The rooftop organic farm

Photo source Panoramic Studio / Landprocess

UNIVERSITY TRANSFORMS EMPTY ROOFTOP INTO ORGANIC FARM

ARCHITECTURE & DESIGN

The space is open to the public and uses solar panels and a water management system to generate renewable energy

Spotted: Sustainable urban design company LANDPROCESS has created and built Asia’s largest rooftop organic farm on Thammasat University’s Rangsit Campus in Bangkok. The farm, called TURF (Thammasat University Rooftop Farm) covers 7,000 square metres and provides 80,000 organic meals for students and faculty every year. The terraced design explicitly evokes the look and feel of traditional Thai rice paddies.

Renewable energy is an important aspect of the farm, with solar panels providing enough power for the farm and multiple university buildings. A rainwater collection system gathers water for use across campus and to irrigate crops. The farm is open to the public and includes a viewing platform and amphitheatre. The university uses the growing space to teach sustainable agriculture techniques to students and members of the public.

With Bangkok likely to be one of the world’s cities most affected by climate-change-induced flooding, rooftop farms help protect essential food sources. TURF grows more than 40 types of edible plants, including rice, fruits, vegetables and herbs, and city farms are likely to grow rapidly in importance as urbanisation continues worldwide. LANDPROCESS uses the site as a testing centre for integrating green technologies into urban landscapes and agricultural solutions and plans to continue developing the ideas and processes already in situ.

Technology is transforming the food industry, with other innovations spotted by Springwise including 3D printed chicken nuggets and translucent barns that provide farm animals with the maximum available natural light.

Written By: Keely Khoury
Takeaway:

With global demand for food likely to rise by 50 per cent as the world's population moves closer to 10 billion, breakthrough technologies in agriculture may be the only way societies are able to create a sustainable future. New irrigation techniques, improved water conservation systems, revitalisation of degraded soils and growth of agroforestry are four areas the World Research Institute recommends as means for adapting to climate change in ways that increase growing productivity without expanding the volume of land in use.