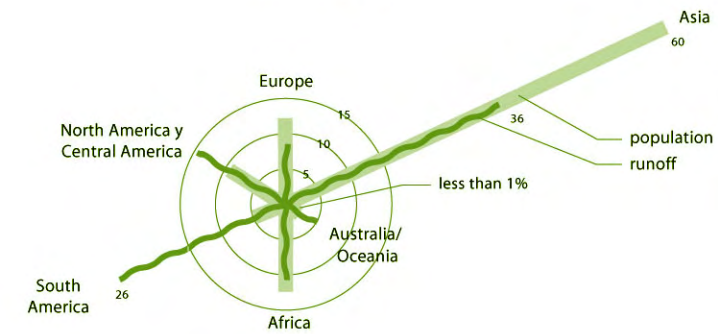


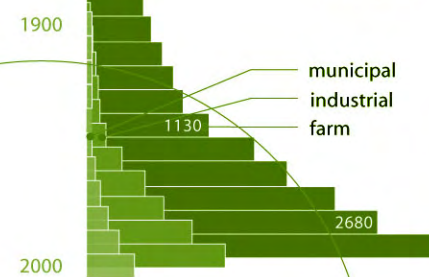
POPULATION & RUNOFF
OVERALL
[percentage %]

amount of people affected by severe water shortages in their countries in the 2025 : 1 Billion

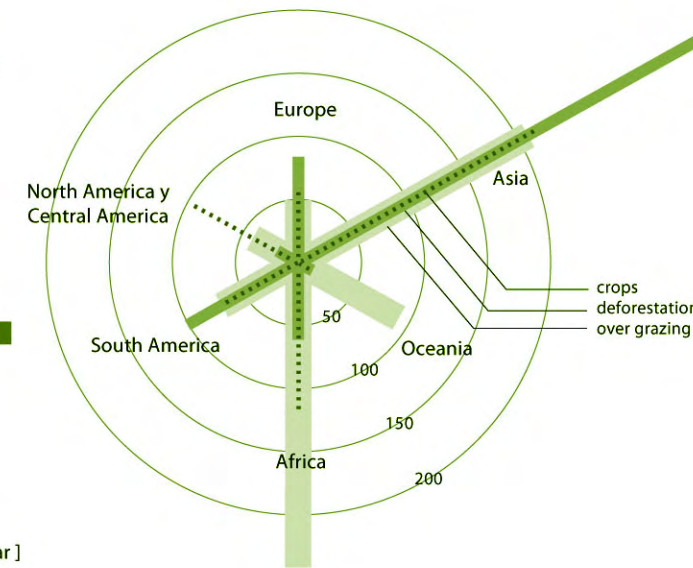
Average water consumption per capita in Europe:
19525 gal/year = 50,71 gal/day

Average water consumption per capita in the U.S.A:
32575,62gal/year = 84,6 gal/day

70% of the water consumed in the world is used for agricultural production and 85% in Asia. Irrigation is the biggest factor in agricultural production.

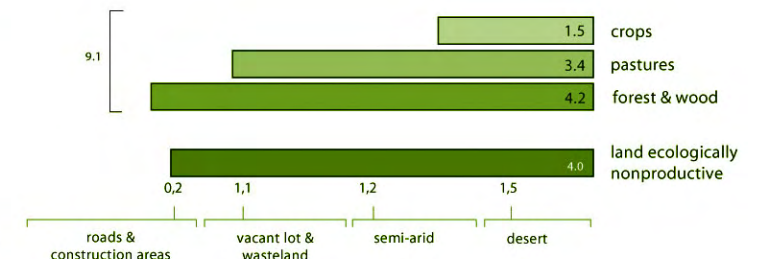
IRRIGATED AREA
[million hectares]WATER USE
[km³/year]NET DEPLETION OF AQUIFERS
[km³/year]

The aquifers are being pumped in an unsustainable way to meet the needs of irrigation.

LAND DEGRADATION AND CAUSES
[millones of hectare]

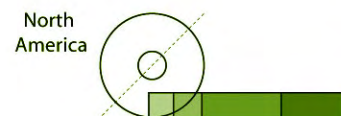
Most of the marketing and logging occurs in industrialized countries, this being the main cause of deforestation.

In developed countries, agriculture and land clearing, they become part of the main factors.

GLOBAL PRODUCTION OF LAND RESERVE
[billions of hectares]

Of the 51 billion hectares of land area above sea level, 13.1 billion hectares are not covered by fresh water or ice. These stocks have to meet our needs not only agricultural, industrial, municipal, materials, leisure, but also must cover all existing species and ecosystems.

Desertification, land degradation and plants, erosion, salinization caused by excessive irrigation, and other forms of degradation expose a growing problem with the existing terrain.



When we talk about biodiversity loss we usually think of wild animals in environments more or less exotic. But it also threatens to agricultural fields and food on the table.

IN EUROPE UP TO 70% OF THE VARIETY OF FRUIT AND VEGETABLE CULTIVATED IN THE EARLY TWENTIETH CENTURY HAS LOST AND SOUTHEAST ASIA HAS LOST 90% OF THE VARIETIES OF RICE. IN THE UNITED STATES HAS BEEN ESTIMATED THAT THE 7100 APPLE VARIETIES GROWN IN THE NINETEENTH CENTURY, 6,800 HAVE DISAPPEARED. THEY HAVE ALL GONE SUCCUMB TO THE COMMERCIAL VARIETIES THAT HAVE BEEN PLACES ON THE MARKET.

This means a problem?

Yes. "That regression", says a report by the United Nations Organization for Agriculture (FAO) "has increased the vulnerability of agriculture and impoverished the human diet." This, in turn, implies a loss of genetic diversity needed for the future

This biodiversity is that it can guarantee that in case of pest or climatic changes, the chances of a variente or another to survive and resist greater.

An example of this was the famine- that struck Europe in the early nineteenth century because of a plague that could only be overcome with more resistant varieties.

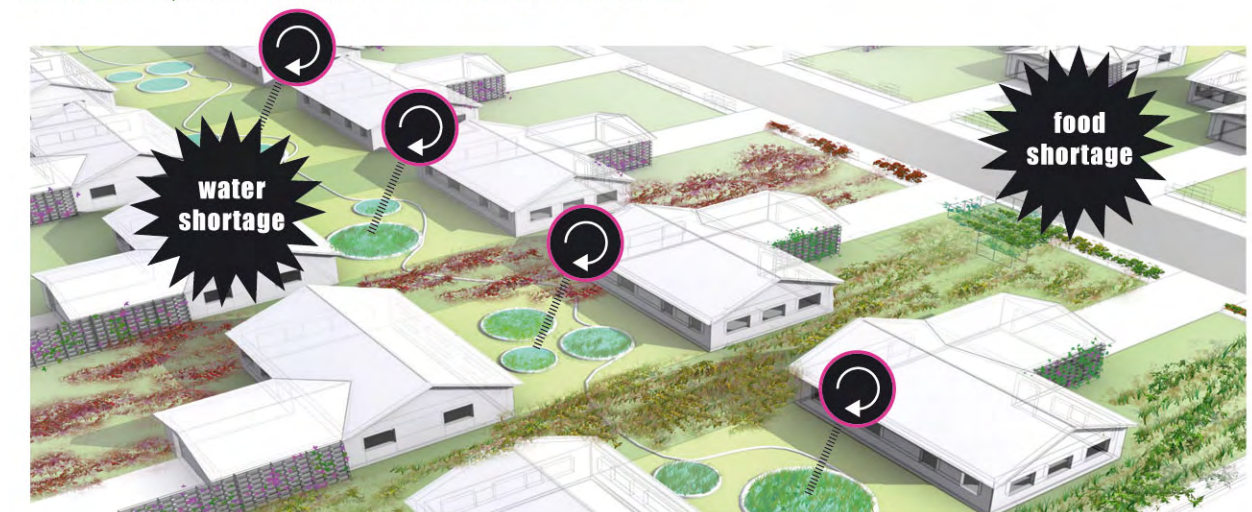
THE ROLE OF THE CONSUMER IS VERY IMPORTANT IN THE RECOVERY OF AGRICULTURAL BIODIVERSITY

Cause of the loss of many varieties for lack of commercial interest:

lower level of productivity and resistance
can not be transported over long distances

HOWEVER, THESE VARIETIES ARE OF INTEREST TO SELF CONSUMPTION OR LOCAL MARKET, WICHI AMPLIFIES THE GROWTH AND MAINTENANCE

water shortage
food shortage

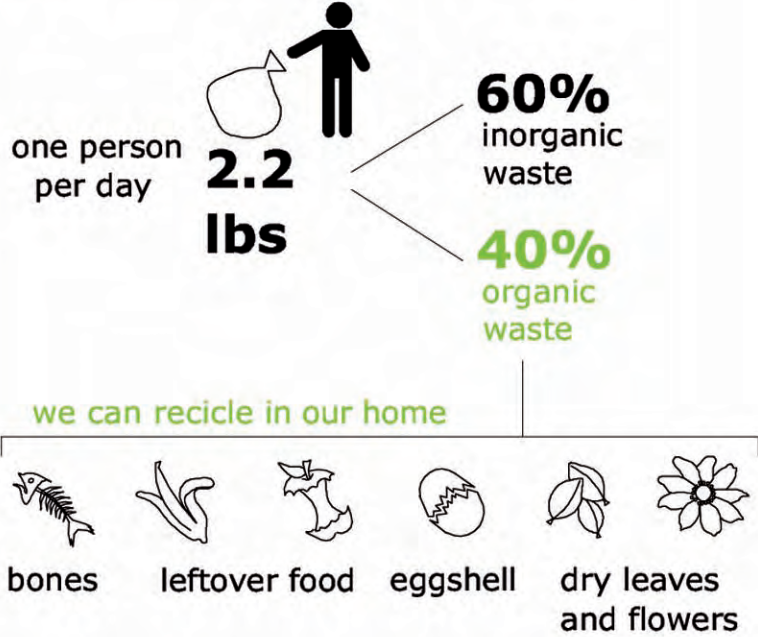


UNITED STATES SITUATION

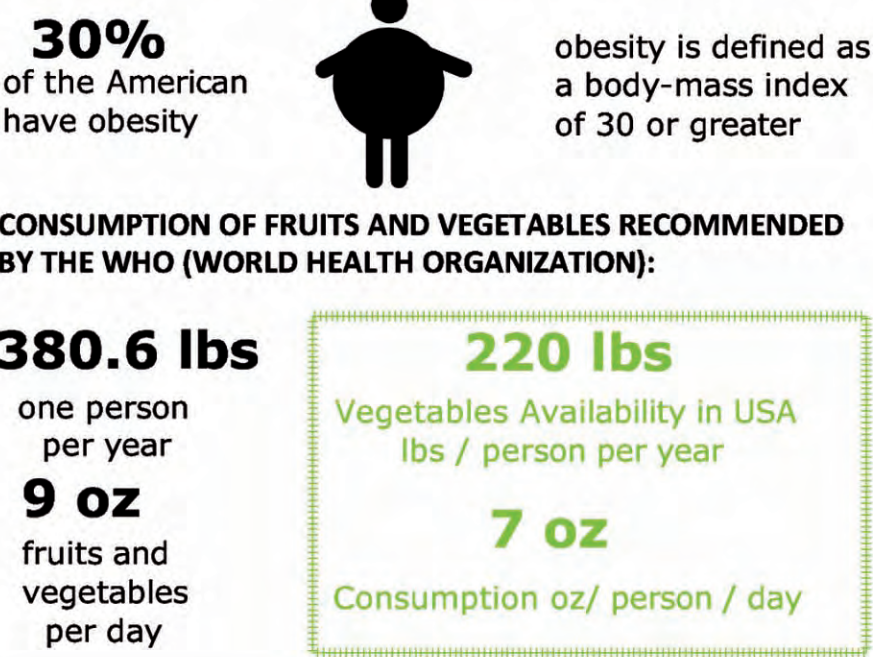
01 CONSUMPTION OF WATER IN A AMERICAN HOME



02 WASTE IN A AMERICAN HOME



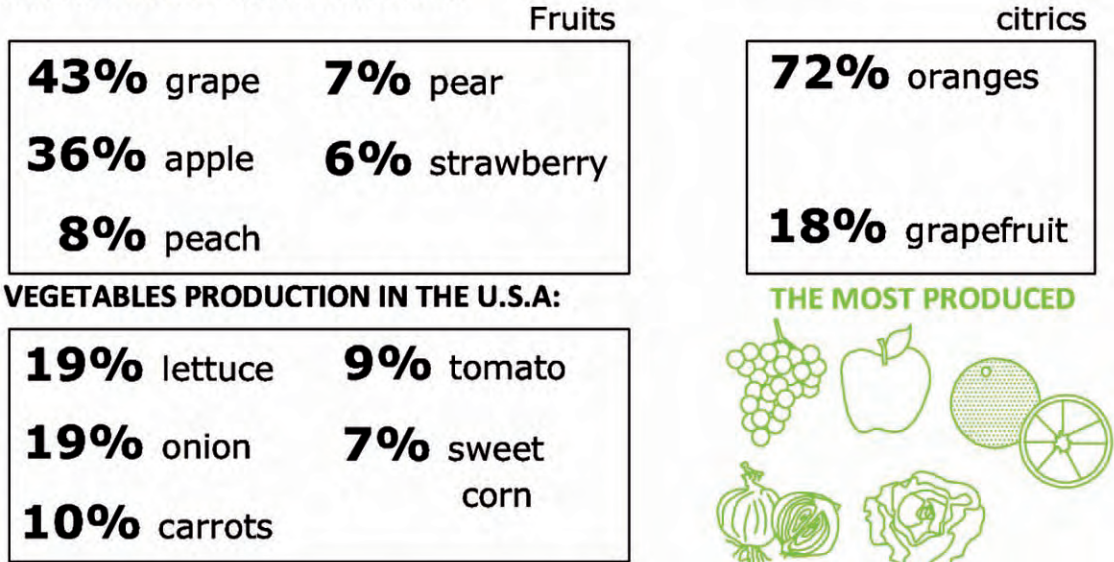
03 OBESITY PROBLEM IN THE UNITED STATES



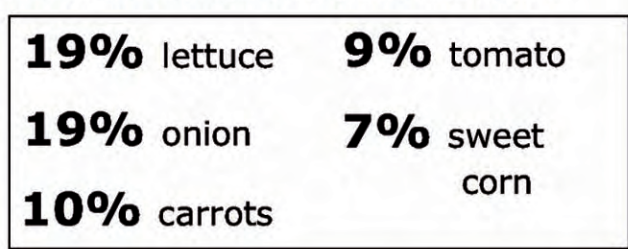
05 PRODUCTION AND IMPORT OF FRUITS AND VEGETABLES



FRUIT PRODUCTION IN THE U.S.A:



VEGETABLES PRODUCTION IN THE U.S.A:



IMPORTS OF FRUITS TO U.S.A:

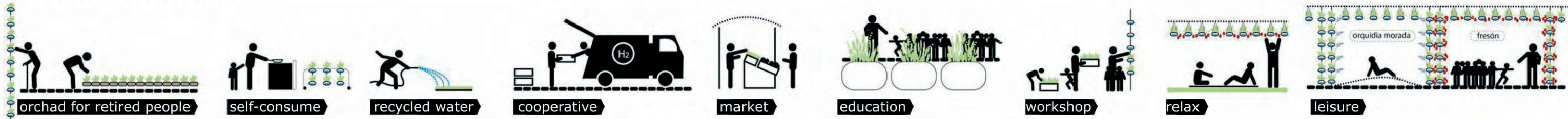
banana, melon, pineapple, mango, bananas, limes, lemons, avocados, oranges, mandarins and tangerines, pineapple, melon, papaya, watermelon, pears and blueberries

IMPORTS OF VEGETABLES TO U.S.A:

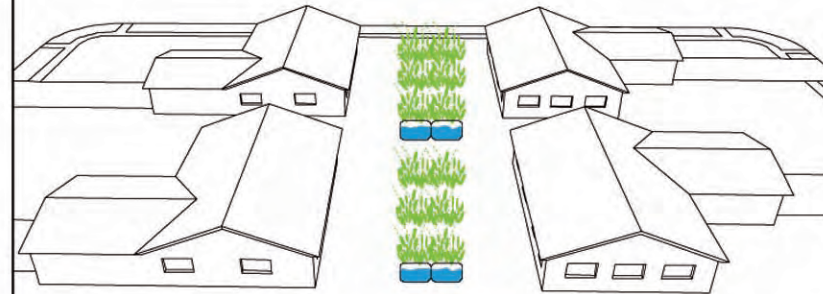
tomato, paprika and peppers, cucumbers and gherkins, potatoes, artichokes, onions, squash, sweet corn, asparagus, Brussels sprouts, cauliflower and spinach.

98% of America's food is from other countries

COMPATIBLE ACTIVITIES PROPOSAL



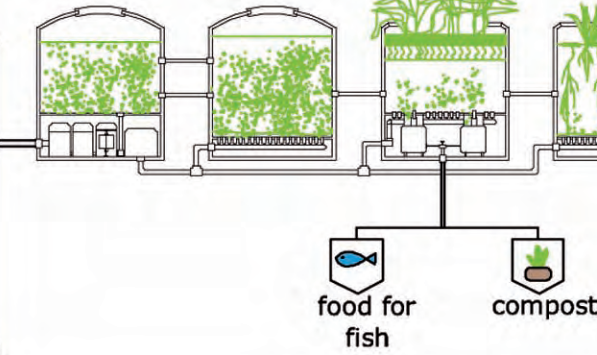
LIVING MACHINE 01



We propose that two houses share a living machine system to recycle black or gray water and reuse for domestic uses. In this way we get a significant reduction in water consumption, so the families save money and also they support with the environment and with our aim to get a sustainable society.

1 living machine x 2

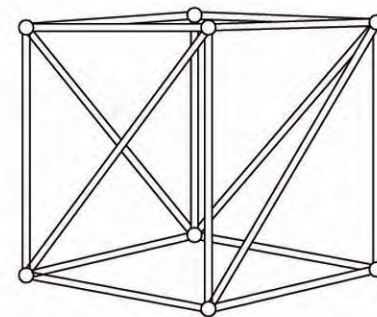
2 x



Housing tips

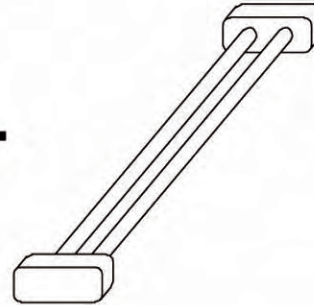
1 materials

scaffold structure



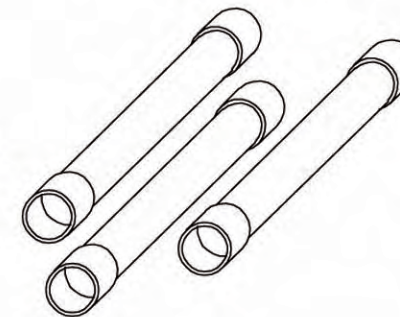
scaffold structure easy to assemble

luminaires



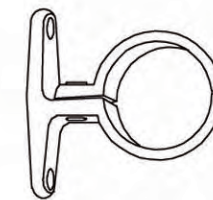
for increased crop yield and to illuminate the installation

Pvc pipes



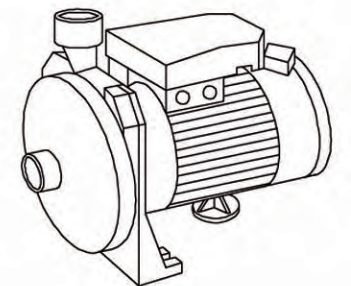
we should do holes equidistant in the pipes to put the plants. For an efficient operation of the installation the inclination should be 1 degree

pipe bracket



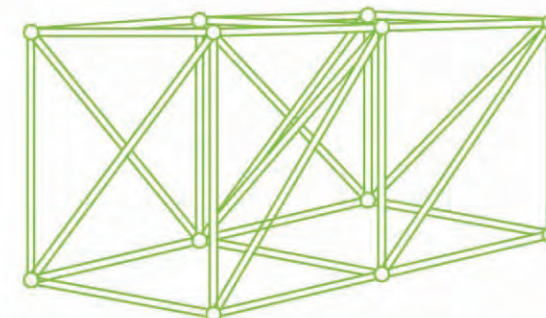
we will use to hold the pipes to the structure

water pump

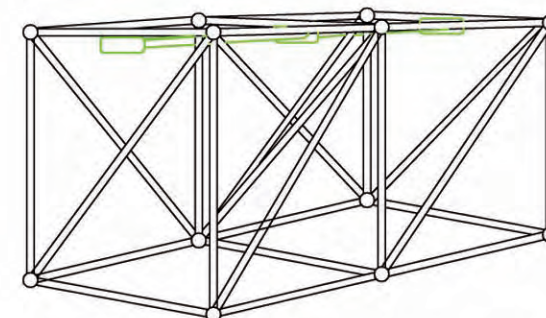


water pump pushes the water to reach all parts of the installation

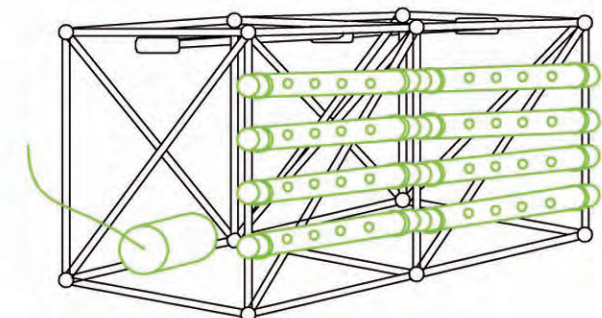
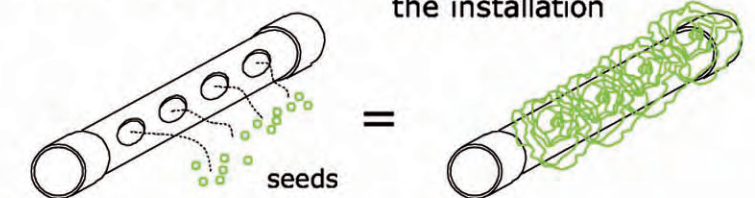
2 assembly



we assemble the scaffold structure and positioned as we like, so we can design the structure of many possible ways.

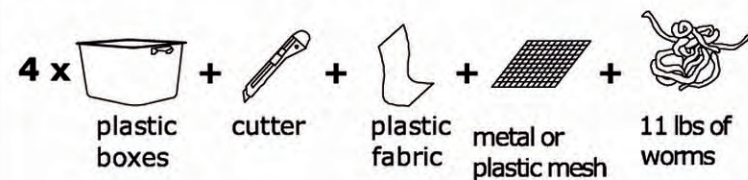


we put the luminaires in the structure

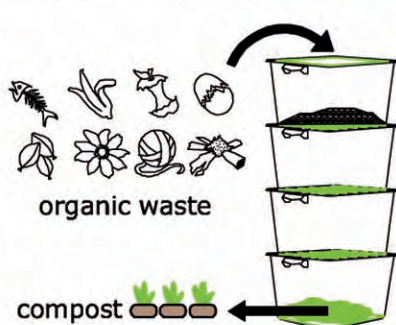


we should do holes in the pipes and then hold the pipes to the structure with the pipe brackets. Finally we connect the water pump with our hose faucet, in this way we will irrigate our kitchen garden

WORM-CULTURE 03



Families will receive an informative brochure explains how to create worm-culture at home and how to use it for recycling household organic waste and turn them into fertilizer for their gardens



construction stages

