

HABIB UNIVERSITY GLOBAL CAMPUS

Planning and Development of the Mohammad Ali Habib Center for Sustainability, Climate Justice, and Urban Forest

Executive Summary

Habib University is embarking on one of the most ambitious higher-education and environmental development initiatives in Pakistan: the creation of a 200-acre Global Campus designed as a next-generation residential university and ecological learning environment. At the heart of this vision lies the Mohammad Ali Habib Center for Sustainability and Climate Justice and Urban Forest, a pioneering institution dedicated to climate research, environmental stewardship, community engagement, and interdisciplinary education.

The Center will serve as the first major development within the Global Campus and will occupy 65 acres of the site, including a 55-acre Urban Forest, climate-sensitive academic facilities, ecological restoration zones, and water conservation infrastructure. More than a collection of buildings, the Center is envisioned as a living laboratory where education, research, innovation, and environmental regeneration converge to address the pressing challenges posed by climate change.

This initiative reflects Habib University's commitment to developing future leaders equipped to respond to the environmental, social, and economic consequences of climate disruption while contributing practical solutions rooted in science, policy, technology, and community engagement.



Picture no 1

1. The Global Campus Vision

The Habib University Global Campus represents a transformative investment in the future of higher education in Pakistan. Planned across 200 acres, the campus is envisioned as a fully residential, environmentally responsible academic ecosystem that integrates learning, research, community life, and ecological stewardship.

Unlike conventional university developments, the Global Campus is being designed as an ecological experiment in sustainable living. Every aspect of planning—from infrastructure and transportation systems to energy generation, water management, and landscape design—will be guided by principles of sustainability, resilience, and long-term environmental responsibility.

The campus seeks to become a national and international model for climate-conscious educational development by demonstrating how academic institutions can simultaneously advance learning and environmental restoration.



Picture no 2

Strategic Objectives

- Establish a world-class residential academic environment.
- Achieve low-carbon and eventually net-zero operational targets.
- Integrate renewable energy systems across campus infrastructure.
- Preserve and enhance natural ecosystems.
- Create opportunities for interdisciplinary teaching and research.
- Demonstrate climate-resilient planning and construction practices.

- Foster meaningful engagement with local communities and stakeholders.



Picture no 3

2. Project Development Status

This project will be developed through phase wise approach, in phase -01, One of the building complex, along with forest and a water reservoir will be developed, as this project is biased on donation , subsequent phases will be developed upon availability of funding. For the project significant preparatory work has already been completed to support future development activities.

A comprehensive drone-based topographical survey and GIS mapping exercise has established a detailed understanding of the site's terrain and environmental characteristics. These studies provide the foundation for informed planning and infrastructure design.

Future investigations will include:

- Geotechnical analysis
- Hydrological studies
- Environmental baseline assessments
- Ecological and biodiversity surveys
- Water resource evaluations

These technical investigations will guide the preparation of the comprehensive master plan for the entire campus.

In parallel, the Mohammad Ali Habib Center has advanced through concept development, design competition, detailed design documentation, and preparation of construction-ready tender packages. The

project is now positioned for implementation through engagement with prequalified contractors and development partners.

3. Mohammad Ali Habib Center for Sustainability and Climate Justice

A National Response to Climate Challenges

Pakistan consistently ranks among the countries most vulnerable to climate change. The nation faces increasing environmental pressures, including:

- Extreme heat events
- Water scarcity
- Flooding and riverine disasters
- Coastal degradation
- Glacial retreat
- Urban environmental stress
- Biodiversity loss

The Mohammad Ali Habib Center for Sustainability and Climate Justice represents Habib University's institutional response to these challenges.



Picture no 4

The Center will function as a multidisciplinary platform where scientists, engineers, social researchers, policymakers, students, and community leaders collaborate to understand climate risks and develop practical solutions.



Picture no 5

Its mission extends beyond academic inquiry to include environmental restoration, policy engagement, public education, and community resilience.

4. Urban Forest Initiative

Reimagining Ecological Restoration

The Urban Forest constitutes the largest component of the project and will cover approximately 55 acres of the Center's 65-acre footprint.



Picture no 6

Designed using scientifically informed restoration methodologies, including the Miyawaki approach, the Urban Forest will significantly enhance biodiversity while creating a living ecological classroom.

Environmental Benefits

The Urban Forest is expected to:

- Increase carbon sequestration capacity.
- Improve local air quality.
- Reduce ambient temperatures.
- Support native biodiversity.
- Enhance groundwater recharge.
- Create habitat for birds and pollinators.
- Strengthen ecological resilience.

Educational Benefits

Students and researchers will utilize the forest as a field laboratory for:

- Climate science
- Biodiversity monitoring
- Ecological restoration
- Environmental engineering
- GIS and remote sensing
- Urban sustainability studies

5. Architectural and Landscape Design

The architectural concept reflected in the project renderings demonstrates a strong commitment to contextual, climate-responsive design.

The proposed buildings are characterized by:

- Low-rise forms integrated into the natural landscape.
- Courtyard-based spatial organization.
- Passive cooling strategies.
- Shaded circulation networks.
- Natural materials and earth-toned finishes.
- Strong indoor-outdoor connectivity.

The architecture seeks to minimize environmental impact while maximizing user comfort and experiential learning opportunities.

Design Philosophy

The development embraces three core principles:

Environmental Integration

Buildings are embedded within the landscape rather than imposed upon it.

Human-Centered Design

Open courtyards, gathering spaces, and pedestrian pathways encourage collaboration and community interaction.

Climate Responsiveness

Orientation, shading, natural ventilation, and landscape buffers reduce energy demand and enhance thermal comfort.

6. Water Conservation and Ecological Infrastructure

A key feature of the project is the creation of a rain-fed lake and integrated water management system.

The lake will support:

- Stormwater retention
- Groundwater recharge
- Ecological restoration
- Biodiversity enhancement
- Hydrological research
- Environmental education

Together with the Urban Forest, the water infrastructure will form a resilient ecological network that demonstrates sustainable landscape management practices suitable for arid and semi-arid regions.

7. Academic and Research Vision

The Center will establish a unique interdisciplinary platform where environmental issues are examined through scientific, technological, social, ethical, and policy perspectives.

Potential academic areas include:

Climate Science

Climate modeling, adaptation strategies, and resilience planning.

Environmental Engineering

Sustainable infrastructure, water systems, and renewable energy technologies.

Data Science and Artificial Intelligence

Environmental monitoring, predictive analytics, and climate risk assessment.

Public Policy

Climate governance, environmental regulation, and sustainable development frameworks.

Humanities and Social Sciences

Environmental justice, ethics, culture, and community resilience.

The Center's landscape itself will become an extension of the classroom, allowing students to engage directly with real-world environmental systems.

8. Community Impact and Outreach

The Center is envisioned not only as a university facility but also as a regional hub for climate awareness and community engagement.

Programs may include:

- Teacher training initiatives
- Public lectures and workshops
- Youth climate leadership programs
- Community environmental restoration projects
- Corporate sustainability partnerships
- Government collaboration on climate policy

By connecting academic research with public engagement, the Center will contribute to broader societal understanding of environmental challenges and solutions.

9. Long-Term Legacy

The Habib University Global Campus and the Mohammad Ali Habib Center for Sustainability and Climate Justice represent a generational investment in education, environmental stewardship, and social responsibility.

The project seeks to establish a lasting legacy by:

- Educating future climate leaders.
- Advancing environmental research.
- Restoring ecosystems.
- Demonstrating sustainable development practices.
- Building resilience in communities.
- Contributing to national and global climate action.

As the first major component of the Global Campus, the Center will establish the foundation upon which a new model of environmentally responsible higher education can be built—one that integrates academic excellence with ecological regeneration and meaningful societal impact.

Conclusion

The Habib University Global Campus and the Mohammad Ali Habib Center for Sustainability and Climate Justice embody a bold vision for the future of higher education in Pakistan. Through its integration of research, sustainability, architecture, environmental restoration, and community engagement, the project offers a powerful model of how universities can become catalysts for climate action and sustainable development.

The initiative stands not only as a physical development project but as a long-term commitment to creating knowledge, restoring ecosystems, and preparing future generations to address the defining environmental challenges of the twenty-first century.



Picture no 7



Picture no 8



Picture no 9



Picture no 10



Picture no 11



Picture no 12