

Vertical Farming: Making Our Cities Food Secure

Samba Nixon Otieno- Chairman & CEO City of Kisumu Urban Areas Association (CKUAA)

Background Information

- The City of Kisumu is the third largest City in Kenya, the Principal City of West Kenya Region and the Headquarters of the County Government of Kisumu.
- It is also the second most important city after Kampala in the greater Lake Victoria basin, the gate-way to East & Central Africa and the Commercial Capital of the East African Community.
- The City of Kisumu host the Secretariat of the Lake Victoria Economic Bloc that brings together 13
 Counties of the Republic of Kenya.

Background Information Cont....d

- The City has a population of 1million people and this is expected to double by 2030.
- 80% of its population live in informal settlements
- Absolute poverty is 60%, Food Poverty is 65% and unemployment rate of 51%

Urban Farming

Urban farming is an industry that produces, processes and markets food, fuel, and other outputs, largely in response to the daily demand of consumers within a town, city or metropolis, on many types of privately and publicly held land and water bodies found throughout intra-urban and peri-urban areas.

Urban Farming

Cont...d

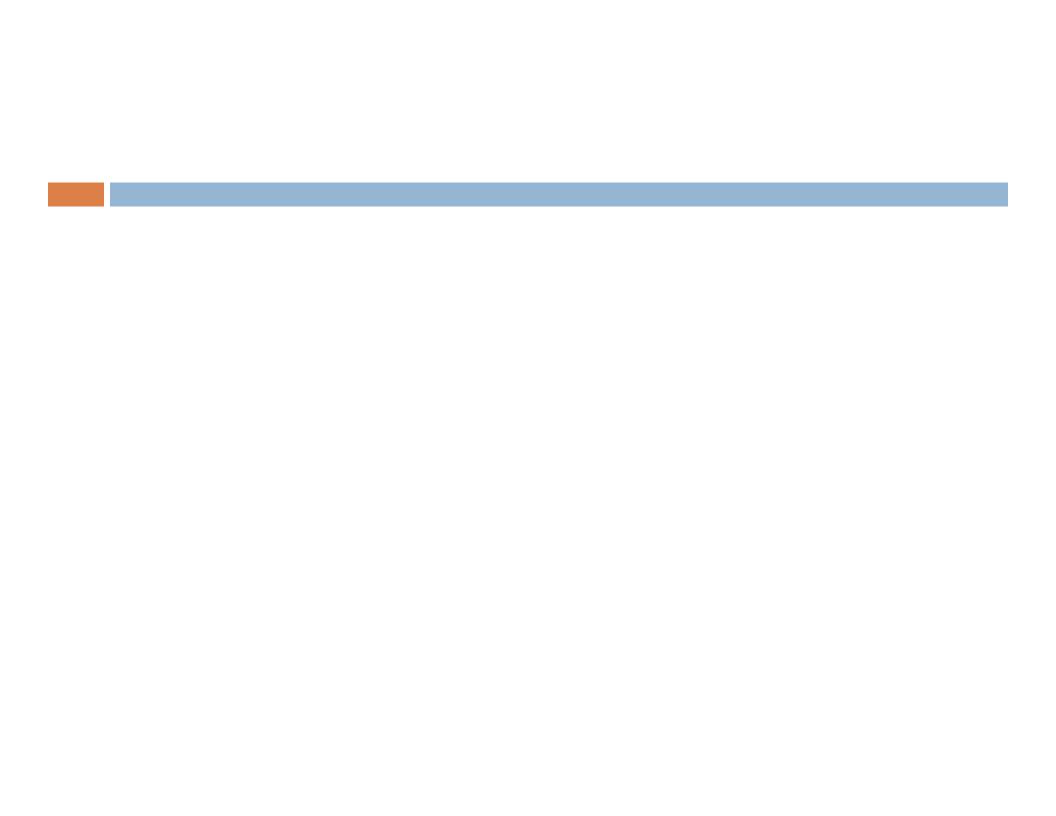
Urban farming applies simple production methods, frequently using and reusing natural resources and urban wastes, to yield a diverse array of land-, water-, and air-based fauna and flora, contributing to the food security, health, livelihood, and environment of the individual, household, and community

Benefits of Urban Farming

- More people around the world are adopting urban farming to make food production as "local" as possible. By growing what they need near where they live, they decrease the "food miles" associated with long-distance transportation.
- They also get the freshest produce money can buy.
- Urban farming adds greenery to cities, reducing harmful runoff, increasing shading, and countering the unpleasant heat island effect.
- Garden plots can help people reconnect with the Mother Earth, and gain a greater appreciation for where our food comes from.

Our (draft) Slogan

- Eat Healthy, grow own foods
- Fresh City Foods, From the City, For the City People
- Vertical Farming, For Fresh Healthy City Foods
- Grow Own Foods, Grow A Healthier You



Garden Tower

Add up to 2 additional rings to grow a total of 70 plants

*100% American made * U.V. Stabilized-Food Grade * Polypropylene * Fully Recyclable

Easy access compost column allows for fast, clean loading of kitchen scraps

> Large pockets make planting seeds or seedlings simple

Internal bearing tracks allows for one handed 360 degree rotation

Wide stance legs provide stability even in severe wind conditions Open access top for watering. Gravity pulls water down to water all of the plants

> Durable ultraplastic is 100% food grade and recyclable

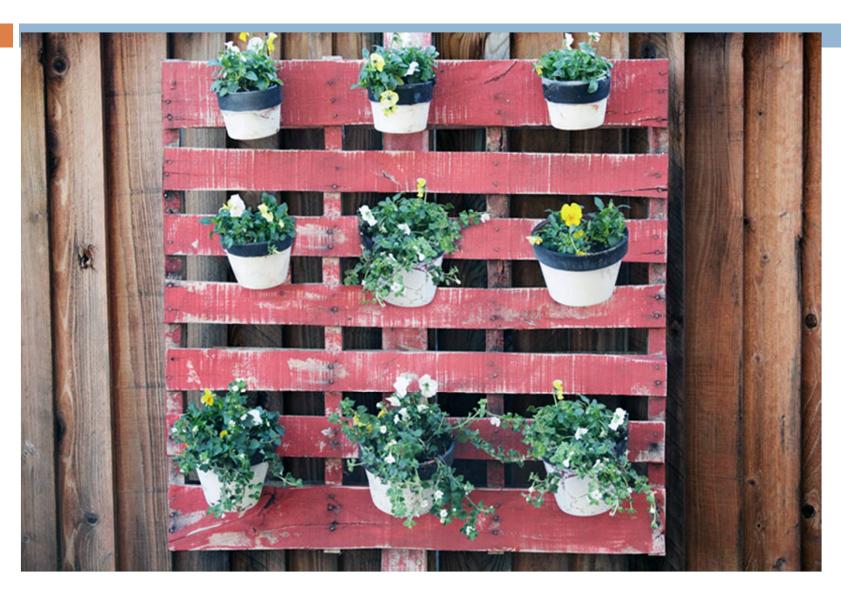
Pull gate allows for effortless collection of compost into drawer

Removable drawer for easy collection and recycling of nutrient tea plus finished compost

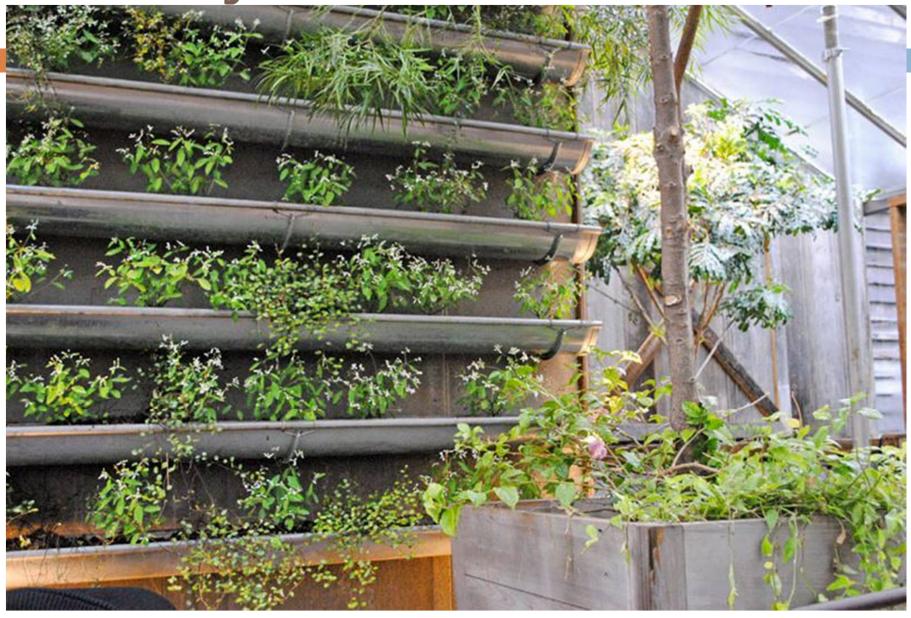
Garden Tower Project



Hanging pots



Gutter System



Gutter System Cont..d



Traditional Trellis



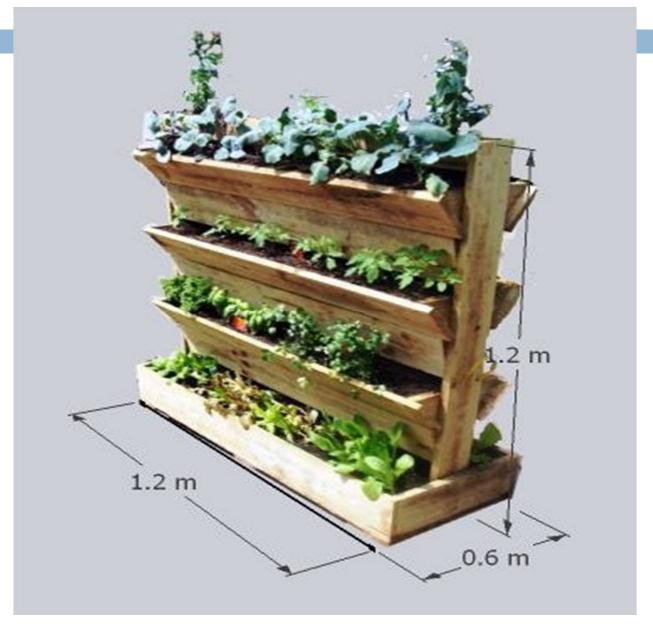
Tower Gardens



Bottle Garden



Freestanding Garden



Pyramid Garden

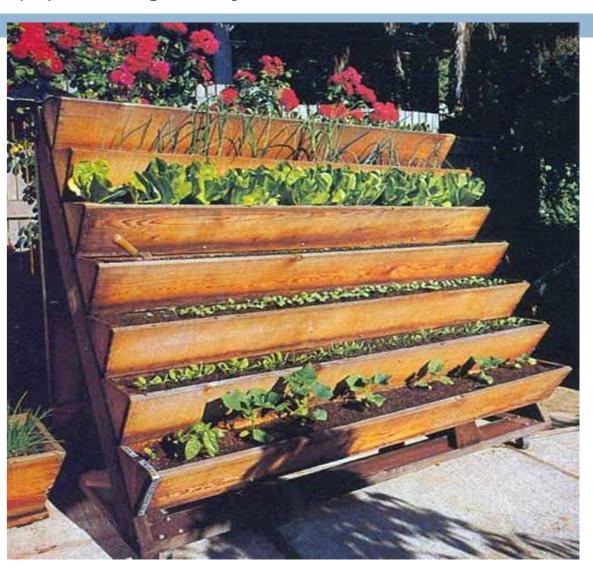




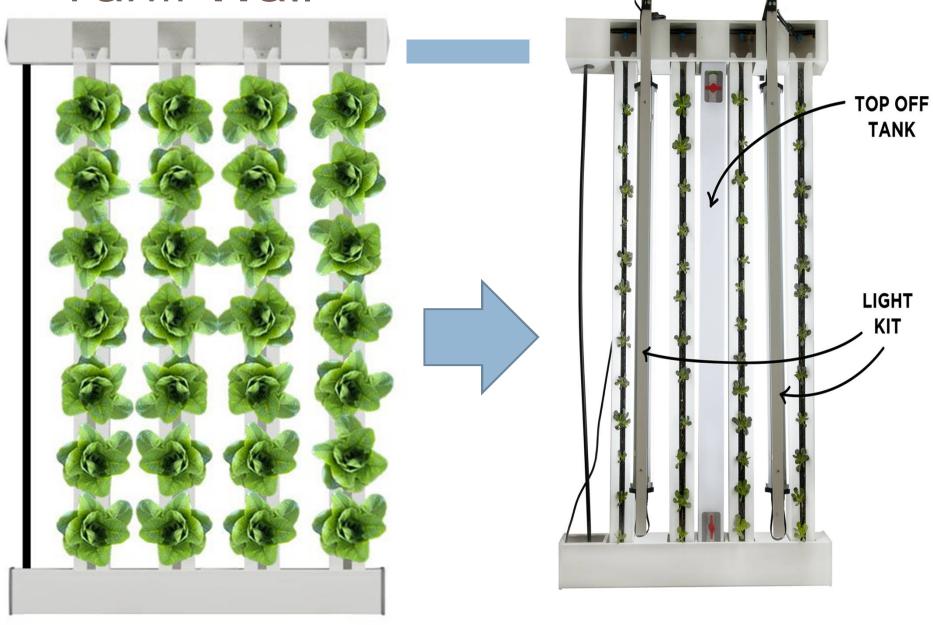


Stair Garden

The stair steps provide a good way for excess water to drain off down the unit.



Farm Wall



Farm Wall Cont..d



EXPECTED ECONOMIC IMPACTS

- This project shall expand the economic base of the City of Kisumu through production, processing, packaging, and marketing of consumable products.
- This results in an increase in entrepreneurial activities and the creation of jobs, as well as reducing food costs and improving quality

EXPECTED SOCIAL IMPACTS

- This project shall have a large impact on the social and emotional well-being of individuals through decreased levels of stress and better overall mental health when they have opportunities to interact with nature through a garden.
- Urban gardens are thought to be relaxing and calming, and offer a space of retreat in densely populated urban areas

EXPECTED ENVIRONMENTAL IMPACTS

- Urban gardening focuses on the use of household waste as fertilizers will reduce the levels of urban environmental pollution thereby increasing the urban resilience to climate changes.
- This further contributes to reduced GHG emissions.

CONTACT US

CITY OF KISUMU URBAN AREAS ASSOCIATION (CKUAA) P.O. Box 7931 – 40100, Kisumu Tel: (+254) 0721 295974, 0789 255 427,

e-mail: cityofkisumu1901@gmail.com

facebook.com/kisumucity1901 twitter.com/kisumucity1901

website: www.ckuaa.or.ke

Chekmula Building, 2nd Floor, Wing C, Suite 19, Jomo Kenyatta Highway

City Of Kisumu Fast Forward, Together | Unity Of Purpose