



# Afforestation for a Greener Punjab

- By Hassan Ilyas, Beenish Saeed & Farwa Ashraf -

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**Implementing urban forest policies and pilot projects will help combat climate change and bring considerable economic, ecological and social benefits to the region**



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Forests represent one of our biggest natural allies against climate change. Rapid climate change and high air pollution levels require an urgent investment in afforestation.

Pakistan's deforestation rate is estimated between 0.2% and 0.5% per year, the second highest in the world. It is also one of the major causes of the erosion of ecosystem services such as carbon sequestration and biodiversity.

Punjab is extremely deficient in forestry sector resources. While 20-25% land area is recommended for forests, only 3% of Punjab's land area comes under forests in the public sector. The SDGs (Sustainable Developmental Goals) aim to ensure the conservation, restoration and sustainable use of terrestrial ecosystems and their services by improving the forest area as a proportion of total land area.



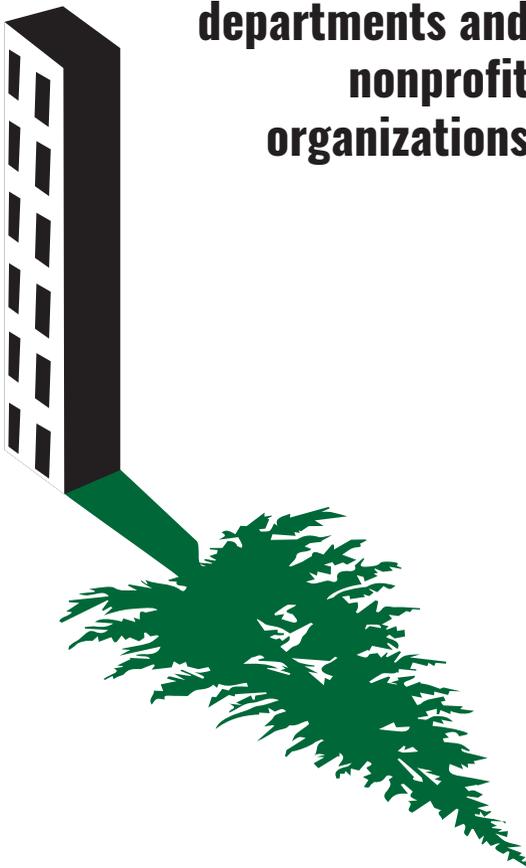
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There are many factors that have contributed to this situation: population growth; change in land use; encroachments; over-exploitation; illegal felling; low investments and a lack of concern for the environmental crisis.

The urban sprawl, coupled with the rapid increase in vehicle and industrial emissions in the urban and peri-urban areas of Punjab, has resulted in multiple environmental issues like urban heat islands, smog, fluctuating precipitation patterns, and health problems. Such environmental conditions require initiatives like tree plantation in order to increase tree covers since carbon sequestration and the emission of oxygen are vital actions towards mitigating the impacts of climate change.

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In addition to traditional afforestation projects, there is also a need to lay more emphasis on cities. Urban Forestry can play a key role in bridging this gap while ensuring a greener environment for our future generations. They are the backbone of a green infrastructure, bridging rural-urban areas and ameliorating a city's environmental footprint. Urban forestry can be defined as the networks or systems comprising all woodlands, groups of trees, and individual trees located in urban and peri-urban areas; they include trees in forests, streets, parks and gardens and in derelict corners.

Pursuant to Court Order – Writ Petition No. 192069 of 2018 Sheikh Asim Farooq v/s Federation of Pakistan, The Urban Unit prepared the “Punjab Urban & Peri-Urban Forest Policy (Draft) 2019” as per the directions of the Honourable Lahore High Court (LHC), Lahore, upon the advice of the Forest, Wildlife & Fisheries Department. This umbrella policy will also provide different departments and autonomous bodies with a legal instrument to synchronize their role through necessary changes, whenever required, in order to achieve the goals and objectives of this policy.

In order to emphasize the importance of tree plantations and a greener environment, the Lahore High Court issued directions to various departments of the Punjab Government to boost tree plantation and to update current laws to deal with violations. The court also directed Local Governments, Development Authorities and all concerned departments to ensure that housing societies shall be obligated to include plantation in their allotment letters; the Secretary Cooperative and the Registrar Cooperative were specifically mentioned as responsible entities to implement this action. The Honourable judge defined that every responsible department shall work strictly against violations and that Rs. 25,000 shall be charged as the penalty for cutting a tree. The LHC ordered that the involvement of the media to run public awareness campaigns and involve citizens. The Urban Unit played a key role in devising the Draft Forest Policy in close consultation with stakeholders including government departments and nonprofit organizations. The forest policy developed by the Urban Unit states and defines methodologies and processes to make the Greener Punjab initiative successful and transparent. Participation of citizens and civil societies is considered a key instrument in its

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i m p l e m e n t a t i o n . Additionally, the honorable judge ordered the involvement of schools, colleges, hospitals, and parking sites to actively take part in tree plantation activities. The interventions proposed in the aforementioned Policy

(Draft) is also directly aligned with Government's vision of a 'Clean and Green Pakistan' which intends to achieve the targeted 'Ten Billion Tree Tsunami Programme'. It offers additional and innovative afforestation plans to turn this drive into a success story and set an example for any future afforestation agendas. Furthermore, the Policy gives direction to all the concerned departments and organizations for their contribution in the promotion of an active urban tree management system. The objective is to increase both the quantity and quality of forests, integrate and improve the planning processes underlying these interventions, promote education and research among its stakeholders while ensuring community focus and engagement.

Envisioning Punjab as an attractive and livable province with thriving forests will provide economic, ecological and social benefits as part of its sustainable valued infrastructure. The targets proposed for the 'Urban Tree Plantation' to be achieved by departments and entities in their respective area is 5% in local streets, 10% in urban areas and 15% in peri-urban areas. The rule of one tree per 10 meters will be observed in city streets, roads, housing societies, and other facilities of the public and private sectors.

For successful implementation of the Urban Forest Policy, land-mapping jurisdictions of various departments functional within cities is to be carried out along with the mapping and assessment of the urban tree count and canopy cover. This can be achieved by using high resolution satellite imagery. Furthermore, tree count, density, positive and negative hotspots may be identified by using ground and space-borne data sources. The calculation of existing tree density for cities ranking on the basis of the green-ness index will help benchmark greenery within cities.



Moreover, the Punjab Urban and Peri-Urban Forest Policy also discusses the functionality related to existing forest covers and temporal mapping, the identification of new sites for forest plantation, the management of forest assets and protected areas (and rangelands to boost production), promoting forestry in private lands, providing education for public and private departments for tree plantation, conducting research and training in various disciplines of forestry, performing identification of problems, formulating training modules, the conservation of natural resources, and other objectives.

Hence, urban forestry can play a key role in making Punjab more resilient to the effects of climate change by mitigating storm water runoff, improving air quality, storing carbon, decreasing urban energy consumption by shading and cooling, and reducing the impacts of extreme weather conditions and flooding. Urban and peri-urban forestation will have an extraordinary impact on improving the quality of life and wellbeing by combating environmental pollution, making cities more attractive and congenial to live in. The need is to plan and execute successful pilot projects after necessary consultations, such as those practiced by The Urban Unit.

The trio of writers are part of The Urban Unit: Hassan Ilyas is a Senior Research Analyst in the Environment, Beenish Saeed is an Environmental Education and Communication Consultant, and Farwa Ashraf is a Senior Research Analyst.

