Urban Greenhouse Challenge #3

WAGENINGEN
UNIVERSITY & RESEARCH

UNIVERSITY OF THE DISTRICT OF COLUMBIA
COLLEGE OF AGRICULTURE, URBAN SUSTAINABILITY AND ENVIRONMENTAL SCIENCES

AGGIECULTURE

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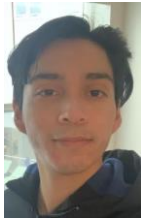

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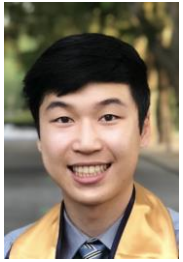

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We are semifinalists!
(Top 20 in the world)

Current food system trajectories are leading to biodiversity loss, land and aquatic ecosystem degradation without delivering food security and nutrition, sustainable and healthy livelihoods to many

- IPCC Report

(Steffen et al., 2015)

Why urban areas?

Consume 70% of the total food supply

Continuously growing

Are among the most at risk to climate change impacts (especially low income)

Source: FAO, 2019b & UN, 2018

Why urban farming?

Improve ecosystem functions
Alleviate food shocks
Reduce food mileage
Divert organic wastes
Contribute to food security & sovereignty
Improve public health and lower healthcare costs
Create jobs and support local businesses
Help communities learn and grow together

Our goal

Design an innovative, sustainable, and inclusive urban food system to address food apartheid and create positive social impact in Ward 7, Washington DC

Selection objectives:
Provide year round sustainable food production
Provide attractive landmark for community
Impact social equity and inclusion

Ward 7

77,456 growing population

97% POC (91.5% black)

14.8% unemployment

$50,130 median household income

21.5% families below poverty

1 grocery store

No means of self production

Highest rates of diet related diseases in DC

Source: https://www.dchealthmatters.org/demographicdata

Location of the East Capitol Urban Farm

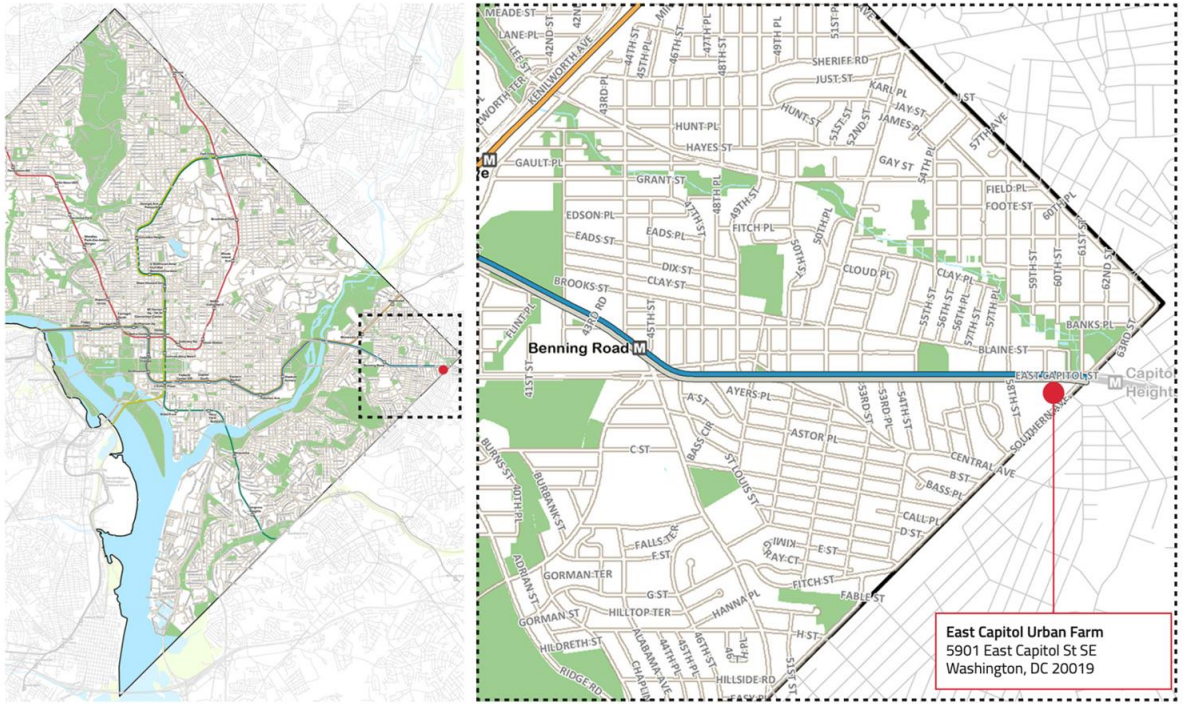

Figure 3. Location of East Capitol Urban Farm (red dot).
Government of the District of Columbia. (2018b, March 09). DC Street Map. Retrieved from planning.dc.gov: https://planning.dc.gov/sites/default/files/dc/sites/op/publication/attachments/WebsitePDF_New_36x48_CityWide_StreetMap_75.pdf

Our Story

Living Gardens embodies a plant growing in symbiotic harmony with its ecosystem, stretching its roots and reaching its branches to meet the community's needs

Functions

Roots: community members, suppliers, and institutions

Leaves: aquaponic module network using repurposed shipping containers

Fruit branches: mobile grocery trucks, local businesses and institutions

Stem to trunk growth: phenotype expression from start up operational hub to flourishing community hub

Source: http://www.ccearch.com/shipping-containers---physical-characteristics.html

Contact

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Challenge website

https://urbangreenhousechallenge.nl

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