First plant conservation translocation in Armenia: restoring globally threatened wild pear populations

Armenia lies in one of the centres of wild pear diversity and domestication. The diversity within *Pyrus* L. in the country is remarkable: 12 of the 32 pear species occurring in Armenia are country endemics. They never form groves, but occur as single trees and in small groups at 1,000–2,200 m altitude, mainly in arid open woodlands, on roadsides and in oak forests. Small test groups of saplings of three threatened pear species were planted in 2022 within their natural range near the villages of Artavan and Vardahovit in Vayots Dzor province and Lanjar in Ararat province. The species are all categorized as threatened on the IUCN Red List and all are endemic to Armenia: the Critically Endangered *P. gergerana* Gladkova and Endangered *P. hajastana* Mulk. and *P. sosnovskyi* Fed. The results of this preliminary experiment were used in planning a larger plantation.

In November–December 2023, 360 saplings of *P. gergerana*, *P. hajastana* and the endemic and Endangered *P. daralagezi* Mulk. were planted in the wild near Arates, Vardahovit and Herher villages. The saplings were raised from seed in Artavan Conservation Nursery and Yerevan Botanical Garden. This population restoration was implemented by the Armenian Society of Biologists, an NGO, in collaboration with the Institute of Botany after A. Takhtajyan of the National Academy of Sciences of the Republic of Armenia, in a project supported by Fondation Franklinia in 2020–2023 (project number 2020–16). It followed the first in situ study of the threatened endemic pears of Armenia carried out in 2016–2018 with funding from Fauna & Flora and The Global Trees Campaign.

This is the first plant conservation translocation in Armenia. The project contributed to both in situ and ex situ conservation of these threatened pear species. Some of the collected seeds were stored in the seed bank of the Department of Conservation of Genetic Resources of Armenian Flora of the Institute of Botany, and 50 saplings of the threatened pear species were added to the living plant collection of the Yerevan Botanical Garden.

Wild pear habitat near the village of Artavan, Armenia. Photo: Anna Asatryan.

Anna Asatryan (*crocus@post.com*)
Institute of Botany after A.Takhtajyan of the National Academy of Sciences of the Republic of Armenia, Yerevan, Armenia

Seeds of collaboration for the Indian Botanical Gardens Network

Research on India's wealth of plant diversity has a long tradition, dating from the late 18th century when the Botanical Survey of India was founded. However, the creation of a national botanical gardens network as a country-wide mechanism to share expertise and coordinate action has been faltering, in part because of limited human and financial resources. Botanic Gardens Conservation International (BGCI) has been supporting plant conservation and botanical gardens in India since its establishment in 1987. Of 119 Indian botanical gardens listed in BGCI's GardenSearch database, 20 are active members of BGCI and five are engaged in practical conservation projects supported by BGCI. Acknowledging the need to conserve threatened plants, BGCI members in India convened at Auroville Botanical Gardens on 10–12 October 2023 to revitalize a national botanical gardens network.

The meeting, attended by representatives from all BGCI member institutions in India and other invited organizations, involved 35 attendees from 19 organizations. Notable participating organizations included Mahatma Gandhi Botanical Garden GKVK, Lalbagh Botanical Gardens, Jawaharlal Nehru Tropical Botanic Garden and Research Institute, MS Swaminathan Research Foundation, Naroji Godrej Centre for Plant Research, French Institute of Pondicherry, The University of Trans-Disciplinary Health Sciences and Technology, Bangalore International Airport Limited, Keystone Foundation and National Institute of Sow Rigpa. The principal aim of the meeting was to explore the potential and opportunities for establishing a network of botanical gardens in India, and to consider how the resources and skills of the gardens could lead to better conservation.

Participants outlined actions for networking, including listing and mapping all Indian botanical gardens, updating institutional details in BGCI's GardenSearch and PlantSearch databases, and establishing a mailing list. Strategies for future meetings, collaboration, sharing institutional plant lists, germplasm and technical resources, and developing staff skills, experience and knowledge were highlighted.