APFORGEN focuses on Asia's unique forest genetic resources

While the world's climate leaders gathered in Lima, Peru, this month for the 20th Conference of the Parties of the UN Framework Convention on Combating Climate Change (UNFCCC) and the Global Landscapes Forum (GLF), nursery managers in Southeast Asia are busy tending their tree seedlings for the next planting season. These seedlings are expected to contribute to the global targets of restoring 150 million ha of degraded and deforested lands and sequestering an estimated one gigatonne of carbon dioxide equivalent from the atmosphere every year, reducing the current emissions gap by 11 to 17 per cent.

The year has been good for the region's restoration enthusiasts. Dipterocarp trees, which dominate the forest canopy in large parts of Southeast Asia, flowered in mass and covered the forest floor with their distinctive winged fruits. Due to their peculiar reproductive biology, many of these species flower and fruit only every few years. The seeds germinate almost immediately and cannot be stored in conventional seed banks.

Lack of seed of key species during most of the years adds to the challenges faced by national tree seed programmes in many Asian countries. In their Country Reports for the State of the World's Forest Genetic Resources Report (FAO 2014), the countries lamented the lack of seed sources for native tree species, low production capacity of the existing seed production areas, poor or unknown quality of seed, and lack of awareness about the importance of quality seed in tree planting and restoration.

***Shorea macrophylla,* a potential oil-bearing seed**

"Our national tree 'Narra" (*Pterocarpus indicus*) tops the list of native tree species planted in the ongoing National Greening Programme. However, the species has long suffered from over exploitation and the quality of the remaining seed sources is questionable", says Professor Enrique Tolentino Jr. from the University of the Philippines, Los Baños. He represents the Philippines in the Asia Pacific Forest Genetic Resources Programme (APFORGEN), a regional network established in 2003.

"Survival and growth of the planted trees over time is compromised if the origin of seed is not carefully chosen to suit the current and changing conditions on the restoration site, or if it is of a narrow genetic base. As a result, restored forests may not redeem the expectations of effective carbon sequestration to mitigate climate change", he continues. Professor Tolentino chairs the new Working Group of APFORGEN on strengthening national tree seed programmes in the region. The group is one of three established to implement APFORGEN's new regional strategy for the conservation and sustainable use of Forest Genetic Resources in Asia and the Pacific. The strategy supports the implementation of the Food and Agriculture Organization of the UN's (FAO) Global Plan of Action on Forest Genetic Resources in the region.

Over the coming months, APFORGEN will also be actively seeking more support for its cause, both political and financial. "We want to see the contribution of forest genetic resources to sustainable development duly recognized and supported, starting from the

region's high-level policymakers and relevant international organizations. Conservation and sustainable use of these unique resources should be effectively incorporated into local, national and regional planning and implementation processes such as the National Biodiversity Strategies and Action Plans, REDD+ and political processes", says Dr Zheng Yongqi from the Chinese Academy of Forestry. He chairs APFORGEN's Working Group on mobilizing support for the implementation of the Global Plan of Action on Forest Genetic Resources in the Asia-Pacific Region.

News contribution

http://www.bioversityinternational.org/news/detail/asias-unique-forest-genetic-resources-supported-in-new-apforgen-strategy/