



Botanic Gardens Conservation International - Plants for the Planet

Five Year Plan 2013-2018

Overview

Botanic Gardens Conservation International (BGCI) is a world leader in conserving the diversity of wild plants. Plant communities underpin the web of life and the ecosystem services which are critical for human welfare and livelihoods. Plants supply our food, medicines, raw materials, the oxygen we breathe and maintain the quality and quantity of our water supplies. Yet, plant diversity is being lost on a global scale with wild places shrinking and plant species facing extinction at an ever-increasing rate. This has an impact on the global economy and the livelihoods of people worldwide.

“Deforestation and forest degradation alone will likely cost the global economy more than losses in the 2008 financial crisis” (UNEP 2012)

BGCI is a membership organization, guiding and supporting botanic gardens in more than 100 countries in the world’s largest plant conservation network. Botanic gardens undertake vital research; conserve plants in their living collections, gene banks and in the wild; and engage, inform and educate wide audiences. BGCI celebrates, champions and provides a global voice for all botanic gardens.

“Our greatest strength lies in our world-wide network of botanic gardens – the true ‘champions’ of plant diversity” (Sara Oldfield, BGCI Secretary General, 2013)

Since its establishment in 1987, BGCI has set the agenda for plant conservation and environmental education and has played a lead role in the Global Strategy for Plant Conservation (GSPC) of the Convention on Biological Diversity (CBD). The CBD is the international community’s key instrument for the conservation and sustainable use of biodiversity. In 2010, the GSPC was updated to align with the CBD’s Strategic Plan for Biodiversity 2011-2020 and the achievement of its 2020 Aichi targets. Biodiversity is a basic requirement for human health and sustainable livelihoods and thus the CBD has a clear role in helping to achieve global sustainable development goals.

BGCI’s Vision: A world in which plant diversity is valued by all, is secure and continues to support all life.

BGCI’s Mission: To mobilize botanic gardens and engage partners in securing plant diversity for the well-being of people and the planet.

BGCI achieves global impact and implements ambitious programmes by leveraging its network of botanic gardens and partners. We operate in a catalytic and cost-effective way with a small core team of dedicated staff. BGCI leads the efforts of the international community of botanic gardens through developing and providing guidance on best conservation practice, relevant policy frameworks and international strategies. In addition, we undertake specific projects in partnership with botanic gardens and other agencies including governments, NGOs and the private sector.



Despite the numerous policies and measures to address biodiversity loss that have been developed over the past 25 years, efforts to ensure that the vital ecosystem services provided by plants are protected and enhanced still need to be strengthened. Over the next five years, BGCI will therefore give greater emphasis to demonstrating the connections between plants and human welfare and on restoring damaged ecosystems, while at the same time continuing our focus on ensuring that threatened plant species worldwide are effectively conserved.

BGCI's ambitious plan for the next five years supports global biodiversity and sustainable development action through three technical programmes:

- Sustaining wild places and plants
- Connecting people with nature
- Finding natural solutions for sustainable livelihoods and well-being

We will work to sustain these programmes through communicating our work more effectively to a wider audience and growing the organisation's support base.

1. Sustaining wild places and plants

At least 25% of the world's plant species are presently threatened with extinction and studies indicate that, with climate change, this figure is likely to grow considerably. Significant loss of plant diversity will have catastrophic impacts on human livelihoods. Botanic gardens already cultivate around one third of the world's known plant species and are therefore ideally placed to lead plant conservation efforts. Over the next five years, working in the framework of relevant biodiversity policy, we will continue to focus on securing a future for threatened plant species and their habitats and will strengthen the coordinated role of botanic gardens in species recovery and ecological restoration.

1.1.Objective: Botanic gardens and the wider conservation community are able to effectively implement plant conservation policy and strategies, especially the GSPC, linking this to the Aichi Targets and sustainable development policy.

Actions:

- Work in partnership with the CBD Secretariat and the Global Partnership for Plant Conservation (GPPC) to further raise awareness of the GSPC and promote mainstreaming of the strategy in National Biodiversity Strategies and Action Plans.
- Review progress in meeting the GSPC targets in 2015 (mid-term review), ensuring that the role of botanic gardens is fully acknowledged.
- Support the development of national responses to the GSPC and monitor and assist the implementation of existing country strategies globally, providing and sharing resources through an enhanced GSPC toolkit.

1.2. Objective: Comprehensive information on plant species, their status in the wild and in botanic garden collections, is assembled and disseminated in support of plant conservation and restoration actions.

Actions:

- Further develop BGCI's global inventory on botanic gardens and their plant collections (GardenSearch and PlantSearch databases) leveraging their value as an *ex situ* conservation and restoration planning tool by increasing the quality and quantity of data and increasing the use of this data.
- Assess the *in situ* and *ex situ* conservation status of priority plant groups including trees (the structural framework of forest ecosystems) and medicinal plants (an over-exploited natural resource) to inform prioritised conservation efforts.
- Gather and share information on the impacts of climate change on plant diversity, including monitoring and assessing the impacts and spread of harmful invasive plants, pests and diseases.

1.3. Objective: Conservation efforts for wild plants and their habitats by botanic gardens and partner organisations are scaled-up and the work of the global Ecological Restoration Alliance (ERA) in replicating best practice worldwide is widely acknowledged.

Actions:

- Undertake ecological restoration at priority sites in different ecosystems around the world, demonstrating best practice, with community participation and livelihood issues addressed at each site as appropriate to local conditions.
- Develop tools to enhance the global outreach of the ERA to communicate best practice and demonstrate successful outcomes, drawing on the active participation of botanic gardens in each continent.
- Strengthen the Global Trees Campaign to support integrated conservation of highly threatened tree species. Ensure that *ex situ* collections are developed to make available indigenous and endangered trees for tree planting schemes and forest restoration with a strong initial focus in Africa.

1.4. Objective: The skills and expertise of botanic garden staff in horticulture, collection management, and plant conservation techniques are increased through training, staff exchanges, provision of relevant information, and networking.

Actions:

- Continue to develop BGCI's range of printed and on-line publications as authoritative resources on all aspects of plant conservation.
- Implement and build on the *International Agenda for Botanic Gardens in Conservation* including the development of a series of tools and training resources for botanic gardens with a focus on botanic garden development and management; establishing effective plant conservation collections; and management of harmful invasive plants, pests and diseases.

- Organise staff exchanges and in-service training for young botanic garden scientists especially those in developing countries.
- Facilitate regional network meetings and organise two Global Botanic Garden Congresses to inform the work of botanic gardens globally and enhance the sharing of ideas, technical resources and good practices.

2. Connecting people with nature

More than half the world's population live in urban areas and this is leading to a growing disconnection with nature. Botanic gardens offer excellent opportunities for people to experience nature first hand. Collectively botanic gardens engage with more than 250 million visitors annually and have the potential to reach larger numbers and more diverse audiences. Science is at the heart of modern botanic gardens and botanic gardens can play a key role in developing a scientifically literate society where people are motivated to play their part in resolving environmental issues. Over the next five years we will continue to build the capacity of gardens to connect with growing numbers of people, helping them to reach new audiences, developing scientific literacy and promoting this work widely.

2.1. Objective: All botanic gardens have the capacity to deliver effective environmental education and outreach programmes.

Actions:

- Publish best practice guidance and promote lively communications among botanic garden staff concerned with communication, education and public awareness, sharing information through the global network of botanic garden educators and creating a unique global database of educational resources available within the botanic garden community.
- Organise two international education congresses that bring together experts to share skills and build capacity.
- Train botanic garden educators to the standard of the International Diploma in Botanic Garden Education in collaboration with Royal Botanic Gardens, Kew.
- Support and promote University-level international on-line courses in education for sustainability aimed at building the capacity of site-based educators.
- Enable botanic gardens to develop teacher training courses that incorporate inquiry-based science education and evaluation as a means to increase scientific literacy among school students, building on the results of the European INQUIRE project.

2.2 Objective: Botanic gardens understand their social and environmental roles and are increasingly relevant to the communities within which they are located.

Actions:

- Share best practice and ideas on social inclusion through regular reports, meetings and on-line communication including an interactive map on BGCI's website to showcase projects run by individual gardens.

- Assist botanic gardens to set up community engagement projects thereby helping to diversify their audiences and increase the numbers of people visiting them.
- Encourage the adoption of healthy life-styles by children through an international school gardening network which promotes food species of local value and fosters awareness of plant diversity, climate change and sustainable use of resources among young people.
- Work with botanic gardens to share experience and promote best practice on sustainable garden practices, including marketing sustainably-produced plant-based products in their retail outlets.

2.3. Objective: Plants are valued by society and the role of botanic gardens in their study and conservation is widely understood.

Actions:

- Develop powerful messages and communication materials based on research and literature review to explain the connection between plant diversity and critical issues such as food security, nutrition, water and energy security and climate change, linking this to the work of botanic gardens and BGCI.
- Run global campaigns through botanic gardens on this range of plant-related environmental issues. Produce publicity and educational materials and take forward any policy-relevant petitions or outcomes.
- Continue to raise awareness among school children about the importance of plants, for example through the international global competition organised in collaboration with the Fairchild Tropical Botanic Garden, USA.
- Work with botanic gardens to interpret their living collections in a way that explains to the general public the science, conservation status and significance of species in a compelling way.

3. Finding natural solutions for sustainable livelihoods and human well-being

Wild plants offer a wealth of services and goods of essential livelihood value. Worldwide, over half a billion people who live in poverty depend on the availability of wild plant resources to sustain their daily subsistence needs. However, with the general global loss of biodiversity caused by habitat loss, the spread of invasive species and global climate change, the availability of the range and abundance of plant resources of livelihood value is under threat. Botanic gardens are centres of excellence for research, conservation and cultivation of economically important plants. In support of this, BGCI will publish reviews of work on important resource species, share best practices, support projects to conserve and sustainably use plants valued by local communities and help to conserve the essential knowledge about such plants typically held by local communities.

3.1. Objective: The role of wild plants in supporting livelihoods and providing ecosystem services is widely understood.

Actions:

- Carry out research on the economic and subsistence value and conservation status of wild plants for provision of timber, medicines, food, spices and flavourings, cosmetics, and other raw materials. Publish the results as a key contribution to the mid-term review of the GSPC.
- Raise awareness of issues related to access to wild plant resources and the sharing of benefits from their use. Develop training resources in collaboration with botanic gardens pertaining to the implementation of related international provisions, in particular the Nagoya Protocol of the Convention on Biological Diversity (CBD).
- Promote the contribution of botanic gardens to research, technology and sustainable and fair commercialisation of plant-based products at relevant international fora, including the CBD, the Intergovernmental Platform on Biodiversity & Ecosystem Services (IPBES) and The Economics of Ecosystems and Biodiversity (TEEB).

3.2. Objective: Human wellbeing and livelihood requirements, as well as conservation needs are being addressed through more sustainable use of the world's most socio-economically important wild plants.

Actions:

- Identify wild plant species that have critical livelihood importance and, drawing on the skills of botanic gardens, work with partners including the private sector to enhance sustainable supply chains for these species.
- Develop an on-line resource that documents successful models of botanic gardens working with local people to improve their livelihoods through plant resource-based value chains and promote this information widely.

Sustaining and growing our programmes

BGCI is at an exciting stage. We aspire to scale up our efforts and broaden our scope in response to the important challenges posed by the increasing and continuing loss of plant diversity vital for the future of humanity, as identified by the CBD, global development policy and associated international initiatives. BGCI has a strong track record and a depth of experience in plant conservation and environmental education on which to build. BGCI's approach is one of working in partnerships. BGCI's greatest strength is its global network of botanic gardens, and we will use this to maximise our outreach potential, building visibility and influencing change.

Identifying new sources of funding will be critical to ensure that we can deliver the ambitious programme set out in our 5-year plan. Specific actions towards securing the necessary funding base will include:

- Promoting our work through a powerful communications strategy
- Working with governments and other stakeholders to take forward the implementation of the GSPC in the framework of the CBD's Strategic Plan for Biodiversity



- Engaging the private sector – with a particular focus on supporting restoration of native habitats through the Ecological Restoration Alliance of botanic gardens
- Forming additional alliances with key botanic gardens to advance particular objectives
- Growing the Sylvia Scholarship Fund to support training for botanic garden staff in developing countries
- Growing our membership base with a focus on key geographic areas where present membership is weak.

What will success look like?

BGCI will have successfully accomplished its five year plan by demonstrable recognition of the vital role of botanic gardens around the world in the conservation, restoration and sustainable use of plant diversity. The commitment of its members to delivery of the GSPC will ensure that excellent progress towards GSPC targets is maintained and acknowledged. Measurable targets were agreed for the Ecological Restoration Alliance of botanic gardens in the initial stages of its development. Over the next five years at least 25 degraded sites will be restored by the Alliance as demonstration sites for the overall goal of 100 restored ecosystems over 20 years. This will provide an important mechanism for delivery of Aichi targets of the CBD's Strategic Plan for Biodiversity relating both to ecological restoration and provision of livelihoods. If we are successful in delivering our five year plan we will have engaged new partners and taken action to ensure that all sectors of society will have a greater understanding of the importance of plant diversity and the opportunity to be involved in finding natural solutions for plants and the planet!