

CBD



Distr. GENERAL

CBD/GSPC/LG/6/2 20 September 2018

ENGLISH ONLY

REPORT OF THE LIAISON GROUP ON THE GLOBAL STRATEGY FOR PLANT CONSERVATION ON ITS SIXTH MEETING

Cape Town, 31 August 2018

BACKGROUND

1. In decision X/17, the Conference of the Parties adopted a consolidated update of the Global Strategy for Plant Conservation for the period 2011-2020 and decided to pursue the implementation of the Strategy as part of the broader framework of the Strategic Plan for Biodiversity 2011-2020.

2. In decision XII/15, the Conference of the Parties considered the mid-term review of the Global Strategy for Plant Conservation contained in CBD Technical Series 81¹ and the ensuing recommendation from the eighteenth meeting of the Subsidiary Body on Scientific, Technical and Technological Advice and provided guidance on options for enhancing the implementation of the Strategy.

3. In decision XIII/1, the Conference of the Parties recognized the need for a comprehensive and participatory process to develop proposals for the follow-up to the Strategic Plan for Biodiversity 2011-2020 and requested the Executive Secretary to prepare a proposal for such a process, taking into consideration that this work must cover the Convention on Biological Diversity and also consider its Protocols, taking into account the preparation of the fifth edition of the *Global Biodiversity Outlook*, the final assessment of the implementation of the Strategic Plan for Biodiversity 2011-2020, the national reports, and the thematic, regional and global assessments of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, and providing for consultations among Parties, and with other Rio Conventions, other biodiversity-related multilateral environmental agreements, and inputs from indigenous peoples and local communities and relevant stakeholders and sectors.

4. In light of discussions held during the preceding *Conference of the Global Partnership for Plant Conservation supporting the worldwide implementation of the Global Strategy for Plant Conservation*, the Liaison Group was invited to review the progress achieved in implementing the Global Strategy for Plant Conservation (GSPC) and the implications for plant conservation targets for the period beyond 2020, including by reviewing options for integrating plant conservation in the post-2020 global biodiversity framework that is under development.

5. The discussions benefited from a survey that had been conducted in preparation of the Conference, seeking the views of participants and other interested experts on the effectiveness of the GSPC in promoting and delivering plant conservation outcomes and on the way in which a follow-up strategy might relate to the post-2020 global biodiversity framework. The responses from the survey are summarized in annex II to the Summary report of the Conference of the Global Partnership for Plant Conservation 2018, contained in annex IV to this report.

¹ http://www.cbd.int/doc/publications/cbd-ts-81-en.pdf

ITEM 1. OPENING OF THE MEETING

6. The Liaison Group met at the Kirstenbosch Research Centre in Cape Town, South Africa. The list of participants is contained in annex I to the present report.

7. Mr. Robert Höft, on behalf of the Executive Secretary of the Convention on Biological Diversity (CBD), welcomed participants to the sixth meeting of the Liaison Group on the GSPC and explained the composition of the Group consisting of approximately equal numbers of representatives from Parties and from members of the Global Partnership for Plant Conservation. He noted that the Group was to provide advice to the Executive Secretary on the matters listed in the agenda. He acknowledged the financial contribution from the European Union, in the context of its support for the post-2020 process that had enabled the participation of nine developing country delegates in the meeting and preceding conference.

8. Mr. Christopher Willis, Chief Director – Conservation Gardens and Tourism at the South African National Biodiversity Institute (SANBI) also welcomed participants and said SANBI was proud to host this important meeting.

9. Mr. Peter Wyse Jackson, Chair of the Global Partnership for Plant Conservation (GPPC), noted that the flexible coordination mechanism for the Global Strategy for Plant Conservation, established through decision VII/10, consisted of meetings of the Liaison Group, alongside national GSPC focal points, GPPC members and the CBD Secretariat and enabled members of the GPPC to provide their inputs.

ITEM 2. ORGANIZATIONAL MATTERS

10. The Group elected Ms. Malta Qwathekana as Chair for the meeting. Ms. Qwathekana thanked participants for their confidence.

11. The Group adopted the agenda as contained in document CBD/GSPC/LG/6/1.

ITEM 3. REFLECTIONS ON THE CONFERENCE OF THE GLOBAL PARTNERSHIP FOR PLANT CONSERVATION

12. In reviewing the discussions and conclusions from the GPPC Conference the Group noted the need to fast-track implementation with a view to maximizing progress towards the achievement of the 2020 targets of the GSPC. It noted that more efforts were needed to inform partners beyond the botanical community of the activities and achievements and this could be realized if greater efforts were made to provide botanical expertise and services to third parties, including the private sector.

13. The Group recognized that since the adoption of the updated GSPC in 2010 many developments had taken place on the international agenda, in particular the adoption of the 2030 Agenda for Sustainable Development and its Sustainable Development Goals. It also noted that the 2050 Vision of the Strategic Plan for Biodiversity 2011-2020 provided a long-term perspective for a future strategy on plant conservation. In this context, it was considered important to make the plant conservation agenda visible and relevant to the broader global agendas on biodiversity and sustainable development.

3.1 Review of progress in the implementation of the Global Strategy for Plant Conservation

14. In its reflections on the GPPC Conference, held from 28-30 August at the Kirstenbosch National Botanical Garden, Cape Town, South Africa, the Group noted the large number of high-quality presentations, workshops and posters. A summary report of the Conference is contained in annex IV to this report. Presentations on progress in the implementation of the Global Strategy for Plant Conservation had been made by experts from seventeen countries, including nine mega-diverse countries, and experts from many more countries could unfortunately not be accommodated.

15. The Group noted that significant progress had been made towards the achievement of the 16 targets of the GSPC. Although not all targets would be achieved by 2020 it was important to emphasize and celebrate the success and to continue pursuing plant conservation objectives on this basis, building on the strength and collaborative spirit of the plant conservation networks. It was noted that the GSPC had also been influential for organizations beyond the botanic garden community.

16. Accordingly, there was a strong call to pursue the work enabled and catalysed through the GSPC, noting that the GSPC is the only programme in the CBD which includes an explicit species-based approach and this should be evident in the post-2020 global biodiversity framework.

17. The presentations on national progress with GSPC implementation used a template that was compatible with the format of the optional Section V of the sixth national report to the CBD (decision XIII/27) on the description of the national contribution to the achievement of the targets of the GSPC. The Group therefore considered that it would be useful to draw attention to these presentations as examples that could facilitate the preparation by Parties of this section. The Group also noted that not all countries use information on GSPC implementation available in specialized national institutions or the broader GPPC network. The GPPC should therefore offer to assist Parties that so desire to facilitate contact with relevant institutions holding such information, and to assist in the compilation and/or review of information needed to complete Section V of the sixth national report. Similar services could be provided through ongoing regional projects such as the Sud Expert Plantes Développement Durable (SEP2D) programme engaging 22 francophone countries in botanical research, training and practical ways to add value to the sustainable use of plant resources.

18. The Group noted in this context that Botanic Gardens Conservation International provided a network for some 1,000 botanical institutions of which 90 per cent were governmental, employing some 60,000 experts and reaching 500 million people every year. The Group noted, however, that many countries did not have well-established links between its botanical institutions and the department responsible for CBD implementation and some 50% of Parties had not yet designated a focal point for the GSPC. On the other hand, some countries had several focal points with complementary mandates and such arrangements enabled covering the array of issues addressed by the GSPC and to ensure the flow of relevant information needed for Governments to adequately report on progress in implementation.

19. Taking note of the conclusions of a Conference workshop to evaluate the current global status of GSPC implementation, the Group discussed the need to place greater emphasis on the sustainable use aspects of managing plant resources and to engage a greater range of partners with a view to mainstreaming plant conservation considerations in other sectors. It also considered the need to emphasize and focus on the specific expertise and institutional strengths of the GPPC and the broader plant conservation networks in contributing to the broader plant conservation agenda.

20. Recalling <u>decision XII/15</u> (paragraph 6), in which the Conference of the Parties encouraged Parties, as appropriate, to recognize the Plants Committee of the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) and relevant national CITES authorities as lead entities for the implementation of Target 11 of the GSPC, and bearing in mind CITES resolution 16.5, the Group noted the value of Non-detriment Findings, CITES Implementation Reports, CITES annual trade reports, and CITES annual illegal trade reports for assessing progress towards Target 11 (among others). The Group noted that the plants2020.net website could be further developed to serve as a clearing-house for such specific information.

3.2 Elements for updated plant conservation targets

21. The Group took account of the discussions on progress made towards individual targets and implications for any future targets that had been held during the Conference. It discussed the value of the

CBD/GSPC/LG/6/2 Page 4

vision and mission of the GSPC as well as its five objectives. It noted that most targets included several components which could be deconstructed and rearranged.

22. The Group decided to form two subgroups to consider (a) the main elements of a follow-up to the GSPC 2011-2020 with particular attention to the vision, mission, objectives and structure of corresponding targets and (b) using the example of Target 7, ideas for a possible template to develop SMART sub-targets, actions and indicators.

23. The subgroup on the main elements of a follow-up to the GSPC 2011-2020 came to the following conclusions:

(a) There is a need to revise and add to current Vision, Mission, Objectives and Rationale, taking into account the following elements as appropriate: connections to the Sustainable Development Goals; social relevance; sustainable use; the 2050 Vision of the Strategic Plan for Biodiversity 2011-2020; CBD objectives and the Cartagena and Nagoya Protocols; global and national implementation; mainstreaming; ecosystem services; human well-being; climate change; ecological infrastructure; engagement with indigenous peoples and local communities; the private sector; non-governmental organizations; and urban areas. The imperative to act in a timely manner needs to be emphasized.

(b) There is a need for an attractive visual representation to explain the links between elements of the GSPC-follow-up with the elements of the post-2020 global biodiversity framework and with the Sustainable Development Goals.

(c) Proposed modifications, observations and annotations were made with regard to the objectives and targets and are detailed in annex II.

(d) The subgroup suggested that these amendments should be considered and further refined through the work of an intersessional group chaired by Co-chairs of the GPPC with the support from its Secretariat.

24. The subgroup on Target 7 discussions and suggested methodology for improvement of targets is included in annex III.

(a) The subgroup felt that these considerations provided a good basis to advance but that further work was needed to complete Target 7. However, the subgroup noted the need to assemble the appropriate experts to consider modifications for each target.

(b) The subgroup recommended that the observations on Target 7 be considered and further refined through the work of an intersessional group chaired by Co-chairs of the GPPC with the support from its Secretariat.

25. In considering the reports from the two subgroups, the Liaison Group decided to establish an intersessional working group, to be facilitated and coordinated by the GPPC with the involvement of all parts of the flexible coordination mechanism for the GSPC.

26. The Group noted that the 10th International Congress on Education in Botanic Gardens (10 - 14 September 2018, University of Warsaw Botanic Garden, Poland) would provide an opportunity to advance work on Target 14.

27. The Group discussed opportunities to present the outcomes of the Conference and conclusions from the Liaison Group meeting at the fourteenth meeting of the Conference of the Parties (COP-14) to the CBD, with particular emphasis to inform high-level delegates including ministers. The following approaches and events were considered:

(a) As Chair of the Like-minded Megadiverse Countries (LMMC), Malaysia could include an element on plant conservation in the Ministerial Declaration;

(b) South Africa could prepare a contribution or make a statement on plant conservation at the Africa Biodiversity Summit on 13 November 2018;

(c) A side event or ministerial breakfast around the High-level Segment (14-15 November 2018) could be organized. The CBD Secretariat should explore possible options for a slot and provide the list of ministers scheduled to participate to DEA/SANBI so that invitations can be sent;

(d) The Executive Secretary could issue a notification drawing attention to the outcomes and conclusions of the Conference;

(e) Representatives from Parties should explore ways to insert appropriate language on the importance of the GSPC in relevant COP-14 draft decisions, in particular the draft decisions on the post-2020 framework, on cooperation, and on the preparation of the fifth edition of the *Global Biodiversity Outlook*.

3.3 Options for integrating plant conservation in the post-2020 global biodiversity framework

28. The Group considered the process for the development of the post 2020 global biodiversity framework and noted key dates as they are presented in a draft note being finalized for COP-14. In particular, the Group noted the invitation to provide, by 15 December 2018, initial views on the scope and content of the post-2020 global biodiversity framework (including the resource mobilization component) as contained in <u>notification 2018-063</u> and decided that a submission should be made by the GPPC, drawing on the GPPC Conference, the Liaison Group meeting and additional intersessional work as established under item 3.2.

29. The Group further noted that additional opportunities to contribute to the process exist and considered it important to follow the developments, including any drafts of a post-2020 global biodiversity framework, and to respond to these by proposing how plant conservation elements might be an explicit component of that framework. In preparation for such proposals it was considered useful to link concrete and preferably SMART GSPC targets or sub-targets, alongside possible actions, indicators and key actors to the components or elements addressed by the Aichi Biodiversity Targets and relevant Sustainable Development Goals. Such an analysis would enable a flexible response to any draft post-2020 global biodiversity framework as it develops.

3.4 Considerations for the post-2020 global biodiversity framework

30. The Group also noted the need to contribute to the broader process of developing the post-2020 global biodiversity framework at large by sharing experiences in the implementation of plant conservation targets in the context of the Strategic Plan for Biodiversity 2011-2020 and offering suggestions for strengthening these connections. The Group thereby noted the value of a species-based approach for advancing work on several Aichi Biodiversity Targets (or corresponding successor targets) and the ability of the plant conservation community to contribute effectively to such an approach.

31. The Group took note of the indicative chronology of key activities and milestones leading to the consideration of the post-2020 global biodiversity framework that will be finalized at COP-14 and decided to explore how the plant conservation community can contribute to selected events.

ITEM 4. PLANS FOR AN UPDATED PLANT CONSERVATION REPORT

32. Reflecting on the visibility and high quality of the <u>Plant Conservation Report 2014, issued as CBD</u> <u>Technical Series 81</u> to complement the fourth edition of the *Global Biodiversity Outlook* prepared to inform the mid-term review of progress in implementation of the Strategic Plan for Biodiversity 2011-2020 and its Aichi Biodiversity Targets, the Group considered it essential to prepare an assessment of the implementation of the GSPC 2011-2020 in parallel and as part of the preparation of the fifth edition of the *Global Biodiversity Outlook* (GBO-5). The Group welcomed the offer by Botanic Gardens Conservation International (BGCI) to coordinate inputs by GPPC members and to take the lead in drafting this assessment.

33. The Group noted that the Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA), in <u>recommendation XXI/5</u>, had provided guidance on the preparation of the fifth edition of the *Global Biodiversity Outlook* (GBO-5) and its role in providing an end-of-decade assessment of the achievement of the Strategic Plan for Biodiversity and its Aichi Biodiversity Targets, as well as in underpinning the rationale for the post-2020 global biodiversity framework and that this recommendation made no reference to the GSPC. The Group therefore agreed that representatives from Parties should intervene in the consideration of the corresponding draft decision at COP-14 and note the intention of preparing a draft updated Plant Conservation Report for review by SBSTTA-23 and the final publication to be issued at SBSTTA-24.

34. The Group noted in this context that the Plant Conservation Report 2020 would draw inter alia on the content of Section V of the sixth national reports and deplored the fact that this section of the national report was not obligatory and that many Parties might therefore not see a need to provide that information. Given the fundamental role of plants in sustaining the biosphere, their status should be an integral part of future reporting under the CBD.

ITEM 5. OTHER MATTERS

35. No other matters were discussed.

ITEM 6. ADOPTION OF THE REPORT

36. The Group agreed that a draft report of the Liaison Group meeting would be circulated with about a week allowed for comments and corrections.

ITEM 7. CLOSURE OF THE MEETING

37. The meeting closed at 5 p.m. on Friday, 31 August 2018. Christopher Willis thanked participants for their contributions and, on behalf of everyone, thanked SANBI and its Kirstenbosch Research Centre, for hosting the meeting.

Annex I

LIST OF PARTICIPANTS IN THE MEETING

Australia	Damian Wrigley
Brazil	Gustavo Martinelli
Canada	David Galbraith
China	Hai Ren
Colombia	Hernando García
France	Maïté Delmas
Jamaica	Joni Jackson
Madagascar	Sahoby Randriamahaleo
Malaysia	Lillian Swee-Lian Chua
Mexico	Hesiquio Benítez Díaz
Serbia	Biljana Panjkovic
Seychelles	James Mougal
Slovakia	Libor Ulrych
South Africa	Malta Qwathekana
Addis Ababa University, Gullele Botanic Garden	Sebsebe Demissew
Botanic Gardens Conservation International	Suzanne Sharrock
Botanic Gardens Conservation International	Paul Smith
Chicago Botanic Garden	Gregory Mueller
Conservatoire et Jardin botaniques de la Ville de Genève	Pierre-André Loizeau
Crop Trust	Luigi Guarino
Missouri Botanical Garden	Peter Wyse Jackson
Royal Botanic Garden Edinburgh	Stephen Blackmore
Royal Botanic Gardens Kew	Colin Clubbe
Secretariat, Convention on Biological Diversity	Robert Höft
South African National Biodiversity Institute	Domitilla Raimondo
South African National Biodiversity Institute	Christopher Willis
TRAFFIC	David Newton

Annex II

DISCUSSIONS OF SUBGROUP 1: SUGGESTED ANNOTATIONS AND MODIFICATIONS OF THE GSPC STRATEGY

Objective I: Plant diversity is well understood, documented and recognized <u>AS IMPORTANT TO</u> <u>HUMANITY</u>

- **Target 1**: An online flora of all known plants.
 - Target remains valid and will have ongoing need for updating it could be expanded to other groups beyond plants for post 2020 framework.
- **Target 2**: An assessment of the conservation status of all known plant species, as far as possible, to guide conservation action.
 - Urgent and also related to Objective 2 including habitat considerations.

Fulfilling this target is the base of progress for most other targets

- Important to identify gaps,
- Acceleration is needed. Including national level status.
- May be achieved by 2020 for trees.
- There should be a strong call for action
- **Target 3:** Information, research and associated outputs, and methods necessary to implement the Strategy developed and shared.
- Target remains valid and will have ongoing need for updating
- A possible new target: Importance of plants to humanity (Medicinal, cosmetics, fragances, timber species, trade). and urban activities

Objective II: Plant diversity is <u>urgently</u> and effectively conserved

4, 5 and 7. (area-focused including protected areas, biological corridors and other effective conservation areas) thus implementation requires successful engagement with relevant stakeholders (local and political)

- **Target 4**: At least 15 per cent of each ecological region or vegetation type secured through effective management and/or restoration.
- **Target 5:** At least 75 per cent of the most important areas for plant diversity of each ecological region protected with effective management in place for conserving plants and their genetic diversity.
- **Target 6:** At least 75 per cent of <u>production lands</u> in each sector managed sustainably, consistent with the conservation of plant diversity.
 - This is probably the most difficult target under this objective.
- Target 7: At least 75 per cent of known threatened plant species conserved in situ.
- **Target 8:** At least 75 per cent of threatened plant species in ex situ collections, preferably in the country of origin, and at least 20 per cent available for recovery and restoration programmes.
- **Target 9**: 70 per cent of the genetic diversity of crops including their wild relatives and other socio-economically valuable plant species conserved, while respecting, preserving and maintaining associated indigenous and local knowledge.

- Very important and needs more engagement from IPLCs.
- **Target 10:** Effective management plans in place to prevent new biological invasions and to manage important areas for plant diversity that are invaded.

Objective III: Plant diversity is used in a sustainable and equitable manner

- Target 11: No species of wild flora endangered by international trade.
- Target 12: All wild harvested plant-based products sourced sustainably.
 This target needs further work
- **Target 13:** Indigenous and local knowledge innovations and practices associated with plant resources maintained or increased, as appropriate, to support customary use, sustainable livelihoods, local food security and health care.
- This target needs further work
- **Possible new target:** Promote diversification of production of crop plants

Objective IV: Education and awareness about plant diversity, its role in sustainable livelihoods and importance to all life on earth is promoted

- **Target 14:** The importance of plant diversity and the need for its conservation incorporated into communication, education and public awareness programs.
 - Use language in Objective 1 and possibly merge

Objective V: The capacities and public engagement necessary to implement the Strategy have been developed

• Target 16: Institutions, networks and partnerships for plant conservation established or strengthened at national, regional and international levels to achieve the targets of this Strategy.

Annex III

DISCUSSIONS OF WORKING GROUP 1: SUGGESTED ANNOTATIONS AND MODIFICATIONS OF THE GSPC STRATEGY

The subgroup on Target 7 discussions and suggested methodology for improvement of target 7 as an example of what is required for all targets.

Definitions:

- 1. Definition of *in situ*:
 - a. In the wild, in natural habitat and transformed landscapes
- 2. Protection level:
 - a. Formal protection level as per IUCN definition and as defined at national or sub-national level in applicable protected areas legislation
 - i. Nature reserves (national level, provincial/ state level and local authority)
 - ii. Forest reserves
 - iii. Small micro-reserves
 - b. Other effective area-based conservation measures (OECMs)
 - i. Community conservation: sacred sites, community forestry reserves, areas in forest certification schemes
 - ii. Policy based measures (e.g. forestry restrictions, protected habitats, key water resource areas)
- 3. Definition of conserved (needs to include effective management) need to think and plan for ecological integrity functioning living landscapes approach.
- 4. Expand threatened species to plant species of conservation concern (threatened, rare endemics and socio-economically important wild species)

Actions:

- 1. Plants species of conservation concern included in formal protected areas
- 2. Plants species of conservation concern included in other effective conservation measures
- 3. Plants species of conservation concern included in national and sector-based landscape planning initiatives
- 4. There is a need to develop a research agenda looking at how effectively conserved species are in different conservation interventions (global and national)
- 5. Information base for measuring progress: there is a need to develop global datasets for socio economically important species and data sets of endemics (e.g. CWRs, medicinal plants), database of species not effectively managed.
- 6. Cross-cutting actions:
 - a. track how invasive species impact on plants of conservation concern
 - b. mechanisms for enhancing protection of plants of conservation concern in urban environments
 - c. improve representation of plant species in restoration programmes

New proposed wording would be:

Target 7: Viable populations of at least 75 per cent of **known rare, threatened and socioeconomically important wild** plant species conserved and **effectively managed** *in situ*, **preferably in connected ecologically functional biodiverse landscapes.**

Indicators:

- What proportion of threatened, rare, and socio-economically important wild plant species are under effective formal protection?
- What proportion of threatened, rare, and socio-economically important wild plant species under other effective conservation measures (OECMS)?
- What proportion of threatened, rare, and socio-economically important wild plant species are included into spatial biodiversity prioritisation plans that influence protected area expansion and land-use decision-making.

Data sets that will need to be generated globally:

- 1. Threatened, rare species assessments with associated spatial accurate distribution data
- 2. Socio economically important wild species (can create global databases) formal protection
- 3. Database of OECMs
- 4. Database that tracks no effective management

Other points:

- Need to look at what the plant conservation community has to offer and publicize its capacities
- Need to tap into IBPES language and link to capacity building rolling plan. The summary for policy makers needs to be checked on development of targets going forward.

Annex IV

SUMMARY REPORT OF THE GPPC CONFERENCE 2018

Summary report of the Conference



Global Partnership for **2018** PLANT CONSERVATION

Supporting the worldwide implementation of the Global Strategy for Plant Conservation

Organised by: the Global Partnership for Plant Conservation (GPPC)

in association with the Secretariat of the Convention on Biological Diversity (SCBD).

and Botanic Gardens Conservation International (BGCI), and

hosted by: South African National Biodiversity Institute (SANBI), Cape Town, South Africa

28 – 30 August 2018



Contents

1.	Introduction and background to the conference	. 3
2.	Overview of conference sessions and participants	. 3
3.	Progress in GSPC implementation at the national level	. 4
4.	Progress towards individual targets of the GSPC	. 4
-	Target 1	. 4
-	Target 2	. 5
-	Target 8:	. 5
-	Target 9	. 5
-	Targets 2 and 5	. 5
-	Target 7 in South Africa	. 5
-	Target 13:	. 6
5.	The GSPC as an integrated conservation framework	. 6
6.	Reports from workshop sessions	. 6
Ŋ	Workshop 1: Achieving Target 8 of the GSPC	. 7
Ŋ	Workshop 2: Raising awareness of the GSPC and engagement with stakeholders – Target 14	. 7
Ŋ	Workshop 3: Plant conservation and crop plants – a Target 9 workshop	. 7
	Workshop 4: Mainstreaming the GSPC into National Biodiversity Strategies and Action Plans (NBSAPs) and other processes.	
Ņ	Workshop 5: Capacity building and support measure for the GSPC (Target 15)	. 8
Ņ	Workshop 6: Evaluation of the current global status of the GSPC and priorities 2018-2020	. 8
7.	Conference conclusions and recommendations	. 9
Glo	bal Partnership for Plant Conservation: Business meeting	. 9
An	nexes	10



environmental affairs Department: Environmental Affairs REPUBLIC OF SOUTH AFRICA















1. Introduction and background to the conference

In October 2010 in Nagoya, Japan, the 10th meeting of the Conference of the Parties to the CBD adopted an updated Global Strategy for Plant Conservation (GSPC) for the period 2011-2020. This updated GSPC includes 16 targets for plant conservation to be achieved by 2020. To help Parties meet the targets of the GSPC, the Global Partnership for Plant Conservation was formed in 2004. This consortium brings together a wide range of international, regional and national plant and conservation organizations. The Partnership is working to support national implementation and the GSPC, and to provide tools and resources to help each country to plan and act to meet the targets. The GSPC was included by the Convention on Biological Diversity as part of the flexible coordination mechanism of the GSPC and plays a significant role in helping to monitor and promote GSPC implementation.

This conference was organised by the Global Partnership for Plant Conservation (GPPC) in association with the Secretariat of the Convention on Biological Diversity (SCBD) and Botanic Gardens Conservation International (BGCI). It was hosted by the South African National Biodiversity Institute (SANBI), Kirstenbosch National Botanical Garden, Cape Town, South Africa.

The objectives of the conference were to:

- Showcase examples and share experience on GSPC implementation;
- Review progress towards the target of the GSPC at national and international levels;
- Provide guidance and support for national and regional GSPC implementation entering into the a new phase post-2020;
- Help build leadership amongst the participating organizations for monitoring and delivery of the GSPC targets;
- Develop and consider scenarios and priorities for the GSPC in the period beyond 2020 and the ways in which it will contribute to the 2050 Vision for Biodiversity and the 2030 Agenda on Sustainable Development.

2. Overview of conference sessions and participants

The conference was attended by over 120 participants from 35 countries. Participants included national GSPC and CBD focal points, plant conservation practitioners, representatives from GPPC member organisations and other interested parties.

The programme included 42 oral presentations and 6 parallel workshops, as well as 21 poster presentations. Oral presentations provided information on GSPC implementation at the national level as well as reports on progress towards individual targets at the global level. The parallel workshops provided opportunities for discussion around specific targets and issues related to the GSPC.

The detailed conference programme is provided in Annex 1.

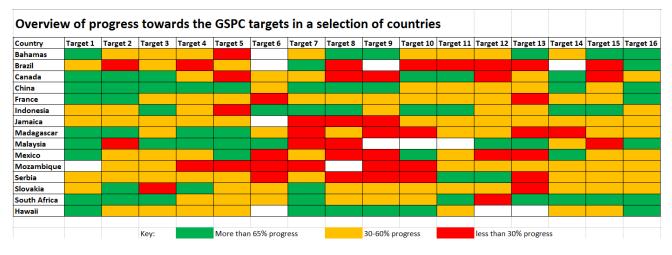
The representative from the CBD Secretariat provided an update on the process for the development of the post-2020 biodiversity framework, as well as an overview of the results of an on-line survey on the GSPC which had been conducted by the CBD Secretariat prior to the conference. Summary results of the survey are provided in Annex 2.

3. Progress in GSPC implementation at the national level

Reports on national implementation of the GSPC were provided by 16 countries including several megadiverse countries, as well as Hawaii:

Bahamas, Brazil, Canada, China, Colombia, France, Indonesia, Jamaica, Madagascar, Malaysia, Mexico, Mozambique, Serbia, Slovakia, South Africa, Switzerland.

All countries were asked to provide a table indicating overall progress against each target at the national level. These assessments have been combined in the table below:



It can be seen that the assessment of progress is variable across both targets and countries. Amongst the megadiverse countries, both South Africa and China report more than 30% progress towards all targets, with the exception of Target 12 in South Africa.

Several countries were unable to assess progress towards Targets 6 and 9, perhaps indicating a lack of communication between agricultural and environmental sectors. All countries report more than 30% progress towards Targets 1 and 16, and most countries are making progress towards Targets 2, 3, 4, 11 and 14. The targets which appear to be the most challenging across countries are Targets 8, 9 and 13.

Copies of all national presentations are available on the Plants2020 website (www.plants2020.net).

4. Progress towards individual targets of the GSPC

A series of presentations were focused on progress at the global level towards specific targets, namely Targets 1, 2, 8 and 9. Presentations also covered national progress towards Target 7 in South Africa, and addressing Target 5 in tropical countries.

Target 1: An update on progress towards completing a World Flora On-line (WFO) was presented. This is a collaborative project, with 42 institutions having so far signed the WFO consortium agreement. Three working groups have been established (taxonomic, technical and communications) and a public portal <u>www.worldfloraonline.org</u> has been launched. The database presently includes over 23 million records provided by major herbaria around the world. These include descriptions for around 98,000 plant species (or approximately 25% of known species). Other data included in the WFO portal include references, vernacular names, images and threat statuses.

Target 2: Progress towards Target 2 (conservation assessments) has recently been accelerated by the launch of BGCI's ThreatSearch database (<u>www.bgci.org/threat_search.php</u>). This database combines global and national conservation assessments to provide a comprehensive global database for plant assessments. The database presently includes over 300,000 conservation assessments, related to 180,000 taxa. Analysis of the data has revealed that global conservation assessments are available for over 90,000 plant species and that one third of assessed plants are classified as threatened. The IUCN Global Trees Specialist Group has launched the Global Tree Assessment, with the aim of ensuring a conservation assessment for all the world's trees by 2020. Work is also ongoing to develop a machine-learning approach to predict threat assessments and fast-track 'least concern' assessments.

Target 8: In relation to this target, an analysis of data in BGCI's PlantSearch database (a database of plant species in botanic garden collections, including over 1.3 million records from over 1,000 institutions) has shown that globally, 42% of threatened plant species are held in botanic garden *ex situ* collections (living and seed collections). However, there is considerable taxonomic variability, with some plant groups being much more comprehensively represented in *ex situ* collections than others. Further analysis is required to determine the extent to which threatened species are held in the country of origin and how many conserved species are available for recovery and restoration programmes. Initial results show that 59% of tree species that are in *ex situ* collections are maintained in the country of origin.

Target 9: This target relates to crop diversity and associated crop wild relatives (CWRs), as well as other socioeconomically important plants. The conservation of the former is carried out in the framework of the Global Plan of Action for Plant Genetic Resources for Food and Agriculture (PGRFA), under the UN's Food and Agriculture Organisation (FAO). Progress is monitored through periodic reviews of the State of the World's PGRFA. A recent study has indicated that, at the global level, 28% of CWR species are adequately conserved *ex situ*. For the latter (other socioeconomically important plants), almost 7,000 different wild useful plants have been assessed to determine how comprehensively their diversity is safeguarded in seedbanks, botanic gardens, and other conservation repositories (*ex situ*), and how well parks, reserves, and other official protected areas preserve their natural populations (*in situ*). Approximately 3.3% of species were assessed as well conserved in *ex situ* conservation, and 40.7% in *in situ* conservation. The combined conservation status metric for all species shows that less than three out of every 100 species (2.78%) is sufficiently conserved or of low priority for further conservation action. Urgent action is currently needed to improve the conservation of the diversity of the world's useful wild plant species.

Targets 2 and 5 in selected tropical countries: To date, some 1,771 important plant areas have been identified globally, but very few of these currently have conservation protection. The Royal Botanic Gardens, Kew and Plantlife International are collaborating on a project to identify Tropical Important Plant Areas (TIPAs) in 7 countries / regions, with the aim of identifying priority sites for the conservation and management of wild plant diversity. The work on identifying TIPAs (Target 5) is also driving forward red listing in the participating countries (Bolivia, Ethiopia, Guinea, Guinea Conakry, Mozambique, New Guinea, British Virgin Islands) as a contribution to Target 2.

Target 7 in South Africa: This presentation provided information on how Target 7 can be achieved in a megadiverse country. In the case of South Africa, the background data required for this target is already available. This includes a comprehensive national plant Red List, fine-scale occurrence data for species and a well-mapped protected area network. Through mapping the occurrence of threatened species against existing protected areas, at least one population of 65% of South Africa's threatened species have been identified in a

protected area – therefore conserved *in situ*. Further analysis revealed that Target 7 could be achieved with the addition of just 30 sites to the protected area network.

Target 13: This target refers to maintaining and supporting the relationship between plant diversity and local and indigenous knowledge, with the aim of ensuring that traditional knowledge is respected and reflected in the implementation of the GSPC. Target 13 may be considered more of a cross-cutting target, and achievement is difficult to measure. This presentation reviewed progress to date, looking at what various countries and organisations, such as botanic gardens, are doing in relation to Target 13. Examples from countries included Scotland, where traditional languages have gained greater protection since the passing of the Gaelic Language (Scotland) Act in 2005. Similarly, the Republic of Palau, in its revised NBSAP (2015-2025), has noted that "a more targeted process of ensuring that Palau's traditional ecological knowledge and expressions of culture around biodiversity is collected and utilised" is needed. A range of tools and resources have been developed to support conservation by indigenous and local communities, including through biocultural protocols and indices of traditional environmental knowledge. Examples of the work of botanic gardens that support the conservation of indigenous knowledge by local communities were presented, including that of Missouri Botanical Garden in Madagascar and Cornell Botanic Gardens in the Pamir Mountains of Central Asia. Finally, a number of recommendations for taking forward Target 13 were presented, including the establishment of an international research platform to address gaps, development of robust indicators, greater engagement by the social sciences and humanities, and greater efforts in local capacity building.

5. The GSPC as an integrated conservation framework

A presentation on the Global Trees Campaign (GTC), which aims to safeguard the world's threatened tree species, demonstrated how the GSPC provides a framework for developing an integrated approach to plant conservation which can be applied at both global and national level.

In order to meet its aims, the GTC focuses its work around the objectives of the GSPC. In relation to Objective 1 (understanding and documenting), the GTC has developed a comprehensive global database of the world's tree species (GlobalTreeSearch), which provides details of over 60,000 tree species and their country-level distribution (Target 1). Species in GlobalTreeSearch are compared with ThreatSearch, to identify species without a threat assessment (Target 2) for priority assessment through the Global Tree Assessment. To date 23,800 tree species have been assessed and 8,614 threatened species identified. Integrated conservation programmes for threatened species are supported through the GTC (Objective 2) using both *in situ* (Target 7) and *ex situ* (Target 8) approaches. Conservation programmes also focus on developing propagation techniques and building capacity for the sustainable use of threatened species (Objective 5, Target 15) forms an important part of the work of the GTC, and in 2017, 395 people were trained in tree conservation techniques. Finally, partnerships and collaboration are promoted through initiatives such as the Global Oak Conservation Partnership (Target 16).

6. Reports from workshop sessions

Six workshops were held during the conference. Four of these focused on specific targets (Targets 8, 9, 14 and 15) while two addressed GSPC mainstreaming and evaluation of the global status of GSPC implementation. Some workshops included formal presentations as well as a discussion session. Copies of all presentations made during the workshops are provided on the Plants2020 website.

Each workshop was asked to:

- Review progress towards the target / issue
- Describe how this is measured
- Identify constraints to progress and opportunities to overcome these
- Identify models and examples for others to use
- Discuss the target / issue post-2020

The reports of these workshops are available on the Plants2020 website. Summaries of the workshop conclusions are provided below:

Workshop 1: Achieving Target 8 of the GSPC

There is variable progress towards this target and it is unlikely to be achieved globally and in megadiverse countries. Tools exist to monitor progress (PlantSearch), but these need to be further developed and refined. Progress is constrained by slow progress with Target 2 (conservation assessments) and lack of information on seed storage behaviour for many species. However, there are concerted efforts to enhance work on Target 2 and dedicated networks and partnerships help to disseminate information. It was suggested that more emphasis should be given to maximising genetic diversity in *ex situ* collections and broadening the use of such collections beyond restoration to include species reintroductions, translocation, novel species assemblages and use in agriculture, horticulture and forestry. In the post-2020 framework, there was a call for a more ambitious and explicit target, such as "*No plant species becomes extinct*" and a separation of the conservation and restoration parts of the target. There was also a suggestion to combine Targets 7 and 8 into a target for integrated species conservation and to investigate stronger linkages with the Global Plans of Action for PGRFA and FGR under FAO.

Workshop 2: Raising awareness of the GSPC and engagement with stakeholders - Target 14

Participants in this workshop noted that most countries had reported moderate or good progress towards this target and this reflects the many successful and persuasive programmes being implemented, often by botanic gardens. However, it does not take into account the extent such programmes influence behaviour or decision-making. It was felt that, at the national level, economics generally take priority over the environment and governments are reluctant to commit to long-term objectives. There is a need to broaden the stakeholder base to include tourism, agriculture and other ministries. We need to find ways to engage with specialists in other fields. It was also noted that botany has an image problem as a career and it is difficult to attract students to pursue plant-related subjects. There are inadequate measures of success and a need to change behaviours and values, not just inform. There could be some value in participating in high quality social research to measure impact. A re-wording of the target post-2020 could be along the lines of "Awareness and understanding of plants results in measurable changes in behaviour, leading to improved conservation of plants and their habitats"

Workshop 3: Plant conservation and crop plants - a Target 9 workshop

Presentations in this workshop provided some examples of the conservation of CWRs at the national and regional levels and a number of tools and models to support implementation were identified. Constraints to progress include the availability and accessibility of gene bank data, insufficient collaboration between *ex situ* and *in situ* practitioners and lack of awareness of available tools and resources. There is also a lack of awareness amongst protected area managers, policy makers etc. of the need for targeted conservation action for CWRs within protected areas. In relation to the post-2020 framework, the need for conservation of genetic

diversity of all plant species was emphasised, while also recognising the special role played by socioeconomically important species in delivering ecosystem services. There is a need to have more explicit linkages with SDG 2.5, the FAO Global Plan of Action for PGRFA and, at the national level, with protected area expansion strategies. The definition of what 'socioeconomically important' means, needs to be clarified and 'crops' should also include neglected and under-utilized species.

Workshop 4: Mainstreaming the GSPC into National Biodiversity Strategies and Action Plans (NBSAPs) and other processes.

It was noted in this workshop that references to the GSPC in CBD National Reports (NRs) fell considerably between the 3rd NR and the 5th NR. Also, only 7 countries mention the GSPC in their NBSAPs and only 17 have developed a national plant conservation strategy or other GSPC response. Mainstreaming plant conservation in NBSAPs has worked best in countries where the CBD and GSPC focal points are well-linked and clear priorities have been set for plant conservation work. Building good relationships with relevant decision makers is key. Some immediate priorities identified by the group included:

- Ensuring countries report on the GSPC in 6th NRs
- Using the presentations from this conference to provide information for reporting
- Producing a Plant Conservation Report in 2020 to compliment Global Biodiversity Outlook 5

There is a need to maintain visibility for the GSPC / plant conservation in post-2020 biodiversity discussions, through developing SMART sub-targets and indicators that can be included under the post-2020 overarching biodiversity target. There is also a need to engage with a wider range of stakeholders, particularly the major production sectors that put pressure on plants.

Workshop 5: Capacity building and support measure for the GSPC (Target 15)

While a number of countries had reported limited progress towards this target during the conference, presentations made during the workshop provided some excellent examples of capacity building initiatives around the world. It was agreed that perhaps more capacity building is happening than is being captured in national reports. It is also very difficult to measure progress towards this target. Constraints identified included the decline in universities offering botany courses and a lack of clear career structures in plant conservation-related jobs. Enhanced partnerships and skills-sharing may help to overcome some constraints. It was suggested that countries should conduct national needs assessments across GSPC targets to determine national priorities and gaps. It was noted that capacity building is key for plant-related activities at national and international levels and linkages with other processes, such as IPBES, as well as with the social sciences, could be beneficial. The workshop also highlighted the need to look forward and consider future needs in plant conservation, to maximise technology use and to reach out to and partner with universities and other training institutions.

Workshop 6: Evaluation of the current global status of the GSPC and priorities 2018-2020

Participants reviewed progress against each of the GSPC targets, comparing the assessment of progress in the mid-term review (2014) with the situation today. For most targets, it was agreed that the assessments made in 2014 are still valid. Problems with the definition and 'ownership' of Target 6 were highlighted and it was agreed that insufficient progress is being made on controlling invasive species (Target 10) and conserving indigenous knowledge (Target 13). On the other hand, it was felt that progress towards Targets 7 and 8 were improving compared to the situation in 2014. Key constraints identified included lack of investment – very few new resources have been committed to plant conservation as a result of the GSPC. It was recommended

that post-2020 the targets should be refined to reflect progress to date and emerging agendas such as the SDGs, made SMART(er) and reporting should be against well-defined milestones and indicators.

7. Conference conclusions and recommendations

The concluding session consisted of a panel discussion, where a number of technical issues around specific targets were discussed. A statement in support of a continued GSPC post-2020 was made by the Chair of BGCI's International Advisory Council. This statement is provided in Annex 3.

A number of issues and points were raised during the conference with respect to the future of the GSPC. These included:

- It is important to recognise and promote the fact that plants underpin the biosphere, food chains and all aspects of life on earth.
- In this respect, plants and their conservation have an important role to play in delivering the Sustainable Development Goals.
- It is important that as many countries as possible report on the GSPC in 6th NRs. Data needs to synthesised and made available for reporting.
- A Plant Conservation Report 2020 should be prepared to compliment GBO5 that shows change in progress towards achieving targets.
- There is a need to strengthen linkages with a wider range of stakeholders particularly from the production sector, whose actions have an impact on plant diversity.
- Local and indigenous people play an important role in conserving both plant diversity and associated traditional knowledge. The need to respect this role and ensure the conservation of traditional knowledge should be highlighted in a future post-2020 plant conservation framework.
- There is a need to be more interactive, more opportunistic and broader in our scope of engagement.
- Post-2020 targets for plant conservation need to be SMART, with clear and measurable milestones and indicators
- National parties need to be speaking to the GSPC and requesting to keep it, or elements of it, in the post-2020 framework.
- We need to take a flexible approach to developing a post-2020 GSPC, or at least plant-related milestones and indicators, so that these can be nested within the post-2020 Aichi targets and the SDGs.
- We should consider being more explicit about the importance of sustainable use of plants a future plant strategy should not just focus on conservation, but perhaps include 'sustainable use' in its title.

Global Partnership for Plant Conservation: Business meeting

Following the plenary workshop, a GPPC business meeting was held. This included a report on activities of the partnership since the last meeting and a review of the current membership. The participants re-elected Botanic Gardens Conservation International (BGCI) as the GPPC Secretariat, and Dr Peter Wyse Jackson (Missouri Botanical Garden, USA) and Ms Maïté Delmas (Muséum National d'Histoire Naturelle, France) were elected as co-chairs.

Annexes

Annex 1: GPPC Conference programme

Annex 2: Results of a survey conducted in preparation for the conference of the Global Partnership for Plant Conservation 2018 and associated Liaison Group meeting.

Annex 3: Statement from the BGCI International Advisory Council on the Global Strategy for Plant Conservation post-2020.

Annex 4: List of participants at the GPPC Conference





Global Partnership for 2018 PLANT CONSERVATION

28–30 August 2018 CONFERENCE PROGRAMME WITH ABSTRACTS



VENUE: Old Mutual Conference Centre, Kirstenbosch National Botanical Garden, South African National Biodiversity Institute (SANBI), Cape Town, South Africa

PROGRAMME

1

VENUE: OLD MUTUAL CONFERENCE CENTRE, KIRSTENBOSCH NATIONAL BOTANICAL GARDEN, SOUTH AFRICAN NATIONAL BIODIVERSITY INSTITUTE (SANBI), CAPE TOWN, SOUTH AFRICA

Tuesday, 28 August 2018

09:00 CONFERENCE OPENING

Including:

- Welcome from the South African National Biodiversity Institute (SANBI).
- Welcome from Secretary General of Botanic Gardens Conservation International (BGCI).
- Welcome and introduction from the Chair of the Global Partnership for Plant Conservation (GPPC).
- Statement and welcome from a representative of the Secretariat of the Convention on Biological Diversity (SCBD):
 - Robert Höft (SCBD): Perspectives on the post-2020 global biodiversity framework.
- Statement and official opening by the Director General: Department of Environmental Affairs (DEA), South Africa.

10:00 PRESENTATIONS ON GSPC PROGRAMMES, PROGRESS AND IMPLEMENTATION AT THE NATIONAL LEVEL

- **Domitilla C. Raimondo**, Z. Rabaney & L. von Staden (South Africa): Progress towards implementing South Africa's Strategy for Plant Conservation.
- **Cristina López-Gallego, Carolina Castellanos & Hernando García** (Colombia): The main achievements of the National Plant Conservation Strategy in Colombia.
- Hesiquio Benitez Dias (Mexico):
 Implementation of the Mexican Strategy for Plant Conservation (EMCV).
- Ethan Freid (Bahamas): Implementation of the Global Strategy for Plant Conservation in the Bahamian Archipelago.

11:00 COFFEE BREAK

11:30 PRESENTATIONS ON GSPC PROGRAMMES, PROGRESS AND IMPLEMENTATION AT THE NATIONAL LEVEL (CONT.)

- David A. Galbraith (Canada): Biodiversity, conservation, the GSPC and the 2020 Biodiversity Goals & Targets for Canada.
- Hai Ren (China): Progress of implementation on the Global Strategy for Plant Conservation (2011–2020) in China.
- Haining Qin (China): The role of expert volunteers in the implementation of GSPC: a case study of the China Plant Specialist Group of the IUCN Species Survival Commission.

- Sahoby Ivy Randriamahaleo (Madagascar): Madagascar's progress in achieving the Global Strategy for Plant Conservation: the need for a successor to the GSPC to pursue national priorities.
- Philippe Bardin, Maïté Delmas & Serge Muller (France): Progress by France in the implementation of the GSPC targets.
- **Gustavo Martinelli** & Rafaela Forzza (Brazil): GSPC advances in Brazil: updates and perspectives for 2020.
- 13:00 GROUP PHOTOGRAPH
- 13:15 LUNCH
- 14:00 PARALLEL WORKSHOPS
 - 1. Achieving Target 8 of the GSPC Coordinators: Paul Smith (BGCI) and John Donaldson (SANBI)
 - **Catherine A. Offord** & Karen D. Sommerville (Australia): Challenges in ex situ conservation in the South Pacific.
 - **Damian Wrigley** (Australia): Seed Banking throughout Australia in support of Target 8 and 9 of the GSPC.
 - John R. Clark, Joyce Maschinski & Peter Raven (U.S.A.): Achieving measurable success towards the Global Strategy for Plant Conservation, Objective II – the Center for Plant Conservation model to urgently and effectively conserve plants.
 - Jordan Wood, Jeremie B. Fant, Andrea T. Kramer, Kayri Havens & **Gregory M. Mueller** (U.S.A.): What to do when we can't bank on seeds: Applying zoo population management protocols to rare plants in living collections.
 - 2. Raising awareness of the GSPC and engagement with stakeholders (at all levels, including amongst governments, CBD stakeholders, conservation and genetic resource practitioners and other groups and sectors) a Target 14 workshop. Coordinators: Tim Entwisle (Melbourne) and Colin Clubbe (Kew)
 - 3. Plant conservation and crop plants a Target 9 workshop. Coordinators: Ehsan Dulloo (Bioversity International, Mauritius) and Luigi Guarino (Crop Trust, Germany).
 - **Nigel Maxted**, Shelagh Kell, Joana Magos Brehm & Ehsan Dulloo (U.K.): Addressing GSPC Target 9: Toward the systematic conservation of global plant agrobiodiversity to 2020 and beyond.
 - **M. Ehsan Dulloo**, N. Maxted, Joana Magos Brehm, Shelagh Kell, E. Allen, I. Thormann, H. Gaisberger, Y. Jaufeerally-Fakim, D. Ng'uni & T.T. Tjikana (Mauritius): Showcasing crop wild relative conservation planning in the SADC region.
 - Wolke Tobón, A. Mastretta-Yanes, B. Goettsch, T. Urquiza-Haas, A. Cuervo-Robayo, M.A. Orjuela, E. Urquiza, E.P. Gómez Ruíz, O. Oliveros, J. Alarcón, F. Acevedo1 & P. Koleff (Mexico): Mesoamerican crop wild relatives: Planning to safeguard genetic diversity.
 - Danny Hunter, Teresa Borelli and **M. Ehsan Dulloo** (Mauritius): 'Plants of the past, or crops for the future': Biodiversity for food and nutrition is central to the 2030 agenda on sustainable development.

17:30 POSTER SESSION

Venue: Kirstenbosch Conservatory

- Sefra Alexandra Levin: The seed huntress: 'On the hunt to save the genetic biodiversity of our Earth'
- **Diana Milena Arango Uribe** (Colombia): Introducing trees to increase biodiversity and decrease pollution in the metropolitan area and the Andean region.
- Tamaz Darchidze, Tinatin Barblishvili, Tsira Mikatadze-Pantsulaia (Georgia): Plant conservation in Georgia – strategic targets of the National Botanical Garden of Georgia for 2030.
- **Peta Hardy** (South Africa): Prioritising areas for conservation management: putting theory into practice.
- Sean Hoban, Emma Spence, Bethany Zumwalde, Nicole Cavender, M. Patrick Griffith, Michael Bruford, Gernot Segelbacher & Gerard Donnelly (U.S.A.): Achieving two GSPC targets by documenting existing genetic diversity and developing best practices for preserving it.
- **Peter M. Hollingsworth** (U.K.): Using DNA for plant identification to support conservation and sustainable use.
- Lerato N. Hoveka, Michelle van der Bank, Bezeng S. Bezeng & Jonathan Davies (South Africa): Barriers to conserving South Africa's endemic flora: a gap analysis.
- M.M. le Roux, Ronell R. Klopper, Janine E. Victor (South Africa): The e-Flora of South Africa – achievements and progress of the past four years.
- Lee, Cheul Ho; Shin, Hyun Tak & Kim, Dong-Kap (South Korea): A review of progress in implementation of the Korea Strategy for Plant Conservation (KSPC) 2020 by the Korea National Arboretum.
- Eva Martens & Colin Clubbe (U.K.): The Millennium Seed Bank Partnership: its role in global plant conservation.
- Kim Norton Taylor, Barney L. Lipscomb & Edward Schneider (U.S.A.): Assessing progress towards Targets 1 and 2 of the GSPC 2020 objectives in Texas, U.S.A.
- J.C. Onyango, Seline Omondi & Mary O.A. Onyango (Kenya): Plant conservation strategies using botanic garden model checklist and photochemistry analysis for classification and herbal medicine usage.
- Anjum Perveen, Shazia Mansuri & Saifullah Khan (Pakistan): Assessment of *Pulicaria boisseri* Hook.f. (A rare and endemic plant of Sindh, Pakistan).
- Ing. Tomáš Peš (Czech Republic): Czech Native Flora Project in the Zoological and Botanical Garden of Plzen.
- S. Rivière, J.V. Müller, E. Breman, A. Carta, M. Kiehn & M. Miranto (France): Progress report towards meeting 2020 GSPC Targets 8 & 9 in Europe – implementation and subsequent recommendations.
- Emiliano Sánchez Martínez, Beatriz Maruri Aguilar & María Magdalena Hernández Martínez (Mexico): The botanical gardens of Mexico and their commitment to plant conservation plans and strategies.
- Raviraja Shetty G.:

Efforts to conserve endangered and economically useful medicinal plants of the Western Ghats of India.

- Ulyana Spirina & Yuri Naumtsev (Russian Federation): Bryophyte horticulture as ex situ conservation method: Case study of the Botanical Garden of Tver State University.
- F. Tarquini, M. Pepe, A. Spoletini, G. Fabrini, L. Varone, L. & Gratani (Italy): Plant conservation strategy of the Botanical Garden of Rome.
- Gene-Sheng, Tung, Chih-Liang, Chao & Tsung-Yu, Hung (Taiwan): To enhance the flora conservation of botanical gardens based on participatory citizen science approach in Taiwan.
- Murphy Westwood, Nicole Cavender & Gerard Donnelly (U.S.A.): Towards achieving the GSPC targets for trees through global collaboration.

Poster presenters will be invited to speak for 2–3 minutes about their poster presentations during the session.

18:30 CLOSE FOR THE DAY

4

09:00 PRESENTATIONS ON GSPC PROGRAMMES, PROGRESS AND IMPLEMENTATION AT THE NATIONAL LEVEL (CONT.)

- **Pierre-André Loizeau** and Anouchka Maeder (Switzerland): The impact of the GSPC on the biodiversity legislation and awareness in Switzerland.
- Libor Ulrych (Slovakia): Global Strategy for Plant Conservation 2011–2020; implementation in Slovakia.
- **Didik Widyatmoko, R.A.**, Risna, D.W. Purnomo, D.O. Pribadi & S.R. Ariati (Indonesia): Implementation of the Global Strategy for Plant Conservation in Indonesia.
- Lillian Swee-Lian Chua (Malaysia): Progress on the implementation of the Global Strategy for Plant Conservation in Malaysia.
- Joni Jackson (Jamaica): Implementation of the Global Strategy on Plant Conservation in Jamaica.
- **Biljana Panjkovic** & Jelena Dučić (Serbia): A review of progress in implementing the Global Strategy of Plant Conservation in the Republic of Serbia.
- James Mougal (Seychelles): Implementation of the Global Strategy on Plant Conservation in the Seychelles.
- **Camila de Sousa** (Mozambique): The challenges and role of IIAM to contribute to achieving GSPC targets.

11:00 COFFEE BREAK

11:30 PRESENTATIONS ON CROSS-CUTTING ISSUES IN THE GLOBAL STRATEGY FOR PLANT CONSERVATION

- Paul Smith & Kirsty Shaw (BGCI): The Global Trees Campaign: an integrated approach to delivering the Global Strategy for Plant Conservation.
- Chipper Wichman (Hawaii, U.S.A.): The Hawaii Strategy for Plant Conservation – implementing the GSPC in one of the most unique floristic regions of the world.
- Malin Rivers, Steven Bachman, Emily Beech, Abby Meyer, Suzanne Sharrock and Paul Smith (U.K.): Targets 2 and 8 – measuring progress towards conservation assessments for all plants and ex situ conservation of threatened species.
- Stuart Hall, Alexander Lansdowne, P.M. Holmes, M. Gaertner & K.J. Esler (South Africa): Understanding restoration needs at the ecosystem level: Case studies from threatened vegetation types in South Africa's Fynbos Biome.
- Colin Clubbe (U.K.): Implementing GSPC Targets 2 and 5: Kew's Tropical Important Plant Areas Programme.
- Porter P. Lowry II (U.S./France): Contributions to GSPC Targets: examples of integrated conservation approaches from Africa and Madagascar.

13:00 LUNCH

14:00 PARALLEL WORKSHOPS (3)

 Mainstreaming the GSPC into national biodiversity strategies and action plans (NBSAPs) and reporting (including aligning GSPC targets with the Aichi Targets, the Sustainable Development Goals and contributions to the Global Biodiversity Outlook – GBO-5)

Coordinators: Domitilla Raimondo (SANBI), Hesiquio Benitez Dias (Mexico) and Robert Höft (SCBD).

2. Capacity building and support measures for plant conservation / GSPC implementation.

Coordinators: Sebsebe Demissew (Ethiopia), Suzanne Sharrock (BGCI) and Christopher Willis (SANBI).

- Suzanne Sharrock & Helen Miller (U.K.): Capacity building for plant conservation.
- Suvarna Parbhoo-Mohan, Zaitoon Rabaney, I. Ebrahim & V. Zikishe (South Africa): Developing capacity to implement South Africa's Plant Conservation Strategy.
- Vanessa Handley & Holly Forbes (U.S.A.): Progress through partnership: How small organizations can make meaningful GSPC contributions.
- Kimberlie McCue & Bárbara Goettsch (U.S.A.): IUCN SSC Specialist Group–Host Institute Collaborations Advance GSPC Target 2: A case study.
- 3. Evaluation of the current global status of GSPC implementation and priorities for 2018–2020.

Coordinators: Stephen Blackmore (BGCI), Maïté Delmas (France) and Peter Wyse Jackson (GPPC).

16:30 GUIDED TOURS OF THE KIRSTENBOSCH NATIONAL BOTANICAL GARDEN, FOLLOWED BY CLOSE FOR THE DAY

Thursday, 30 August 2018

09:00 PRESENTATIONS ON ACHIEVING INDIVIDUAL TARGETS OF THE GLOBAL STRATEGY FOR PLANT CONSERVATION

- Target 1: M. Marianne le Roux, Peter Wyse Jackson & Pierre-André Loizeau (South Africa): Building a World Flora Online.
- Target 2: Steven Bachman & Malin Rivers (U.K.): A machine learning approach to assess the conservation status of all plants.
- Target 7: Lize von Staden, Rupert Koopman & Ismail Ebrahim (South Africa): Achieving GSPC Target 7 in a megadiverse country.
- Target 9: Luigi Guarino (Germany): Measuring progress in the conservation of crop diversity.
- Target 13: Christopher Dunn & Peter Wyse Jackson (U.S.A.): Traditional knowledge conservation and the GSPC: progress and perspectives.
- Target 13: Tom Suchanandan & Carol van Wyk (South Africa): The National Recordal System – An initiative of the Department of Science and Technology towards the protection, promotion, development and management of indigenous knowledge.
- 11:00 COFFEE BREAK

12:00 REPORTS FROM WORKSHOPS OF THE PREVIOUS DAYS AND DISCUSSION

followed by:

PLENARY WORKSHOP – A FUTURE GSPC FOR 2020 TO 2030

The workshop will address questions such as:

- What will be the suggested structure of a post-2020 GSPC formulation, objectives, targets (revised, updated and new), stakeholders
- How will it address emergent issues such as cities and urban biodiversity, the SDGs, climate change and action, ecological restoration?
- Aligning the post-2020 GSPC with the Strategic Plan for Biodiversity, Aichi Targets and the SDGs
- How will relevant stakeholders be engaged fully?
- 13:00 LUNCH
- 14:00 WORKSHOP CONTINUES...
- 16:00 WRAP UP AND GPPC BUSINESS MEETING
- 17:00 CONFERENCE CLOSE

ANNEX 2: RESULTS OF A SURVEY CONDUCTED IN PREPARATION FOR THE CONFERENCE OF THE GLOBAL PARTNERSHIP FOR PLANT CONSERVATION 2018 AND ASSOCIATED LIAISON GROUP MEETING.

Note: Where scores were used, respondents rated their level of agreement with the respective statements/questions using a 1 to 5 scale where, 1 was the lowest and 5 was the highest.

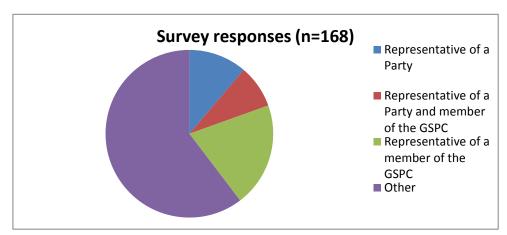
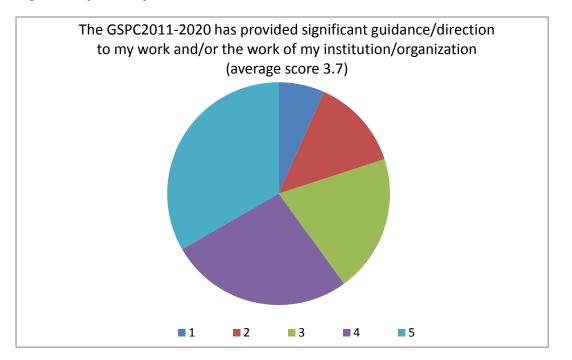


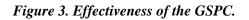
Figure 1. Affiliation of respondents.

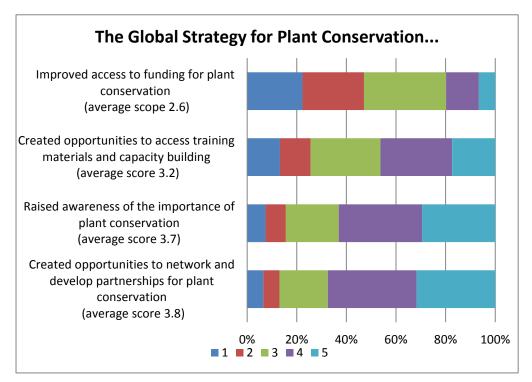
The majority of respondents who selected "Other" were experts based in botanical institutions that are not members of the GPPC.

Figure 2. Influence of the GSPC.



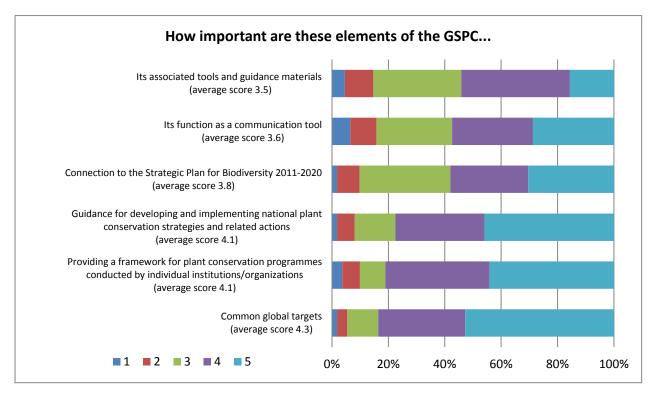
Two-thirds of respondents agreed or strongly agreed that the GSPC had provided significant guidance or direction to their work.



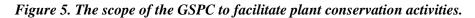


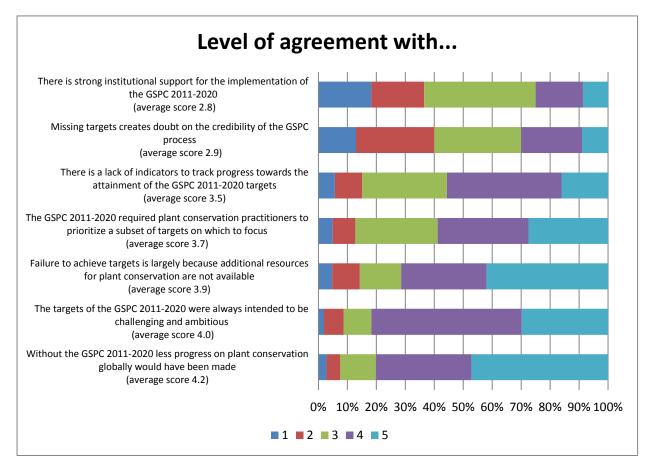
The GSPC was considered particularly effective in raising awareness and strengthening networks, while it was less effective in facilitating access to resources.

Figure 4. Importance of GSPC elements.



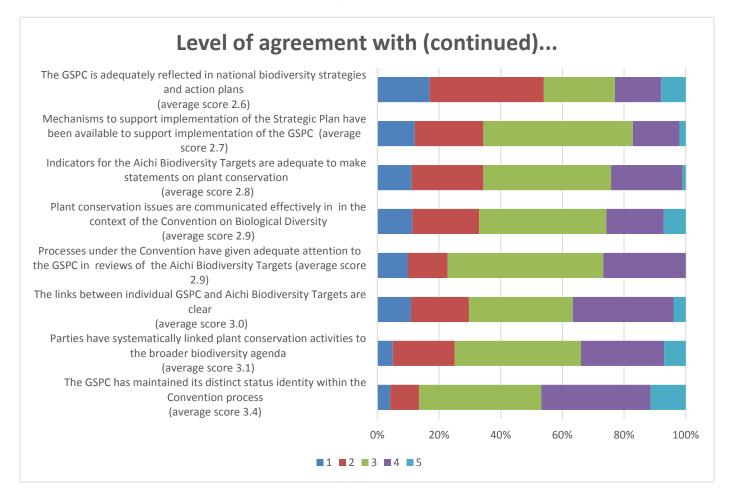
Respondents highlighted the importance of the GSPC in providing guidance for national implementation and as a framework with common targets.





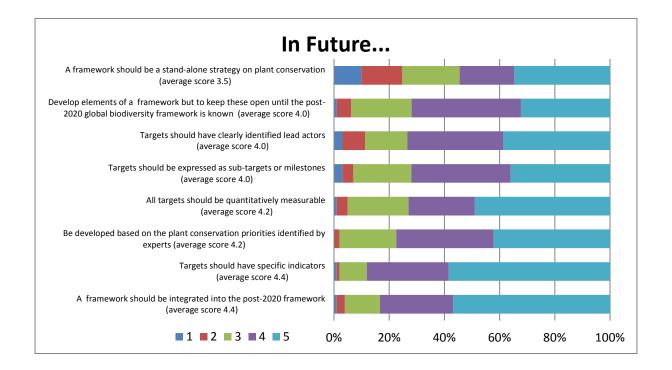
There was strong agreement that the GSPC has enabled advancing plant conservation and less would have been achieved without it.

Figure 6. The GSPC in the context of CBD implementation.



The responses suggest that the GSPC is not well integrated into the work under the Convention and the Strategic Plan for Biodiversity 2011-2020.

Figure 7. The future arrangement of the GSPC in relation to the post-2020 global biodiversity framework.



Respondents considered it particular important that plant conservation targets should have specific indicators and that they become an integral part of the post-2020 global biodiversity framework.

Annex 3

Statement by the International Advisory Council of Botanic Gardens Conservation International on the Global Strategy for Plant Conservation, post-2020 considerations, on the occasion of the Conference of the Global Partnership for Plant Conservation, Cape Town, South Africa, August, 2018.

Preamble:

The botanic garden community worldwide includes more than 2,500 institutions undertaking actions in conservation, horticulture, scientific research, promoting sustainability and environmental education that is of inestimable value to humanity, and reaches an audience of more than half billion people worldwide each year. The botanic garden community has been a keen and determined supporter and participant in the Global Partnership for Plant Conservation (GPPC) since its establishment in 2004. The GPPC conference brought together a wide range of plant conservation scientists, policy makers and practitioners from across the world to consider the future of plant conservation, and in particular to develop ideas for a global plant conservation strategy for the post-2020 period. The conference attracted a wide range of participants to share their experiences and further the development of plant conservation policy, practice and actions during and beyond this, the U.N. Decade of Biological Diversity. Many participants representing botanic gardens worldwide attended the conference, including many of the world's most biodiversity rich countries.

The results of the conference will be provided to the Convention on Biological Diversity (CBD) as a contribution from the GPPC and the plant conservation community in general towards future plans for the CBD in the achievement of the 2050 Vision for Biodiversity and the 2030 Agenda on Sustainable Development. The importance of plants and their conservation is clear in helping to address many of the global challenges identified by the SDGs. On the occasion of this conference, the International Advisory Council of BGCI provided the following statement of support for the conference and its deliberations and for the objective of achieving an effective global framework to guide plant conservation in the years following 2020.

Statement:

The International Advisory Council of Botanic Gardens Conservation International represents thirty or more leaders of some of the world's top botanic gardens and institutions, from 6 continents. At its meeting held on Monday 27th August, 2018 in Cape Town, South Africa, these leaders pledged their support for the development of a renewed global plant conservation strategy for the period post-2020.

Furthermore they reiterated their strong support for and commitment to the achievement of the Global Strategy for Plant Conservation (GSPC) under the Convention on Biological Diversity (CBD) and recognized that the continuation of the GSPC, within the context of the CBD, is essential for continued success in plant conservation at all levels. They highlighted the particular and unique roles of botanic gardens in conservation and the remarkable progress achieved by them since 2002, supported through the guidance and framework provided by the GSPC adopted in that year.

They noted that the CBD had recognized the special importance of plants for sustaining life on earth, as the basis of most terrestrial ecosystems and their importance for ecosystem services, food security and for the provision of many other resources for humanity. Therefore, there is a continuing need to have specific measures adopted to

safeguard the tens of thousands of plant species worldwide that are threatened and to ensure that these plants remain available to support future generations.

They also noted their continued support for the CBD and its objectives and pointed out that the GSPC has played an important role in ensuring that the botanic garden community is closely aligned with the CBD, which the renewal of a GSPC framework in the post-2020 period will continue to sustain and further develop.

They expressed the hope that the GSPC could be increasingly mainstreamed into national biodiversity frameworks so that it becomes effectively nested into a post-2020 global biodiversity framework which will be adopted by the world community. In this regard, they suggested that links between a post-2020 GSPC and the Sustainable Development Goals be explored so that objectives and actions can be harmonized with the Sustainable Development Agenda, while at the same time ensuring that effective species conservation measures continue. Similarly, synergies should be explored with complementary Conventions such as the climate change convention and the convention to combat desertification. However, care should be taken not to dilute or lose the species conservation focus of targets 7 and 8 of the GSPC, particularly where species have no immediately demonstrable use to humans.

They pointed out the need for the CBD and its Nagoya Protocol to address the current challenges and constraints on achieving access to plants to support urgent conservation, sustainable use and research needs worldwide.

These botanical leaders also supported the IUCN Species Survival Commission in calling for more emphasis on, and resources to support, species conservation, including the need for species conservation action plans, the establishment and effective management of protected areas, greater accountability and enforcement by Governments and sufficient funding and political support for species conservation.

They pointed out that botanic garden collections contain millions of accessions (of living plants, herbarium specimens and other biological material) of immense value to support conservation and ecological restoration. Furthermore, their scientific and horticultural expertise, experience and networks in all regions are a remarkable global resource available to undertake and support plant conservation and restoration actions throughout the world.

The Council noted the importance of Parties to the CBD incorporating more of the non-governmental sector's responses to the GSPC into national CBD reporting and monitoring and urged Parties to the Convention to include national responses to the GSPC in their National Reports to the CBD.

They reiterated the importance of renewed efforts in capacity building and resource mobilization.

They pledged to focus on developing renewed efforts for botanic gardens to develop new coordination and joint efforts between them and with non-garden sectors in achieving the objectives and targets of the Global Strategy for Plant Conservation.

The International Advisory Council of Botanic Gardens Conservation International committed to work with Parties to the Convention on Biological Diversity and the CBD Secretariat in the development of the post-2020 global biodiversity framework and ensuring a clear role for plant conservation within this framework.

	-			
	•		ERSHIP FOR P	LANT CONSERVATION CONFERENCE
No	KIRSTENBOSCH - 2 Surname		Title	Organisation
NO	Surname	Name	Title	
1	Abdul Karim	Nura	Dr	I Singapore Botanic Gardens, National Parks Board
-	Abu Taleb	Tariq	Mr	Royal Botanic Gardens, Jordan
	Arango Uribe	Diana Milena	Mrs	Fundación Jardín Botánico "Joaquín Antonio Uribe"
	Bachman	Steven	Mr	Royal Botanic Gardens, Kew
5	Barreiro	Graciela	Mrs	Jardín Botánico de Buenos Aires
6	Benitez	Hesiquio	Mr	Conabio - Mexico
7	Bint Ali	Basma	HRH Princess	Royal Botanic Gardens, Jordan
	Blackmore	Stephen	Prof	Botanic Gardens Conservation International
	Chen	Jin	Dr	Xishuangbanna Tropical Botanical Garden
	Chua	Lillian Swee-Lian	Dr	Forest Research Institute Malaysia
	Cindi	Mncedisi	Mr	Department of Environmental Affairs
12	Clark	John	Dr	Centre for Plant Conservation
	Clubbe	Colin	Dr	Royal Botanic Gardens, Kew National Botanical Garden of Georgia
	Darchidze Davies	Tamaz Jonathan	Mr Dr	ACDB - University of British Columbia
	Davies De Sousa	Camila	Ms	
	Delmas	Maité	Mrs	Muséum National d'Histoire Naturelle
	Demissew	Sebsebe	Prof	Gullele Botanic Garden, Ethiopia
	Donaldson	John	Prof	SANBI - CT
	Donnelly	Gerard	Dr	The Morton Arboretum
	Dulloo	M. Ehsan	Dr	Bioversity International
22	Dunn	Christopher	Dr	Cornell Botanic Gardens
23	Ebrahim	Ismail	Mr	SANBI - CT
	Entwisle	Timothy John	Prof	Royal Botanic Gardens Victoria
	Featherstone	Lance	Mr	BBC - Natural History Unit
	Fischer	Gunther	Dr	Kadoorie Farm & Botanic Garden
	Fischer-Stolle	Petra	Mrs	Kadoorie Farm & Botanic Garden
28	Franczyk	Jean	Ms	Chicago Botanic Garden
20	Freid	Ethan	Dr	Leon Levy Native Plant Preserve/Bahamas National Trust
	Gabayi	Mpendulo	Mr	SANBI CT
	Galbraith	David	Dr	Royal Botanic Garden Canada
•.	Gaibraian			Research Inst of Biological Resources Alexander von
32	Garcia	Hernando	Dr	Humboldt
33	Guarino	Luigi	Mr	Global Crop Diversity Trust
34	Hall	Alexander Stuart	Dr	Stellenbosch University Botanical Garden
35	Handley	Vanessa	Dr	University of California Botanical Garden
36	Hardy	Peta	Mrs	Sappi Forests
				Ministry of Agriculture, Nature & Food Quality -
-		Robertus J.J	Dr	Netherlands
	Hernandez Martinez		Mrs	Cadereyta Regional Botanical Garden CBD Secretariat
	Höft Hollingsworth	Robert Pete	Dr Prof	Royal Botanic Garden Edinburgh
40 41	Hollingsworth Hoveka	Lerato	Miss	ACDB - University of Johannesburg
42	Jackson	Joni	Ms	Ministry of Economic Growth and Job Creation
	Kgope	Barney	Ms	Department of Environmental Affairs
	Kikodze	David	Mr	Institute of Botany, Ilia State Univ, Tbilisi, Georgia
	Kim	Dong-Kap	Dr	Korea National Arboretum
46	Kim	Joon Soon	Dr	Kangwon National University
	Koopman	Rupert	Mr	Cape Nature
48	Le Roux	Elton	Mr	SANBI - CT
49	Le Roux	Marianne	Dr	SANBI - PTA
50	Lee	Cheul Ho	Dr	Korea National Arboretum
E4		Diarra André		Conservatoire et lardin beteniques de la Ville de Castri
	Loizeau	Pierre-André Cristina	Dr	Conservatoire et Jardin botaniques de la Ville de Genève Colombian Plant Specialist Group
	Lopez-Gallego Lowry II	Cristina Porter	Prof Mr	Missouri Botanical Garden
55		Asanda	Ms	WWF-SA
54	Mafila	Asanna	IVIS	

No	Surname	Name	Title	Organisation
H				Brazilian National Centre for Flora Conservation -
56	Martinelli	Gustavo	Dr	CNCFlora
	Mashua	Tebogo	Miss	Department of Environmental Affairs
	Matheson	Mary Pat	Mrs	Atlanta Botanical Garden
	Maxted	Nigel	Dr	School of Biosciences, University of Birmingham
	McCue	Kimberlie	Dr	Desert Botanical Garden
	Mei	Nomama	Ms	SANBI - CT
	Milne	Simon	Mr	Royal Botanic Garden Edinburgh
	Mokoena	Mpolokeng	Ms	Dept of Agriculture, Forestry & Fisheries
	Mougal	James Marc	Mr	Seychelles National Parks Authority
	Mtshali	Hlengiwe	Ms	SANBI - DBN
	Mudau	Azwinndini	Ms	SANBI - BLM
	Mueller	Gregory	Dr	Chicago Botanic Garden
	Muingi	Azwinaki	Mr	Department of Environmental Affairs
	wang			Limpopo Dept of Economic Development, Environment &
69	Musetsho	Nkhanedzeni	Mr	Tourism
70	Naumtsev	Yuri	Dr	Botanical Garden of Tver State University
	Nenungwi	Lufuno	Mr	SANBI - BLM
72	Netnou-Nkoana	Noluthando	Dr	Department of Agriculture, Forestry & Fisheries
73	Netshithothole	Edward	Mr	Department of Environmental Affairs
	Newton	David	Mr	TRAFFIC
	Nghidinwa	Kirsti	Ms	Ministry of Environment & Tourism Namibia
	Nndanduleni	Mashudu	Mr	SANBI - CT
70	Offord	Catherine	Dr	Botanic Gardens & Centennial Parklands
78	Oliver		Mr	SANBI - CT
_		Roger John. C	Prof	University Botanic Garden, Maseno Kenya
79	Onyango	John. C	PIOI	
00	Daniković	Diliono		Institute for Nature Conservation of Vojvodina Province
	Panjković Parbhoo-Mohan	Biljana Suvarna	Dr Ms	SANBI - DBN
01	Faiblioo-wonan	Suvaina	IVIS	Centre for Plant Conservation, University of Karachi,
82	Perveen	Anjum	Prof	Pakistan
83	Pes	Tomas	Mr	Zoological & Botanical Garden Plzen Czech Republic
05	F C 3	1011185		Institute of Botany, Chinese Academy of Sciences,
84	Qin	Haining	Dr	Beijing, China
-	Qwathekana	Malta	Ms	Department of Environmental Affairs
	Rabaney	Zaitoon	Ms	Botanical Society
87	Raimondo	Domitilla	Ms	SANBI - PTA
88	Ren	Hai	Prof	South China Botanical Garden
	Rivers	Malin	Dr	Botanic Gardens Conservation International
90	Sahoby Ivy	Randriamahaleo	Mr	Ministry of Environment, Ecology & Forest Madagascar
	Sanchez Martinez	Emiliano	Eng	Cadereyta Regional Botanical Garden
92	Schatz	George	Dr	Missouri Botanical Garden
93	Schneider	Edward	Dr	Botanical Research Institute of Texas
94	Schneider	Sandy	Mrs	Botanical Research Institute of Texas
				Limpopo Dept of Economic Development, Environment &
95	Seani	Lusani	Mr	Tourism
96	Sharrock	Suzanne	Ms	Botanic Gardens Conservation International
	Shaw	Kirsty	Ms	Botanic Gardens Conservation International
98	Smith	Paul	Dr	Botanic Gardens Conservation International
99	Spirina	Ulyana	Dr	Botanical Garden of Tver State University
100	Tan	Yi-Fan	Dr	Fairy Lake Botanical Garden, Shenzhen & CAS
101	Tarquini	Flavio	Dr	Museo Orto Botanico Sapienza, University of Rome
	Taylor	Kimberly	Mrs	Botanical Research Institute of Texas
	Thomas	Rosie	Ms	BBC - Natural History Unit
104	Tshidada	Ntakadzeni	Ms	Department of Environmental Affairs
	Tung	Gene-Sheng	Dr	Taiwan Forestry Research Institute
	Ulrych	Libor	Mr	State Nature Conservancy of Slovak Republic
	Upson	Tim	Dr	Royal Horticultural Society
	van der Bank	Michelle	Prof	ACDB - University of Johannesburg
	Velembo	Sisanda	Miss	SANBI - CT
	von Staden	Lize	Ms	SANBI - PTA
	Wan	Тао	Dr	Fairy Lake Botanical Garden, Shenzhen & CAS

No	Surname	Name	Title	Organisation
112	Wichman	Chipper	Mr	National Tropical Botanical Garden, USA
113	Wichman	Hau'oli	Mrs	National Tropical Botanical Garden, USA
114	Widyatmoko	Didik	Dr	Center for Plant Conservation Botanic Gardens – LIPI
115	Willis	Christopher	Mr	SANBI - PTA
116	Wilman	Victoria	Ms	SANBI - CT
117	Wrigley	Damian	Mr	Australian Seed Bank Partnership
118	Wyse Jackson	Peter	Dr	Missouri Botanical Garden
119	Wyse Jackson	Diane	Mrs	Missouri Botanical Garden
120	Xaba	Phakamani	Mr	SANBI - CT