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Meeting Needs

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

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Target 15: The number of trained people working with appropriate facilities sufficient according to national needs, to achieve the targets of this Strategy

Botanical capacity is necessary not only to achieve the targets of the GSPC, but is also essential for managing many of the major issues facing society today. Such grand challenges include climate change mitigation, land management and wildlife habitat restoration, understanding the provision of ecosystem services, management and control of invasive species, and the conservation and recovery of rare species.

Given the importance of plant science, the decline in the teaching of botany and plant sciences in schools and universities around the world is of particular concern. The fact that the plant sciences are often taught less in schools than other sciences contributes to a chain of events involving reduced research, reduced funding, fewer students studying botany at a higher level, and fewer universities offering courses in plant science.

Regional capacity building

Since 1988, the Red Latinoamericana de Botánica (RLB – Latin American Plant Sciences Network), has been engaged in capacity building, fostering the number of qualified Latin American botanists in order to adequately assess the regional vegetation, to understand ecosystem functioning and to provide the basis for the conservation and management of the important natural resources offered by the Latin American flora.

To achieve this goal young botanists from Latin American countries are being trained through the expertise and infrastructure available in qualified scientific institutions across the region. Over the past 20 years, RLB has trained over 200 graduate-level researchers from 18 Latin American countries, as well as offering many short-term specialized graduate courses, benefiting over 1,000 students. It also organizes and funds scientific events and provides small grants for botanical research.

In 2010, BGCI (US) and partners carried out a survey to assess the status of the capacity available in the US to conserve and manage native plant species and habitat. In 1988, 72 per cent of the nation's top 50 most


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funded universities offered advanced degree programmes in botany. Today, more than half these institutions have eliminated their botany programmes together with many, if not all, related courses. Similarly, the number of universities offering botany degrees in the UK decreased steadily over recent years until by 2011 botany degree programmes had been completely phased out.

However, despite the decline in university-level courses in botany and plant sciences, a number of national and international organizations do offer training or provide resources to support capacity building in plant conservation.

The taxonomic impediment

One particular area of concern is that of taxonomic capacity. There is a worldwide shortage of taxonomists who can be called upon to identify species, describe species that are new to science, determine their taxonomic relationships, and make predictions about their properties. The shortage is expected to worsen, because the expert workforce is ageing while the number of students being trained in taxonomy shrinks. Governments, through the Convention on Biological Diversity, have acknowledged the existence of a 'taxonomic impediment' to the sound management of biodiversity, and have developed the Global Taxonomy Initiative to try to alleviate the situation.


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Find out more:

www.plants2020.net

"While education broadens the mind, training focuses the mind."

South African response to the GSPC


Chicago Botanic Garden

Where are we now?

While there is no global baseline from which progress can be measured, and despite relatively few countries having conducted needs assessments, several global and regional programmes have made progress in increasing the number of trained people in plant conservation. However, given the importance of plant science, the decline in the teaching of botany and plant sciences in schools and universities around the world remains a worrying issue.


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