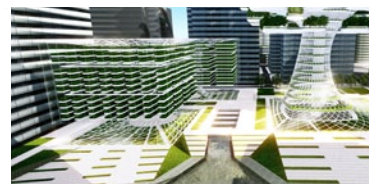


URBAN SKYFARM VERTICAL FARM

The Urban Skyfarm is a vertical farm which utilizes hydroponic systems as substitution of soil based agricultural extensions. By using the hydroponic system, the Urban Skyfarm can provide hundreds of light weight farming decks which can be conditioned with supplementary heating, lighting and moisturizing while having the natural sunlight as the main resource.

In order to gain maximum exposure toward sun light, the vertical garden lifts the main outdoor vegetation area higher up in the air which is called the leaf portion where mostly medium based hydroponic fruit trees and larger scale vegetables needing more exposure toward outside air and sunlight can be produced. The lower portions are controlled indoor environments using solution based hydroponic farming with artificial lighting which are more suitable for indoor products such as basil, arugula or bok choy etc. The Urban Skyfarm provides 44,000 m² outdoor farming deck space in the leaf portion and 28,000m² for the indoor farming on the lower portion along with 3,200 m² solar PV panel area for renewable energy production.

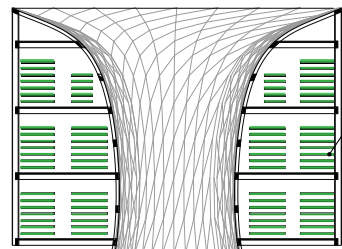
The Urban Skyfarm acts as a community garden hub where people can easily visit, grow their vegetations and participate in the final production by either bringing it home or selling it back to the local community. The central food market will host local mobile farmer markets around the neighborhood which will circulate through the city to facilitate producing and trading local food products grown by the local roof gardens within the community.



Greenhouse style Hydroponic Farm
Controlled environment with supplemental lighting and heating. Automated conveyance system. Solution based trays suspended from cables. Leafy green vegetables such as bok choy, basil, arugula and etc.

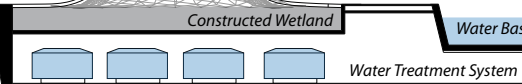
Water Recycling System
Rain water and Greywater are filtered and processed for reuse or to be returned to the Cheonnyecheon stream.

HYDROPONIC FARM



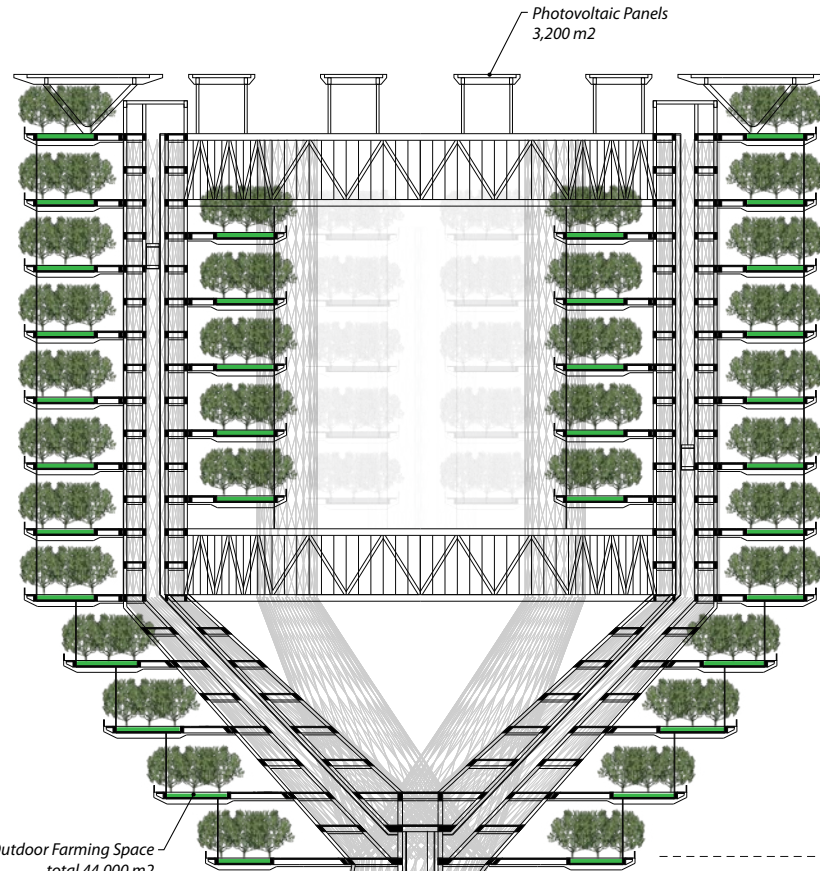
Indoor Hydroponic Farm
18,000 m²

WATER RECYCLING



Water Treatment System

Outdoor Farming Space
total 44,000 m²



Photovoltaic Panels
3,200 m²

ROOF

Photovoltaic Panels and Wind Turbines

SKYBRIDGE

View Deck, Public space and Cafeteria.



SKYFARM

Hydroponic Farming Decks, Outdoor

Each farming deck provides a 10m x 10m medium based cultivation space with supplementary lighting, heating and moisturizing using renewable energy produced on site. Hydroponic system with root supporting material for midsize fruit trees such as apples, tomatoes, cherries.

TRANSFER ZONE

View Deck, Public space and Cafeteria.



SKYFARM

Hydroponic Farming Decks, Outdoor

Medium based hydroponic farming decks for fruit trees such as apples, tomatoes, cherries etc.

VERTICAL GARDEN



Vertical Community Gardens, Indoor

Multi level vertical community garden space for local production, exhibition and educational facilities.

FARMERS MARKET



Farmers Market

Food Processing & Storage

