

Detailed Problem Statement

Sustainable Landscape Design Model/Prototype for Arid & Semi-Arid Regions

With rapid urbanization, cities in arid and semi-arid regions face significant challenges in maintaining sustainable green spaces that are resilient to water scarcity, extreme temperatures, and soil degradation. Effective landscape engineering is crucial for designing environments that support biodiversity, conserve water, mitigate urban heat islands, and enhance ambient health.

Your challenge is to develop an innovative landscape design model/prototype for buildings and infrastructure in an arid or semi-arid regions.

The design should focus on:

- Sustainable plant selection
- Efficient water management
- Microclimate improvement
- Biodiversity promotion

Participants are encouraged to use digital tools (trial/ licensed/ student versions) such as Revit, AutoCAD, ArcGIS, or any landscape simulation software for visualization and performance analysis.

The final submission should include working models/prototype, sustainability justifications, and an impact assessment of the proposed landscape.

Are you ready to reshape the future of urban landscapes in water-scarce regions? Let's innovate for a greener, healthier tomorrow!