

CULTURAL

URBAN AGRICULTURE

CUALTI:

(from Nahuatl language, which means "to give food or to feed").

Is the name given to a multidisciplinary collective conformed by students, mainly focused into urban agriculture promotion and involved with different kind of activities related to the responsible use of water, the organic and inorganic waste sorting, recycling, compost making, alternative ways of growing vegetable gardens (with less environmental impact) and the planning of self-sustainable communities.

Everything started with the idea of doing the substitution, in long term, of our daily consumption from industrial nourishment to the home grown products made with **organic** and **ecological** methods. From this initial concept, came up the idea to invite the city-urban people to engage within its vital **natural** world, which has been lost into our contemporary societies, being this the main cause of some depraved and non sustainable attitudes that let us notice how far we have lost consciousness in general. Noteworthy that in this behaviour specially we should point out the ignorance concerning the inproper water usage, the irresponsible environment exploitation, the poor information we have about where do we get our nourishment and where our waste ends up, amongst other topics.

The collective is looking forward to bring into the society (Mexican, in this particular case) the new ideas about the environmental protection and preservation. First approaching to families households and then into a bigger scale up to communities, within the ideal creation of a local market offering organic products and trade, opening the possibilities to enrich, for example, relationships between neighbours.



The project started with the construction of a greenhouse on a rooftop in a family house in Mexico City. At the end of its setting up, the independent production of the video "Despertar" (Awakening) was finished, giving us the achievement of participating and winning the third price into the **National Contest About The Environment and Climate Change Problematic** and the honorary mention in the Photography, Video and Art Festival **EL Arte es Un Viaje**, both happening in Mexico City in 2010.

Until now, the achievements mentioned above, plus two workshops of basics in urban agriculture, and a conferece had already took place. All of this becoming very important steps for the project itself and giving us the opportunity to keep spreading our knowledge to the people interested.



Frontal view of the house where we built the greenhouse.

Detailed description of each project:

BIO-INTENSIVE CROPS

Seeding

From many different ways to sow we are using two: seeding in nursery and direct seeding.

Nursery seeding:

This method is very used nowadays into diverse agricultural practices. It is very easy to take care and irrigate. For this purposes there a lots of possibilities to do recycling using containers and materials such as the ones that surround us every day. Like egg packaging, little plastic containers, etc. Once the plant has reached the third leaf in the seedling, the plant is transplanted into the flowerpot or bed where it will continue its growing process. This final step grind down the plant if it is not made with the proper care.



Nursery Seeding

Direct seeding:

This variant is probably the most common way to sow. We use this method for bigger size seeds, such as beans, sunflower, pumpkin and corn, amongst others. The main advantage is that there is no need to transplant the plant, so it will grow from the beginning to the end of its life in the same spot, until the harvest of it comes or the its natural life cycle is complete.

Maintenance and harvest

Generally, the plants maintenance is very simple, we just look for keeping them humid and with the nutrients needed in the soil. As we have a greenhouse, there are seasons when the heat causes dryness, therefore we put mulch for protecting the plants, plus the weekly composting that feed our plants from fresh nutrients made by our own produced compost.



The greenhouse helps the plants as a shelter for the winter frosts. This allows us to have two sowing and harvesting seasons along the year. For this reason we should keep studying and be in constant learning of new techniques to take care of our plants, as well as more knowledge about the procedures for the organic seeds that we use.



Compost

The compost is one of the most important elements in the urban agriculture, because our plants will use this nutritive element for their development and their fruits and products to be created with a high nutritional level.

The compost we prefer to use is the "hot compost" or fast compost. It consists in store all our organic waste from preferably vegetable source (garden and kitchen waste) into a one square meter box. The care of it does not go far than keep it wet, mixing the contents once in a week. In this way, up to four weeks approximately we obtain something similar to a soil with "forest" aroma.

We sift the compost to use the smaller pieces and keep the bigger size waste which has not yet finished its decompose process.



HYDROPONICS



We have installed a crops system that exchanges the soil we commonly use for agrolita (soil without nutrients) which its nutrients (potassium nitrate, magnesium sulphate, etc.) are added and controlled in doses by us. This plan is inspired with the Manhattan [Windowfarms](#) project idea*. We keep improving the method and hopefully we expect to obtain more production from it than from the soil crops.

All the assembly of this type of crops was made using plastic bottles, showing once more our compromise with the environment when recycling the bigger quantity of possible products.

P.E.T Recycling

The P.E.T is reused in the hydroponics crops. But it is a matter of fact that we get into our hands more and more quantity of this material everyday, more than we can reuse in a useful way. Therefore we started to separate this surplus on a daily basis and we dispose them in special containers located in the university campus.

Litter separation

The organic and inorganic waste sorting was already a common practice in the home where the greenhouse is located. But what we do now is to put the organic waste into containers giving them special care to decompose as we need, controlled. Besides we use it for the maintenance of the compost we do.

Water recollection

The soil crops are watered and the remaining of this are still collected on the bottom of the flowerpots for using it again.

We expect for the next rain season to install a rainwater recollection complete system for all the house, reducing a lot in this way the consumption and not wasting the one provided by SACM (City government water system)

Workshops and conferences

Giving workshops.

Two theoretical-practical workshops were given, where the main objective sought, apart from the urban agriculture promotion, was that the people could learn very simple methods of sow, nursery sowing, transplant, composting and also having exchange of ideas between the participants, which finally as a work team have given the project too much. Feedback is a very important and beneficial element into our society. Therefore we pursue a more rich learning process.



Conferences

A recent conference was given by us in The Luis Vives Insitute. We talked about the environmental situation of today and specifically Mexico City problematic, adding descriptions and notes of concepts such as permaculture, urban agriculture, local markets, Eco technologies. At the end we did a final proposition of solutions and a whole explanation of what are we doing together as a collective.

Collaboration with ecologists in Xochimilco

Since the beginning of the project we have had a close collaboration from **Vivarium S.C.**, a Civil Society that looks for the ecological rescue of the Chinampas productive area from Xochimilco District.

One of the more complicated tasks of the greenhouse construction was getting the ideal soil for the flowerpots and all the vegetable garden seeds. Thanks to their assistance, we learned diverse techniques of true ecology and environmental rescue, which is based upon Chinampa development.



“Two weeks later”
This is our partner’s
greenhouse in Xochimilco.

Lake Xochimilco is an ancient endorheic lake located in the Valley of Mexico, part of a series of lakes, which included the brackish Lake Texcoco, Lake Zumpango, and Lake Xaltocan and the fresh water Lake Chalco. These lakes were the home of many Mesoamerican cultures, including the Teotihuacanos, the Toltecs, and the Aztecs.

Due to its shallow waters and the freshwater springs that lined the south shore of the lake, Lake Xochimilco was the center of chinampa agriculture in the centuries leading up to the Spanish conquest of Mexico. This made the region a prime target for the expansionist Aztecs.

The Spaniards' destruction of the dams and sluice gates in the 1520s, as well as the sharp declines in the native population, led to the near abandonment of the chinampa gardens. The five lakes within the Valley of Mexico have now largely disappeared, drained to reduce flooding. Only the Xochimilco canals remain from the original Lake Xochimilco and even today, some chinamperos still work their chinampa gardens within the canals.

The word chinampa comes from the Nahuatl word chinamitl, meaning "square made of canes". Often referred to "floating gardens". Chinampa is a method of ancient Mesoamerican agriculture which uses small, rectangle-shaped areas of fertile arable land to grow crops on the shallow lake beds. Chinampas are separated by channels wide enough for a canoe to pass. These "islands" have very high crop yields with up to three crops a year. The primary chinampas crops were maize, beans, squash, amaranth, tomatoes, and chili peppers, although chinampas were also used to grow flowers. It is estimated that food provided by chinampas made up one-half to two-thirds of the food consumed by the city of Tenochtitlán (Mexico City). Chinampas are fertilized using lake sediments as well as horse and cow excrement.**



Vivarium S.C. workland in Xochimilco

Collaboration with projects abroad

While we still work in Mexico, we have managed to get in touch with other people in other countries, such as Germany, France and Scotland.

The type of work and collaboration we had depended on each project we contacted. It has been from volunteering and further more, even to help them in the planning of the project.

Nevertheless, we have to say that this process helped us to understand and see what people in different places around the globe is doing. Giving us experience and courage to continue and to pursue our own objectives.

Now we have more friends abroad and we are trying to keep in touch with them. And one day, perhaps we could work on something together.

We still open to explore more, meet more people and network harder.





“Miguel’s Jarden”, Aubagne, south France.



Altmark community, Saxony Anhalt, Germany.



“Apple Day”, Monimail tower community. Fife, Scotland.



“Trash tour”, Freegan community.
New York City, USA.***

Cultural activities and promotion

To achieve the collective project promotion and giving it a creative and educative aspect, we have organized several meetings.

To reinforce this measures we have now on the web a Facebook profile, a project blog and very recently, we just acquired a website which stills very precarious due the work we still need to do on it.

All of this networks we created have various links to websites and pages that are doing similar projects to ours in a global way. We also uploaded a photo gallery, videos and more information about us.

As we already mentioned, we are looking to make up into the society. We consider that a big part of the project needs to take place in open spaces and by free costs situations where in permanent way, we could always share and show our ideas, aiming to the main objective of doing a self sustainable community in the city.

Future plans year 2011 so far...

- **Primary next Cualti project:** We are considering the building of a **second greenhouse** in one of the collaborators house, once we have collected and got the economic resources. Which are a matter of fact to develop optimum projects.
- **Mushrooms cultivation** in straw: Some members of the collective know the techniques of mushroom farming. We are in the process of getting the mycellium. So this will be implemented soon.
- **Worm compost:** This have not yet being set because we still don't have the proper system. But we already get in touch with Phd. Omar Arellano from the Biomedical Institute in UNAM (Autonomous National Mexico University, who amongst all his activities, does the worm farming and self sustainable projects planning****.
- **Snail farming:** This is something we expect to have working in middle 2011. This project we have not yet started because of insufficient budget.
- **Creation of the Local market:** This is a long term idea in which we expect to make up the society into this project.
- **Conferences:** We are looking to integrate youth, therefore we have been approaching to educative institutions that are also pointing to promote our ideas or similar ones.

Who we are

Alejandro Chellet

Mexico City, 1990

Co-founder of the project. He has a strong art background and had worked mainly in film industry. Now he is very much interested in independent documentary and permaculture. He also has been travelling since January 2010 doing research and documenting alternative communal living projects.

Santiago Rubio

Mexico City, 1988

Co-founder of the project. currently studying international bussiness and leading the main project tasks in Mexico. He has attended to several permaculture workshops and courses. Recently workked for the Enviromental Department of Mexico City government.

Juan Espinasa

Mexico City, 1990

Trustee, he has been supporting the project in every way possible. He is sutding genetic research at the moment in the Biomedical Institute in UNAM (Autonomous National Mexico University).

Diego Barjau

Mexico City, 1990

trustworthy collaborator of the project. He studying right now his bachelor in Biology, UNAM.

Other Collaborators

María Eugenia Chellet

Gerardo Rubio

Rodrigo Treviño

Emiliano Rocha

Florencia Pérez Vela

Links and references.

CUALTI MEXICO OFICIAL WEBSITE

<http://cualtimexico.org>

CUALTI MÉXICO OFICIAL BLOG

<http://cualtimexico.blogspot.com>

CUALTI MÉXICO as a name for FACEBOOK PROFILE

* Window Farms Project <http://www.windowfarms.org/>

** Lake Xochimilco and Chinampa definition from WIKIPEDIA,
<http://en.wikipedia.org/wiki/Chinampa> and http://en.wikipedia.org/wiki/Lake_Xochimilco

*** Freeganism <http://freegan.info/>

**** Omar Arellano's Worm Project <http://lombricompostaenaccion.blogspot.com>

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Cualti México Collective

Contact info

cualti.mexico@gmail.com

+52 (55) 27893812

+52 (55) 55632273

Prol. Correggio Sur # 3,
Col. San Juan, Delegación Benito Juárez,
Mexico D.F.

2011