

Reviving Qatar's Desert Biochar Solutions from Local Waste

Reach Out
innovation@hbku.edu.qa

Overview

This project transforms deteriorated soils into fertile land using biochar locally sourced from waste. Biochar enhances soil structure, reduces water usage, and captures CO₂, helping to combat climate change. It also protects groundwater by preventing the leaching of harmful substances. By merging waste management with sustainable agriculture, this project addresses desertification and environmental preservation, reinforcing Qatar's food security while supporting its sustainability goals.

Product Description

Converts waste into value-added products

Enhances soil fertility and structure, rehabilitating deteriorated soils

Reduces irrigation water usage by up to 40%

Captures and stores CO₂, mitigating climate change

Protects groundwater by preventing chemical leaching

Supports local farming and sustainable food production for decades

Target Audience

Government entities focused on sustainability (e.g., Ministry of Environment & Climate Change and Ministry of Municipality)

Local farmers and agricultural cooperatives

Environmental organizations and NGOs addressing desertification and waste management

Research institutions and universities

Investors in green technology and sustainable agriculture.
