



University of Peshawar Initiatives for *ex situ* Conservation



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Abstract

Pakistan has a land area of 796 million km² that ranges from sea level to 8,611 m. Five phytogeographic regions are located within country, but the plant biodiversity within them is threatened by deforestation, overgrazing, habitat loss, pollution, and invasive species.

Pakistan's recognition of the importance of conserving plant diversity is evident in several new strategies, its commitment to capacity building in plant diversity and conservation, and the establishment of botanical gardens. The University of Peshawar Botanical Garden reflects Pakistan's commitment to the Convention of Biological Diversity.



Introduction

Pakistan lies between 23°- 37°N and 61°- 76°E and has a land area of 796 million km². In elevation, it ranges from sea level to 8,611 m at K2. High mountain ranges and valleys characterize the north and west, plains of the Indus River and its tributaries the south and east. Five phytogeographic regions are present within this area. Their plant diversity is threatened by deforestation, overgrazing, habitat loss, pollution, and invasive species.

Pakistan's recognition of the importance of conserving plant diversity, as called for by the Convention on Biological Biodiversity, and the Global Strategy for Plant Conservation, is reflected in its National Conservation Strategy, National Biodiversity Action Plan, and Provincial Conservation Strategies its development of graduate programs in plant systematics and conservation, and its establishment of four botanic gardens. This poster reports on the University of Peshawar Botanical Garden.



MASTER PLAN OF UPBG AZA KHEL

University of Peshawar Botanical Garden (UPBG)

The University of Peshawar Botanical Garden has three intertwined objectives:

- Promoting conservation of Pakistan's plant biodiversity;
- Encouraging education in plant biodiversity and conservation at all education levels and for the public;
- Creating recreational areas and activities that will promote public awareness of the importance of plant diversity and conservation.

The UPBG staff are responsible for development and maintenance of two areas, the main garden at Azakhel and the university's arboretum. Each of these areas contributes to attainment of the garden's objectives, but with differing emphases.

UPBG Azakhel

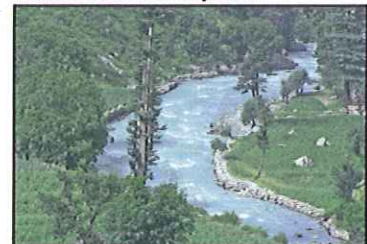
This is UPBG's primary garden. It occupies 40.5 hectares provided by the Northwest Frontier Province. Pakistan's Higher Education Commission has provided Rs. 37,861,000 (\$US 624,150) for establishment of a graduate program in plant biodiversity and conservation, including laboratories, greenhouses, herbarium, library, and test plots. The test plots and greenhouses will be used for *ex situ* conservation of Pakistan's endangered plant species.

An overall plan for the garden has been developed and construction work begun. The graduate program is being developed in collaboration with Utah State University (USU).



UPBG Arboretum

The 425 hectares occupied by the University of Peshawar have been designated an arboretum. The arboretum already has over 2,000 species, including an 80 yr old specimen of *Cycas revoluta* and a specimen of *Magnolia grandiflora* that is more than 50 yr old.



Acknowledgments

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