

poop protecting dump nutshell protecting dump plant plant

NUTSHELL OF LIFE DESERT MIGRATING MARKET KATARZYNA PRZYBYŁA

AGNIESZKA WIERZBICKA

NUTSHELL OF LIFE – DESERT MIGRATING MARKET was originally proposal for Kakuma Refugee Camp in Kenya. The main idea was to create architecture, which would minimalize the devastating influence of the refugee camp on the surrounding enviroment, such as deforestation and disappearance of biodiversity.

Our project originates new technique of architectural revaluation of space: by inversing inside with outside of the building, we bring plants into its heart to protect them from unfriendly enviroment.

Market will consist of optional number of C-shaped, sustainable units. Wide, shading roof has space for trade under it. The central part is cultivated space. Traditional walls are replaced with water tanks. During day they will protect water from vaporizing and plants from overheating, during night they will heat back and allow the condensation process. Slots located on the bottom of the tank in equal interspaces will provide minimal amount of water for the plantation.

Market is the heart of each humman settlement and we believe, that well designed will indicate the transformation of the desert into the fruitful place. A crucial determinant is not market in itself, but its background: supplies and support. Our project recreates natural environment and provides vegetables after just one season.



REFUGEES GOVERMENT + NGO's LOCALS knowledge of traditional techniques and knowledge of speds traditional planting and techniques and methods for planting and building local needs

UNIT BUILDING PROCESS - ROUNDTABLE

Cooperate for fair and sustainable development initiatives in active collaboration with disadvantaged people or communities. This process shall follow principles of human solidarity, non- discrimination and will be aimed at promoting their self-sufficiency

History shows that the development of each community was inextricably linked to the ability of management of the inhabited

area. In order to struggle with hunger, and

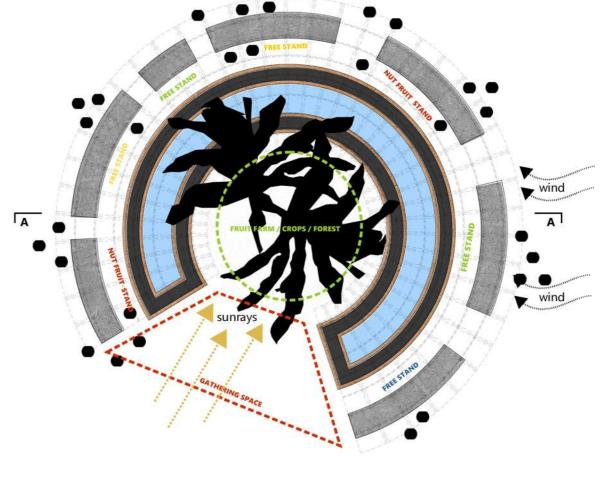
to be dependent to world food programs,

people need to know how to "fill the earth and subdue it". The building technology

employed in the project enables the

construction by unskilled workers at very





INSPIRATION - WATER POT

Somalia 417,900 refugees

Sudan 95,700 refugees

Ethiopia

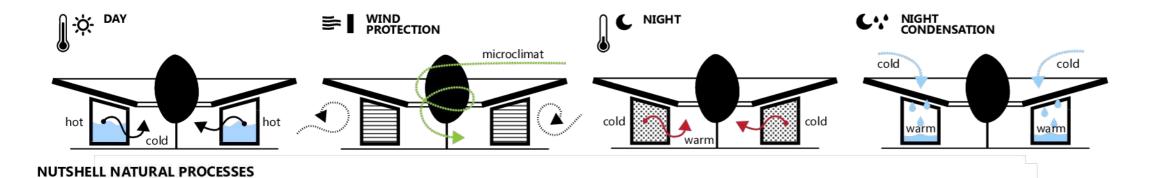
•00000 **†††††† †††††** **** *†††††††††* **** **త**్రిటిటిటిటిటిటి 1 tone of green veggies KAKUMA VEGETABLE REQUIREMENT

low cost, so it is also available for vulnerable people who lost everything. They need only the strength of Their own hands and the will to make Their future better. The usage of costless local materials and traditional technologies is one of the basic objectives of the project. We assume the use of various materials and technologies for particular units. They shall be developed in cooperation with refugees, local specialists and organisations. We hope that this cooperation will bring the most efficient solutions and will affect the community relations. The concept shall improve existing environment by minimal

interventions.

NUTSHELL PLAN

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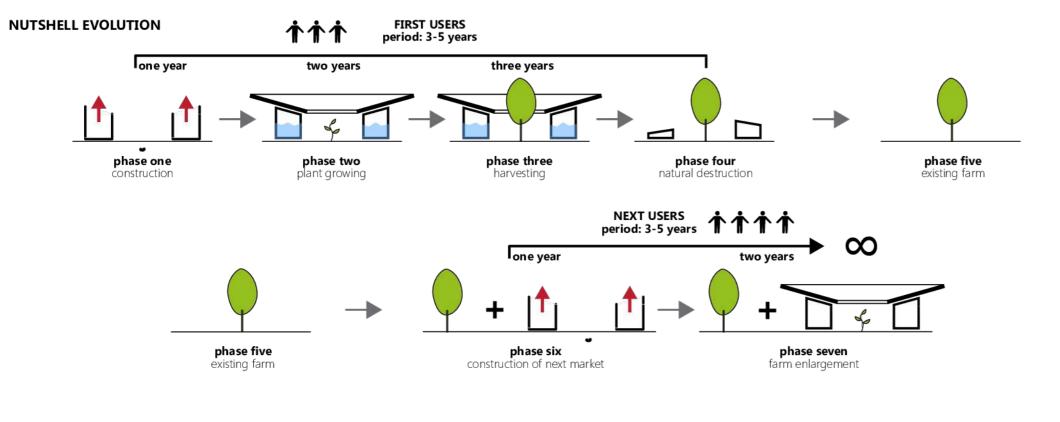


Facilitate the use of appropriate technologies, materials and labour adequate to local values, to the cultural specificity and responsive to the natural environment

corrugated sheet water collecting easy accessible during rainy seasons wooden roof clay plaster structure backed bricks, cut stones, compressed soil block clay plaster farm/park/forest ground irrigation ground irrigation bioactive mass to keep water and influence microenvironment **SECTION A-A** 3 [m]

Building construction is designed of locally available materials: the walls may be erected of backed bricks, cut stones or compressed-soil blocks and shall be covered on both sides by clay plaster. We want to experiment with various, locally cultivated water tank building techniques by adapting them to our project to find the best solution. Natural materials are crucial, because the nature shall take over the market space and turn into diverse garden / forest – the future of next generations.

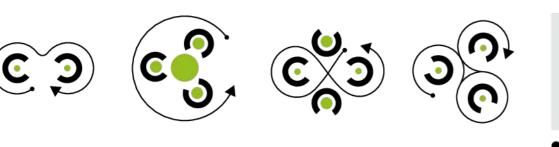
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PLANTING STRUCTURE **FARM EVOLUTION** NATURAL FENCE protecting tree WIND PROTECTION + SHADING - GRAPES ON THE WALLS date tree 🕌 FRUIT TREES grapes BANANA, AVOCADO, fruit tree LOW FRUITS AND VEGGIES WATERMELON, TOMATO, low fruits and veggies "2" PINEAPPLE, ONION, CABBAGE years

MARKET

CONSTRUCTION



timeline NUTSHELL URBANISM

Endorse the integration of post-emergency relief interventions into long-term sustainable development strategies

The main problem of the market is not its construction, but the desert. To be sustainable it needs to be as self-sufficient as possible. People depending on the outside circumstanced will be always unstable. Being limited by the climatic conditions of the desert is one of the main problems of the inhabitants of it. If we learn how to subdue the desert, people will be able to utilize this knowledge in their own countries, evolving from the nomadic lifestyle into a stable mode settled. Furthermore controlling the desert is not only overcoming the limitations of nature but giving people control over their own lives.

The development process starts with middle part of C-shaped module intended for planting. In first year it shall be digged and filled with bioactive mass, which will keep water and influence microenviroment. Harvest season should begin within a year. With the time passing by, the green area shall spread around and the desert shall fertilize. After 3-5 years plants will be strong enough to survive without watertanks and supporting walls. Ravages of time will affect the building and it will shatter like the nutshell after spring. The process of recreating the vegetation is done. This is the moment to remove the market to new location. Roof may be reused.

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FARM

ENLARGEMENT

NUTSHELL TYPOLOGY CUSTOMER TRACKS

GREENERY MANAGEMENT

IIIIII natural fence

eastern

low veggies and fruits