





# Convention on Biological Diversity

Distr. GENERAL

CBD/COP/14/INF/12/Add.1 17 November 2018

**ENGLISH ONLY** 

CONFERENCE OF THE PARTIES TO THE CONVENTION ON BIOLOGICAL DIVERSITY Fourteenth meeting Sharm El-Sheikh, Egypt, 17-29 November 2018 Agenda items 8, 10, 17 and 26

## REPORT ON THE GLOBAL TAXONOMY INITIATIVE FORUM: "REMOVING THE TAXONOMIC IMPEDIMENT FOR ALL CITIZENS"

#### I. INTRODUCTION

- 1. In pursuance of decisions <u>IV/1,V/9</u>, <u>VII/9</u>, <u>VII/9</u>, <u>VIII/3</u>, <u>IX/22</u>, <u>X/39</u>, <u>XI/29</u> and <u>XIII/23</u> of the Conference of the Parties, the Global Taxonomy Initiative Forum was organized by the Secretariat in collaboration with the ASEAN Center for Biodiversity, the Consortium of European Taxonomic Facilities, the Global Biodiversity Information Facility, the International Barcode of Life, the Nature & Science Foundation of Egypt, and the World Federation for Culture Collections with the financial support of Japan through the Japan Biodiversity Fund.
- 2. The invitation to the Forum was sent to Parties and observers via notification 2018-090,<sup>1</sup> and a web page was created to disseminate up-to-date information, including a provisional agenda and other information).<sup>2</sup>
- 3. The Forum was held on 16 November 2018 in Sharm El Sheikh, Egypt, under the theme "Removing the taxonomic impediment for all citizens". It had 67 participants from Parties and observers. The agenda adopted by the Forum and the list of participants to the Forum can be found in annexes I and II, respectively, below. The Forum was composed of a symposium and a round-table discussion. The symposium was live streamed.<sup>3</sup> All discussions were conducted in English.

# II. OUTCOME OF THE GLOBAL TAXONOMY INITIATIVE FORUM ITEM 1. SYMPOSIUM

- 4. Mr. Alexander Shestakov of the Secretariat opened the Symposium at 9:30 a.m. on 16 November 2018 at the CEPA Fair venue of the United Nations Biodiversity Conference in Sharm El Sheikh, Egypt.
- 5. The Minister of Environment and Energy of Costa Rica, Mr. Carlos Manuel Rodriguez, delivered a keynote speech on removing the taxonomic impediment, highlighting the success of participatory capacity development in taxonomy in Costa Rica with emphasis on the importance of evidence-based biodiversity management, the application of new technologies and international collaboration.
- 6. Mr. Daniel H. Janzen of the University of Pennsylvania, United States of America, made a presentation on the BioAlfa project and other practices in Costa Rica designed to enable and empower citizens in recording and monitoring biodiversity (attaining bio-literacy) and sharing biodiversity data for purposes of policymaking and implementation. The presentation was delivered remotely via the Internet.
- 7. Mr. Hendrik Seger of Belgium, on behalf of the Consortium of European Taxonomic Facilities (CETAF), made a presentation on the collaborative work done under CETAF to enhance taxonomic

<sup>&</sup>lt;sup>1</sup> https://www.cbd.int/doc/notifications/2018/ntf-2018-090-gti-en.pdf

https://www.cbd.int/conferences/2018/parallel-meetings/The-Global-Taxonomy-Initiative-Forum

<sup>&</sup>lt;sup>3</sup> Accessible at <a href="https://www.cbd.int/webcast/gti-live">https://www.cbd.int/webcast/gti-live</a>

research and to support taxonomic capacity development in scientific programmes. CETAF benefited from generous financial support from the European Union.

- 8. Mr. Tim Hirsch of the Global Biodiversity Information Facility (GBIF) presented on the growth of data on the GBIF platform, freely accessible, together with various shared tools for taxonomic knowledge and species occurrence data (<a href="http://gbif.org/">http://gbif.org/</a>).
- 9. Mr. Filliberto Polisco Jr. of the ASEAN Center for Biodiversity presented on the Global Taxonomy Initiative in South-East Asia, which provided training for young taxonomists with the help of taxonomic experts from within the region and Japan. With generous financial support from the Government of Japan, the Initiative had produced many field guides.
- 10. Ms. Jemilat Ibrahim from Nigeria, Ms. Mouna Rifi from Tunisia and Ms. Tatsiana Lipinskaya from Belarus co-presented on the GTI-DNA-tech training on rapid identification of priority species held in 10 developing countries in 2018.<sup>4</sup> The 10 projects were undertaken by the "trained trainers" of previous GTI capacity-building activities and were financially supported by the Japan Biodiversity Fund. The presentation was made on behalf of the trained trainers of all 10 projects.
- 11. Mr. Samy Zalat of Egypt presented on a comprehensive plan for taxonomic capacity development to be implemented in the North African region to identify, monitor and map species occurrences, in particular, invasive alien species, in support of the Global Taxonomy Initiative.
- 12. Mr. Mehrdad Hajibabaei of the University of Guelph, Canada, presented on the rapid growth of DNA barcoding applications in biodiversity research, regulatory and management practices and high-throughput DNA sequencing technologies to be applied by scientists to bulk DNA samples in the field. He also highlighted the importance of the global platform for sharing DNA barcoding data in order to enhance international collaboration and the efficacy of the technology.
- 13. Following the presentations by the experts, the panel discussion highlighted the following:
- (a) Technological advancements in molecular biology and bioinformatics is accelerating taxonomic research in many parts of the world;
- (b) Taxonomic experts should not work in isolation; facilitating international collaboration enhancing interdisciplinary research on biodiversity is the way to support taxonomic institutes in implementing the Convention on Biological Diversity;
- (c) A capacity gap exists which needs to be overcome globally, and training in the application of DNA technologies and DNA barcoding is cost-effective and a good entry point for Parties with limited or no taxonomic capacity, especially developing countries;
- (d) Application of DNA barcoding supports not only taxonomy but also regulatory, health and the broader economy and biodiversity monitoring in the field. It also enhances citizen science, which significantly contributes to improved public awareness of biodiversity, including strengthening the bioliteracy among citizens;
- (e) The Global Taxonomy Initiative needs to continue its work with a more up-to-date programme of work (or the equivalent) to fully support the implementation of the Convention and other international agreements relevant to biodiversity.

#### ITEM 2. ROUND-TABLE DISCUSSION

- 14. Participants suggested a plenary discussion instead of a thematic break-out group discussion on the matters revealed during the symposium.
- 15. Participants made the following suggestions:
- (a) To enable broad communities to identify, monitor and record biodiversity in collaboration with taxonomic experts, for example application of DNA barcoding and sharing information on the public domain (e.g. BOLD systems) which contribute to improve biodiversity literacy "bio-literacy", referring to the practice of BioAlfa in Costa Rica;

\_

<sup>&</sup>lt;sup>4</sup> See http://www.cbd.int/gti/

- (b) To engage retired individuals, as well as indigenous peoples and local communities, women and youth in citizen science projects, in view of the high potential of senior citizens contributing to citizen science;
- (c) To create incentives for biodiversity data sharing from taxonomic knowledge holders, for example by ensuring citation of their contributions on the occasion of data use;
- (d) To continue and increase opportunities for capacity-building in new technologies related to taxonomy, such as DNA barcoding, in addition to the traditional taxonomic training;
- (e) To include existing taxonomic capacity and progress on improving taxonomic capacity in national reports, and, based on national circumstances, the national biodiversity strategies and action plans should include the necessary training action plans;
- (f) To consider using up-to-date and harmonized taxonomic views for species monitoring, taking into account the difficulty to collate information on invasive alien species, endangered species and other trade-related issues around the world;
- (g) To develop a user-friendly interface for non-academic users to contribute to the sharing and use of biodiversity information.
- 16. After some discussion on the issues raised by participants, participants suggested unanimously that the Global Taxonomy Initiative should continue the activities related to: (a) building taxonomic capacity; (b) facilitating international collaboration; (c) enhancing taxonomic research, with emphasis on understudied biomes; (d) applying new technologies (such as DNA technologies and bioinformatics); (v) supporting and enhancing citizen science; and (e) encouraging the broader community to use taxonomic knowledge in biodiversity management and related businesses.
- 17. Participants further expressed that the Forum should produce a synthesis of shared views of taxonomic knowledge from holders and users:
- (a) To provide inputs to the process for the development of the post-2020 global biodiversity framework;
- (b) To produce a declaration on the Global Taxonomy Initiative at the next meeting of the Conference of the Parties, to be held in Beijing, in 2020;
- (c) To revisit the Programme of Work (decision VI/8, annex) and update the capacity-building Strategy for the Global Taxonomy Initiative (decision XI/29, annex), taking into account the needs of taxonomic knowledge at all levels and sectors, as well as advanced technologies in taxonomic researches and their applications.

#### Annex I

#### Agenda of the Global Taxonomy Initiative Forum (as amended by participants)

#### Item 1. Symposium

- 1.1 Opening
- 1.2 Keynote speech, "Removing the taxonomic impediment for all citizens"
- 1.3 BioAlfa Costa Rica, to become the world's first taxonomically bio-literate country by its citizens
- 1.4 CETAF natural history collections a collaborative project
- 1.5 Informatics in support of the post-2020 framework for biodiversity
- 1.6 A good practice approach to taxonomic capacity-building in South-East Asia
- 1.7 The GTI-DNA-tech training workshops 2018 immediate outcomes and sustainable plans developed by the trained trainers
- 1.8 Taxonomic capacity development in Egypt and North Africa
- 1.9 BIOSCAN: A large-scale DNA-based biodiversity analysis in support of the post-2020 global biodiversity framework
- 1.10 Panel discussion

Item 2. Round-table discussion on removing the taxonomic impediment for all citizens

### Annex II

## Participants list

	Name	Affiliation	Email
	Parties		
1	Alfred Oteng- Yeboah	University of Ghana	alfredotengyeboah@gmail.com
2	Bozena Haczek	Ministry of Environment, Poland	bozena.haczek@mos.gov.pl
3	Carlos Manuel Rodriguez	Minister of Environment and Energy, Costa Rica	cmrodriguez@minae.go.cr
4	Elbialy Hatab	Egyptian Environmental Affairs Agency	bialy.hatab@ yahoo.com
5	Elena Makeyeva	Institute of Genetics and Cytology of the National Academy of Sciences, Belarus	makeyevae@gmail.com
6	Elzbieta Martyniuk	Ministry of Environment, Poland	elzbieta_martyniuk@sggw.pl
7	Faisal Shuraim	Saudi Wildlife Authority	f.shuraim@swa.gov.sa
8	Hedi Chebili	Ministry of Environment and Sustainable Development	hedi.chebili@mineat.gov.tn
9	Hendrik Segers	Royal Belgian Institute of Natural Sciences	hsegers@naturalsciences.be
10	Jean Bruno Mikissa	Ministry of Forest, Gabon	jbmikissa@gmail.com
11	Kalina Stoyanova	Ministry of Environment and Water	kstoyanova@moew.government.bg
12	Kamal Shaltout	Egyptian Environmental Affairs Agency	kshaltout@yahoo.com
13	Mohamed AlShamlan	Saudi Wildlife Authority	alshamlan@swa.gov.sa
14	Mohammed Alshehri	Saudi Wildlife Authority	m.alshehri@swa.gov.sa
15	Moustafa Fouda	Ministry of State for Environmental Affairs, Nature Conservation	drfoudamos@gmail.com
16	Mustapha Laroui	Ministry of Environment and Sustainable Development	Mustapha.laroui@mineat.gov.tn
17	Pathma Abeykoon	Ministry of Mahaweli Development and Environment	pathman66a@gmail.com
18	Sahar Mehanna	National Institute of Oceanography and Fisheries, Egypt	Sahar_mehanna@yahoo.com
19	Sahoby Ivy Randriamahaleo	Ministry of Environment, Madagascar	sahobyivyrandriamahaleo@yahoo.fr
20	Soloman Adefolu	Nigerian Conservation Foundation	Solomon.adefolu@gmail.com
21	Tamer Kamal	Egyptian Environmental Affairs Agency	tamer.redsea@gmail.com
22	Yasa Belmar	Saint Vincent and the Grenadines	yasa.belmar@gmail.com
23	Yemisi Fawibe	Nigerian Conservation Foundation	ymorenike@yahoo.com
	Observers		, · · · · · · · · · · · · · · · · · · ·
24	Abdelwahab Afefe	Egyptian Environmental Affairs Agency	abdoafefe@hotmail.com
25	Adriana Radulovici	University of Guelph, Canada	aradulov@uoguelph.ca
26	Alice Hughes	China Biodiversity Conservation and Green Development Foundation	dr_achughes@hotmail.co.uk

	Name	Affiliation	Email
27	Carmen Capriles	CBD Alliance	carmengaro@gmail.com
28	Carolina Soto Navarro	WCMC-UNEP	sotonavanocarolina@gmail.com
29	Daniel H. Janzen	University of Pennsylvania, United States of America	djanzen@sas.upenn.edu
30	Deng Jing	China Biodiversity Conservation and Green Development Foundation	h37@wbag.org
31	Dominique Krayenbohl	Nature Conservation Egypt	dominique.krayenbuhl@gmail.com
32	Eugenia Arguedas Montezuma	Ministry of Environment and Energy, Costa Rica	eugenio. cuguedos@suioc.go.cr
33	Filiberto Pollisco	ASEAN Center for Biodiversity	fapollisco@aseanbiodiversity.org
34	Gerrit Oehm	Global Youth Biodiversity Network	gerrit.ohm@gmail.com
35	Haitham Zalat	Nature and Science Foundation, Egypt	haitham.zalat@gmail.com
36	Jemilat Ibrahim	National Institute for Pharmaceutical Research and Development, Nigeria	sadiqoyene@yahoo.com
37	Karim Sherif	Nature Conservation Egypt	karimsherif@rocketmail.com
38	Kat Bruce	Nature Metrics	kat@naturemetrics.co.uk
39	Keping Ma	Institute of Botany, Chinese Academy of Sciences	kpma@ ibcas.ac.cn
40	Kyle Copas	Global Biodiversity Information Facility	kcopas@gbif.org
41	Liezel M. Gouws	Biosafety, South Africa	liezel@biosafety.org.zu
42	Mahatub Khan Badhon	Global Youth Biodiversity Network	mahatubkhanbadhon@gmail.com
43	Mauricio Arias Zumbado	Sistema Nacional de Áreas de Conservación, Costa Rica	mauricio.arias@sinac.go.cr
44	Mehrdad Hajibabaei	University of Guelph, Canada	mhajibab@uoguelph.ca
45	Melianie Raymond	Global Biodiversity Information Facility	mraymond@gbif.org
46	Mohamed Fishar	National Institute of Oceanography and Fisheries, Egypt	mlishar@hotmal.com
47	Mohammed Taalab	Egyptian Environmental Affairs Agency	hogohogo2007@hotmail.com
48	Mona A.M. Mahmud	Nature and Science Foundation, Egypt	monaelharawy_2013@yahoo.com
49	Mouna Rifi	Institut National Agronomique de Tunisie	mounarifi3@gmail.com
50	Nada El Shanawany	Nature Conservation Egypt	nada@nature.org
51	Natalie Adel	Nature Conservation Egypt	info@natureegypt.org
52	Nikolas Sellheim	University of Helsinki	nikolas.sellheim@helsinki.fl
53	Pierluigi Bozzi	International University Network on Cultural and Biological Diversity	p.bozzi@yahoo.it
54	Salma Zalat	Nature and Science Foundation, Egypt	salma.s.zalat@gmail.com

	Name	Affiliation	Email		
55	Samah Bassem	National Resource Center, Egypt	Samahbassem7@gmail.com		
56	Samy Zalat	Nature and Science Foundation, Egypt	samysinai@yahoo.com		
57	Sheila G. Vergara	ASEAN Center for Biodiversity	sgvergara@ aseanbiodiversity.org		
58	Shyama Pagad	International Union for Conservation of Nature	s.pagad@auckland.ac.nz		
59	Tatsiana Lipinskaya	Scientific and Practical Center of the National Academy of Sciences of Belarus for Bioresources	tatsiana.lipinskaya@gmail.com		
60	Tim Hirsch	Global Biodiversity Information Facility	thirsch@gbif.org		
61	Vera Lucia Imperatriz Fonseca	Vale Technological Institute	vera.fonseca@itv.org		
62	Winnie Hallchaws	University of Pennsylvania, United States of America	whallwac@sas.upenn.edu		
63	Xiaoli Shen	Institute of Botany, Chinese Academy of Sciences	xlshen@ibcas.ac.cn		
	Secretariat of the Convention on Biological Diversity				
64	Alexander Shestakov	Director of Science, Society and Sustainable Futures	alexander.shestakov@cbd.int		
65	Wataru Suzuki	Global Coordinator, Japan Biodiversity Fund	wataru.suzuki@cbd.int		
66	Junko Shimura	Programme Management Officer, The Global Taxonomy Initiative	junko.shimura@cbd.int		
67	Frederic Vogel	Head of Information and Communications Technology	frederic.vogel@cbd.int		
68	David Ainsworth	Information Officer	david.ainsworth@cbd.int		
69	Camillo Ponziani	Programme Management Officer, Bio-Bridge Initiative	camillo.ponziani@cbd.int		