## TEN BILLION TREES TSUNAMI AFFORESTATION PROGRAMME IMPACT RESULTS IN PAKISTAN

Invited by the United Nations to host the World Environment Day 2021, Pakistan presented the impactful results achieved with his 10 Billion Trees Tsunami Programme to the international community. The country has been a global pioneer in forest restoration by combining community participation, green job creation and strong political commitment.

Designed in September 2018, the programme is being implemented across Pakistan by the Ministry of Climate Change along with

Provincial and territorial Forest and Wildlife Departments and sets out to plant ten billion trees by 2023. The project is supported by the United Nations Environment Programme (UNEP).

Reforestation activities started in 2019 and in June 2021 the project has reached the milestone of planting 1 billion trees. According to the findings of a third-party assessment of the trees planted across the country under the federal government's projects, a 90% survival rate has been recorded at 72% sites, 85% at 24% sites and 75% at 4% sites.

Pakistan has only 5% of forest cover, due to arid and semi-arid climatic conditions in most parts of the country. But despite poor forest cover, Pakistan is highly rich in both ecosystem and species biodiversity where such ecosystems are still intact. However, unsustainable management practices and a high dependency of local communities on forests for meeting a wide variety of needs including timber, firewood, fodder for livestock, agricultural land, and non-timber forest products including wild fruits and medicinal plants, often results in deforestation and degradation of forest ecosystems. Forest degradation in Pakistan has negatively impacted communities, ecosystems, and biodiversity.

To address these problems, made even more alarming by the consequences of climate change, the Government has joined the commitments of the <u>Bonn Challenge for restoration</u> and established alliances with various international organizations and United Nations Agencies to implement initiatives in different areas of the country. In 2018, based on the methods adopted and the results achieved, it decided to upscale the strategy at national level and launched the ambitious 10 Billion Tree Tsunami Initiative. The Programme deals with diverse ecological zones, landscapes and forestry models across the country Provinces, from mangroves to natural reserves and urban forestation.

Since 2019, the Government of Pakistan has established the complex











management structure to coordinate activities in all Provinces and territories of the country, with the support of the Provincial and territorial Forest and Wildlife Departments. Part of the funds is provided by the Federal Government while the remaining costs are insured by the respective Provinces.

The Programme achieves its restoration target through a combination of protected natural regeneration (60 percent) and planned afforestation (40 percent). Taking into account the various different territories with their ecosystems and the interests of local communities for growing trees that generate direct economic value, the project used 42 tree species for reforestation activities, including native species and other imported tree varieties. While native trees are primarily grown in naturally regenerated areas, a mix of native and non-native species are used in plantations in community forests.

The Government has invested funds to help establish private tree nurseries in almost every District of the Provinces, producing hundreds of thousands of saplings of local and imported tree varieties. Many small-scale nurseries producing saplings, have also been set up with cash advances and a guaranteed purchase agreement from each Provincial Government. In general, locals are paid to raise tree saplings on nurseries for plantation, while Village Development Councils appoint *forest watchers* to look after parts of community forests enclosed for natural regeneration. The involvement of local communities was fundamental to ensure the very high survival rate of the planted trees. The local communities first grow the nurseries and then protect the saplings as soon as planted and the trees that grow.

The new plants were also used to strengthen riverbanks, canals and mountain road slopes through environmental engineering activities. Newly planted trees add tree resources to agricultural lands engaged in farm forestry. They also improve biodiversity by restoring wildlife shelters and contribute to CO2 sequestration through new tree plantations.

The tree nurseries and all these activities have had a positive economic impact in communities, boosting local incomes, generating thousands of green jobs, and empowering unemployed youth and women in all Provinces. Furthermore in 2020, during the COVID-19 pandemic, the Forest and Wildlife Departments provided green jobs to 84,609 people. Many of these new jobs are being created in rural areas, with a focus on hiring women and unemployed daily workers, mainly young people, who were migrating home from locked-down cities. The work includes setting up nurseries, planting saplings, and serving as forest protection guards or forest firefighters.

The 10 Billion Trees Tsunami programme is considered a very successful initiative. Not only for the 1 billion trees planted so far across the country with one of the highest survival rates of trees in the world, ranging from 70 to 90 percent. The project has also been able to generate an environmental, economic and social impact and the Government of Pakistan is examining the possibilities of extending its activities. The Government is considering becoming a pilot experience for a novel type of debt relief in exchange for achieving nature conservation targets. Proposed by Finance for Biodiversity (F4B), the nature performance bond could allow a reduction of the debt or interest rate for new debt issued as long as progress is made toward nature-related activities.

Meanwhile, different organizations that have supported the 10 Billion Trees Tsunami initiative, such as the UN Agencies UNEP, UNDP, UNESCO, WHO, and other international organizations such as the















International Union for Conservation of Nature (IUCN) and the World Wildlife Fund-Pakistan (WWF) published articles and documents allowing to know and appreciate the results obtained in the country.

## To know more

Ten Billion Trees Tsunami in Facebook

Article in Ministry of Climate Change website

Ten Billion Trees in globallandscapesforum.org

Article in climatechangenews.com

Article in undp-biodiversity.exposure.co

Ten Billion Trees in IUCN website

Article in UNEP website

Pakistan protected areas in UNEP website

Forest management project UNDP-GEF in UNDP website

Pakistan green again in Courier – UNESCO website

Article in aljazeera.com

Article in weforum.org

Article in borgenproject.org

Article in voanews.com

Article in masazullaneta.com.ar

Article in voanews.com

Article in down.com

Article in UNEP website

World Wildlife Fund (WWF) 2017 audit

Bon Challenge website







