks and activities. It is therefore crucial to adopt a holistic (rather than a piecemeal or ad-hoc) approach to capacity-building to ensure effective and sustainable outcomes.

(h)   Undertake rigorous monitoring, evaluation, and reporting: Participants recommended that a monitoring and evaluation framework and guidelines should be developed to assist Parties to establish baselines and to measure the performance and impact of capacity-building initiatives in support of the post-2020 framework. They also highlighted the need to identify from the design stage common indicators to be used to evaluate capacity-building interventions and to document and disseminate evidence gathered using these indicators.

(i)   Assess and communicate the impact of capacity-building: Participants underlined the need to systematically assess and communicate the impact of capacity-building initiatives, document and share success stories and lessons learned, and to ensure maximum utilization of the best practices and lessons learned in the development of new capacity-building initiatives.

(j)   Ensure the sustainability of capacity-building initiatives: Participants emphasized the need to ensure all capacity-building projects and programmes incorporate effective follow-up measures to maintain and/or upscale the resulting outputs and outcomes after the end of the project and focus on long-term rather than short-term solutions. Such measures could include ensuring full country ownership of the projects, institutionalizing capacity-building activities into existing structures and functions, and building networks and long-term partnerships with relevant institutions, such as local universities.

8.   In summary, participants from the Africa region emphasised the need to adopt a strategic and practical approach to ensure that capacity-building contributes meaningfully to the effective implementation of the post-2020 global biodiversity framework.

(b)   Asia and the Pacific Regional Consultation

9.   Participants from Asia and the Pacific noted that capacity-building is an important issue for the post-2020 global biodiversity framework. Some suggested that there should be a specific target on capacity-building. However, there appeared to be a general view that it would be better reflected in the post-2020 global biodiversity framework as a cross-cutting element or in the preamble to the framework. It was also suggested that capacity-building could be an indicator for the post-2020 global biodiversity framework. The need for an evaluation of capacity-building needs to help inform the development of the post-2020 global biodiversity framework and its implementation was noted.

(c)   Central and Eastern Europe Regional Consultation

10.   Participants from Central and Eastern Europe noted the following limitations to capacity-building efforts over the past decade:

a)   Mass media and Government bodies provide very limited information;

b)   Failure to provide a global capacity-building process, beyond seminars and workshops;

c)   No specific capacity-building plan;

d)   Incomplete involvement of Parties and of various stakeholder groups;

e)   Insufficient awareness-raising activities;

f)   Failure to address needs of indigenous peoples and local communities, including increasing knowledge about ABS;

g)   Insufficient preparation provided to Parties prior to the adoption of the protocols;

h)   Lack of information available in national languages of countries of the former Union of Soviet Socialist Republics, and the high cost and the time-consuming nature of translation;

i)   Limited availability of Internet access in some countries;

j)   Limited capacity to develop NBSAPs, which become an added burden in countries without dedicated staff/centres;

k)   Limited awareness of the information sources that do exist, even among those who really need it;

l)   Lack of preparation/time: this issue was new to the Central and Eastern European region, and time was needed to act. National capacity-building strategies had to be prepared after the Strategic Plan had been adopted, rather than in advance, delaying the process;

m)   Funding for that purpose was received halfway through the 10-year timeline, thereby delaying the process;

n)   Regarding what should be done to improve capacity-building during the post-2020 period, participants noted the following:

o)   Donors, such as GEF, should start working on providing financing while the framework is being developed, so that Parties can be better prepared;

p)   Capacity-building should be a continuous process;

q)   Capacity-building for biodiversity and related issues should be provided in other sectors;

r)   Provide a train-the-trainer approach, so that training can be provided to local communities in the national language;

s)   Collaborate with various partners and institutions, including academia and local communities, to tailor curriculum and transfer capacity, including through innovative, informal capacity-building;

t)   Provide the opportunity to learn by doing, through the use of videos with supporting materials, rather than solely through written materials;

u)   Create online video courses in different languages;

v)   Use social media;

w)   Provide both knowledge and practice, using an interactive process involving coaching, so that the principles can become part of daily practice.

(d)   Latin America and the Caribbean Regional Consultation

11.   While many efforts have been dedicated to capacity-building under the current Strategic Plan for Biodiversity 2011-2020, major limitations still exist in this area. Among these, the time required to fundraise for capacity-building, the limited human resources and the frequent employee turnover in government institutions were highlighted. Participants from Latin America and the Caribbean suggested that financing for capacity development should span a longer term so that capacity development processes can be supported. Partnerships could be helpful in securing funds.

12.   With regard to the contents of capacity development programmes, it was suggested that mechanisms are needed at the country level to determine specific capacity development needs, including subject matters and target groups. Participants from Latin America and the Caribbean also suggested that, although the post-2020 biodiversity framework will be global, capacity development should reflect regional and local realities and consider what has already been done at the national level. More emphasis should be placed on exchanging experiences and generating and adapting solutions from local experiences.

Still others would like to see more opportunities for technical training and degree programmes in certain areas.

13.   Some participants stated that programmes should address the three objectives of the Convention and the two protocols and should focus on implementation of the Convention and the Aichi Targets. Others stated that capacity development should include modules on other multilateral processes relating to biodiversity (such as the Sustainable Development Goals) so that synergies can be strengthened. Various participants advocated for capacity-building on ecosystem-based approaches and biodiverse production systems to restore ecological functions. There was a view that capacity development should have a holistic vision and not be limited to technical issues. It was suggested that a human rights and gender perspective could be helpful, as could one from the social sciences and other areas.

14.   With regard to target groups, some participants from Latin America and the Caribbean expressed concern that, generally, very few individuals, usually government technicians, are trained in the Convention on Biological Diversity and its Protocols, generating a vicious cycle of knowledge remaining among few. They suggested there should be a "constructive spiral" to spread the knowledge more broadly to all levels of government, non-governmental organizations and the private sector. It was agreed that there should be a more consistent effort to develop capacities at the primary and secondary school levels. Some were of the view that the actors responsible for causing the loss of biodiversity should be targeted so that there could be an impact on the drivers more directly. One idea was the creation of new technical curricula in sustainable management to be offered to sectoral actors (fishing, agriculture) in order to help them integrate biodiversity in their work.

15.   With regard to modalities for capacity-building, participants from Latin America and the Caribbean agreed that capacity development should be tailored to the topic and to the social and ecological context being addressed, preferably maintaining a regional perspective. Workshops are not always the most effective modality and should be complemented by training of trainers, peer-to-peer learning, and the use of information and communication technologies which facilitate reaching more people. It was also suggested that capacity development should not rely exclusively on best practices, which are often context specific. It was suggested that contents of the Biodiversity Learning Platform should be extended and enhanced.

16.   Some participants from Latin America and the Caribbean suggested that there should be a goal or target in the post 2020 framework addressing capacity-building. This could be as part of a broader goal on enabling conditions which could be a major pillar of the new framework. It was also suggested that the short-term action plan to enhance and support capacity-building should be carried forward and adjusted to the new global biodiversity framework.

(e)   WEOG and other EU Members Consultation

17.   Participants from Western Europe, Others Group and other European Union members, noted that capacity-building was as an important issue for the post-2020 global biodiversity framework. For ambitious targets to be successful, capacity-building will be needed, especially in terms of indicators and reporting. It was suggested that capacity-building look at other MEAs and Protocols as examples for best practices and synergies.

18.   In addition, participants from Western Europe, Others Group and other European Union members recommended that capacity building be tailored to individual national or stakeholder needs, including the sharing of traditional knowledge. They also suggested to link funding for capacity-building to targets and reporting, and to define specific indicators.

II.   TECHNICAL AND SCIENTIFIC COOPERATION

19.   The following is a summary of the views and suggestions that participants expressed during the five regional consultations regarding technical and scientific cooperation.

(a)   Africa Regional Consultation

20.   Participants from the African region noted that limited progress had been made in promoting technical and scientific cooperation, technology transfer and innovation. While some initiatives and programmes, such as the Bio-Bridge Initiative, had been established, they were underfunded and only a few Parties had benefited.

21.   Participants from the African region also underlined the need to enhance technical and scientific cooperation, technology transfer and innovation as key means of implementation for supporting the post-2020 framework. They identified the following as possible actions for consideration:

(a)   Mapping and cataloguing existing providers or potential providers of technical assistance that could be matched with those requesting assistance;

(b)   Assessment/inventory of relevant technologies and best practices (including traditional knowledge and science) to identify what exists where and who owns it so that national biodiversity policymakers and practitioners can devise mechanisms for accessing them and/or respond to the gaps and challenges encountered in accessing them;

(c)   Technology fit for purpose: Review examples of technologies that have been transferred over the last decade to understand the objectives and purpose of the transfer with a view to adopting strategies and decisions designed to provide the most fit-for-purpose outcomes;

(d)   Promote and support the development of technologies locally rather than focusing on transfer from other countries, which is sometimes constrained by issues related to intellectual property rights and lack of spare parts in case of equipment. Participants noted that it is best to have home-grown technologies and know-how to ensure sustainability and reduce dependence and costs, and highlighted the need to focus on soft technologies, practices and know-how;

(e)   Promote development, transfer and use of indigenous and traditional technologies, including through existing traditional exchange mechanisms and systems among indigenous peoples and local communities;

(f)   Build accelerator mechanisms at the local and national levels to encourage and promote the development of technologies, innovations and solutions for the conservation and sustainable use of biodiversity in support of various components of the post-2020 framework. Such mechanisms would provide platforms for people to analyse technical challenges, discuss new ideas, undertake feasibility and sustainability studies, and leverage existing opportunities to collaborate on start-ups and accelerate deployment promising innovations and solutions;

(g)   Identify and strengthen centers of excellence in the region (for example those with advanced laboratories) for reference on technologies, practices and develop a network of such centres in Africa;

(h)   Refine and include Aichi Biodiversity Target 19 in the post-2020 global biodiversity framework;

(i)   Develop partnerships and exchange programmes between countries to be facilitated by technical partners and brokers (such as academia, United Nations agencies and the private sector), including through technical training, local knowledge transfer and sharing of equipment and expertise between institutions and countries.

(b)   Central and Eastern Europe Regional Consultation

22.   Participants from Central and Eastern Europe mentioned the following approaches to improve technical and scientific cooperation to support the post-2020 global biodiversity framework:

a)   *Increase involvement of scientists*: it was noted that some countries in the region had strong scientific expertise, but that it was a challenge to involve experts in the work of the Convention. It was observed that meetings of the Convention on Biological Diversity were primarily attended by civil servants, rather than scientists, and that it was crucial to consider mechanisms or approaches

to encourage the countries of the region to further involve scientists, noting that political decisions in this realm should not be made without their input. It was noted that the Central and Eastern European region in particular provided a very limited response to notifications from the secretariat of the Convention seeking nominations or input and was thus underrepresented at meetings and workshops;

b) *Better prepare specialized scientists*: while some noted that the region had strong scientists (see above), others noted that there was an insufficient supply of specialists in particular areas, and that there was a need to better prepare young scientists;

c) *Provide technical support*: Some participants emphasized that technical support was needed more than scientific support, as the scientific knowledge existed in the region. Participants particularly mentioned the need to increase the accessibility of existing data, through, among other things, the provision of a database connected to the Convention, for flora, geological data, DNA banks, genetic resources, data sharing, information technology (for example, to help to transfer data to digital format), findings from WWF, IPBES reports. It was suggested that the secretariat of the Convention could develop technical guidelines for access to data, to ensure accessibility while also ensuring its protection. Some Parties mentioned that they continued to rely on information in hard copy due to a lack of digitization;

d) *Adopt a flexible approach* that takes into account the preparedness of each country to embrace a particular technology;

e) *Establish a platform for knowledge and innovation*: Participants emphasized the need for a common database to help Parties implement each target, including educational modules, information on existing technologies, scientific information, financial resources, voluntary commitments, and information about biopiracy activities. Participants noted the importance of building networks across science centres, and the importance of involving the business sector in this area was emphasized;

f) *Ensure funding to support scientific cooperation* between experts to ensure that their work is sustainable;

g) *Ensure that science is conducted with a view to meeting policy needs*, which may elicit further attention/support from politicians;

h) *Provide a proper mechanism for communication*, continuous exchange and feedback between scientists and policymakers;

i) *Make the post-2020 framework science-based* and demonstrate the importance of science, thereby ensuring political support;

j) *Build networks* to bring together centres of excellence so that information can be transferred to where it is needed.

(c)   Latin America and the Caribbean Regional Consultation

23.   There was significant interest among participants in technical and scientific cooperation. They highlighted the need for government-to-government cooperation, to learn from others' experiences and have shared capacities across the region. The financial and private sectors were also seen as playing an important role, and it was suggested that more partnerships should be promoted between them and governments, academia and civil society.

24.   Technology and innovation, while potentially useful, should be explored with precaution against the risks and uncertainties concerning biodiversity. As there are still many knowledge gaps, participants from Latin America and the Caribbean suggested that "responsible innovation" is needed. Others suggested that governments should provide incentives for sustainable technologies and could convene actors with different skills, perspectives and knowledge areas to work together to innovate.

25.   With regard to technology transfer, participants from Latin America and the Caribbean were aware that mechanisms already existed under the Convention, such as the Bio-Bridge Initiative, and were of the opinion that there was a need for a flexible framework for technology transfer that would help transference from one country to another.

26.   Participants from Latin America and the Caribbean stated that innovation under the Convention should not only refer to technology but also to social innovation – how people organize, types of governance, conflict resolution, etc. It was also argued that innovation should not only be about new technologies and practices but also about traditional practices and knowledges being applied to new contexts.

27.   With regard to research, participants agreed that there should be better cooperation with academia so that research can better address the scientific needs related to implementing the Convention. Some concern was expressed over science and knowledge generated in higher-income countries used to solve problems in the region. There is a need to strengthen research and publication of results in Latin America for the region. Some argued that national public research institutions, as well as decision makers, should be strengthened and better linked to IPBES, and that more dialogue with IPBES would be valuable. There was also a view that there is a role for IPBES in building capacities for national reporting and research.

III.   KNOWLEDGE MANAGEMENT

28.   The following is a summary of the views and suggestions expressed during the regional consultations regarding knowledge management.

(a)   Africa Regional Consultation

29.   Participants from the African region noted that knowledge was an important asset and that knowledge management would be crucial in the implementation of the post-2020 global biodiversity framework. In this regard, they highlighted the need to identify the type of knowledge that would be required, where it would be sourced from and who would need it and why, and how they would access it.

30.   Participants from Africa observed that a lot of data, information and knowledge existed, but were scattered in various institutions and not easily accessible in the right format or language. For example, many researchers and students collect useful data and information, but there were no effective national systems for mobilizing such information and making it easily available to support planning, policy and decision-making processes. It was reported, however, that sometimes researchers do not share their findings or provide feedback to the government or providers of the information at the end of their research. Participants further noted that the culture of data and information-sharing was lacking in many countries, observing that many institutions were reluctant or unwilling to share information among themselves.

31.   Participants from Africa also noted the need to further strengthen the clearing-house mechanism, including assisting all countries to establish or enhance national clearing-house mechanisms (CHMs) to facilitate the exchange of information among Parties. It was observed that the process of establishing national CHMs had been slow and that many Parties still faced technological challenges (including limited access to the Internet) to access and use the central CHM effectively. Some participants observed that the CHM was designed for the urbanized society with access to computers and the Internet and is not suitable for stakeholders in non-urban areas, including field practitioners, indigenous peoples and local communities, farmers and the rural public. It was further noted that many countries lacked expertise and know-how to access, manage, share and utilize the information in the CHM effectively. As a result, the tools developed under the CHM were being fully utilized by only a few persons at the national and subnational levels and information available in the CHM was under-utilized.

32.   Some participants also highlighted the issue of quality of data and information shared through the CHM and other mechanisms. It was noted that a number of countries lacked mechanisms for verification of the quality of the data generated and made available. A lack of appropriate and data-sharing protocols and standards was also identified as one of the challenges faced by some Parties and various institutions.

33.   Participants also discussed the issue of "big data". It was observed that the new era of "big data" was both an opportunity and a challenge for Parties and partners. It was considered a challenge because it raised questions of ownership of the data and their management (e.g. who would own the data, manage it and use the resulting products?). It was also an opportunity because Parties would access large quantities of data and images at the largest possible scale.

34.   Finally, participants noted that data was not information and that information was not knowledge. They therefore highlighted the need for deliberate efforts at the country level to collect, compile and analyse available data to generate relevant information that can be used by planners and policymakers. They also highlighted the need to further process and aggregate information into knowledge, for example in the form of good practices and lessons learned, and in a format and language that can be understood by various end users, including policy- and decision makers, practitioners and the public.

35.   Some of the suggestions made, by the participants from Africa, to address the above challenges and improve the creation, access to, management, sharing and use of knowledge in support of the post-2020 global biodiversity framework included the following:

General suggestions

(a)   Develop national systems for discovering, mapping and mobilizing existing information and making it easily available to support national planning and policy- and decision-making processes;

(b)   Put in place national legislation, administrative frameworks and incentives to encourage knowledge sharing;

(c)   Institutionalize knowledge management to nurture a strong culture of knowledge sharing and establish policies and procedures to ensure knowledge capture and retention when national focal points and other staff retire or move on;

(d)   Develop infrastructure and national capacity for data collection, management and exchange;

(e)   Take advantage of the latest information communication technologies to establish dedicated, dynamic and user-friendly platforms to facilitate easy and rapid exchange of available information;

(f)   Complement existing databases at the global level with national and regional databases, tailored to the specific needs of Parties and ensure that those databases are up to date and well maintained;

(g)   Apart from Internet-based systems, explore different knowledge-sharing tools, such as radios, farmer or field schools and mobile phones, to reach various audiences at different levels.

Clearing-house mechanism

(h)   Further develop and strengthen the central CHM and the national CHMs for enhanced exchange of information at the national, regional and global levels and ensure that they are consistently updated and available with no downtime;

(i)   Establish data-sharing protocols and standards to enable interoperability with various regional and international knowledge management systems and databases;

(j)   Make the CHM more visible to various audiences (beyond the national focal points) to encourage them to access and use it. As well, Parties should designate, train and authorize more national users to contribute information to the CHM;

(k)   Identify innovative ways to encourage the use of the CHM, including the development of applications (Apps) to facilitate easy and timely access to information available in the CHM;

Quality of information and knowledge

(l)   Establish mechanisms for verification of the quality of data and information shared;

Use of the knowledge

(m)   Encourage and support the capture, compilation, analysis and sharing of best practices and lessons learned in a format that can be easily accessed and used;

(n)   Organize, structure and package the data, information, tools and knowledge available by themes and target audiences to facilitate their access in a user-friendly and fit-for-purpose manner.

(b)   Latin America and the Caribbean Regional Consultation

36.   An area in which participants, from Latin America and the Caribbean, thought there was significant room for improvement is in the science-policy interface. Various dimensions were discussed. One of these was the need to "translate" scientific language for different audiences, including policymakers, and implementers. It was suggested that the media could be helpful in this respect. However, it was noted that there is a danger in "losing the facts in the sensation" if it is left only to media to communicate.

37.   There was substantial discussion on access to data and information. Participants, from Latin America and the Caribbean, suggested that the Convention's clearing-house mechanism, or another such tool, could be used by countries to access data and information that is produced by third parties in standardized formats. This could be a way to fill knowledge gaps and to know what data already exists. It was suggested that there was a need to fund the organization of information that could be shared in Spanish among countries with financial and cultural similarities.

38.   Participants from Latin America and the Caribbean also noted the importance of using and publicizing existing biodiversity data protocols and interchange as a foundation for sharing biodiversity data. They noted that it can be difficult to compel Parties and other actors to share data in an open and accessible manner.

39.   Many participants from Latin America and the Caribbean mentioned the importance of improving the clearing-house mechanism and the CBD website to improve access to information and data, both for the general public (in a less "technical" form) and for practitioners. The sheer volume and variety of available data can be a burden for those needing to use it to create policy. Participants suggested that the Secretariat could work with partners to synergize and publicize data resources. Many participants also emphasized the importance of capacity-building to provide additional skills at the national and subnational levels for data collection and utilization.

40.   With regard to indigenous and local knowledge, participants from Latin America and the Caribbean view that the Convention should go beyond a superficial knowledge and understanding of their potential contributions to truly respect and use these knowledges to fill gaps in scientific knowledge. The importance of incorporating traditional knowledge and scientific knowledge in the context of the Nagoya Protocol was stressed.

41.   Participants from Latin America and the Caribbean also observed that there should be a strengthening of the interaction between academia and the public sector. The importance of contributions from civil society and indigenous peoples and local communities to the collection of data and knowledge was also noted.

_____