

ABSTRACT

This master thesis project in architecture is about studying and understanding the slum areas in the city of Guayaquil in Ecuador, and analyzing their problems but also their possibilities. Further, it is about proposing a centre for knowledge and culture, in one of the by poverty worst affected slum areas of Guayaquil, Isla Trinitaria. The aim with the centre, is to generate new possibilities for people to get out of poverty.

The architectural proposal is a building made of bamboo, because it is a cheap and available local material that works very well in the hot and humid climate of Guayaquil, and where earthquakes often appear. The proposal has space for alternative education and to develop professional skills. There is also space dedicated to recreation and cultural activities, since the cultural heritage is strongly rooted and a common joy among the inhabitants of Isla Trinitaria.

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IN THE CITY OF GUAYAQUIL, ECUADOR, ABOUT 65 % OF THE POPULATION LIVE IN POVERTY IN SLUM AREAS.

Every year many people move to Guayaquil from other parts of the country with the hopes of finding a good job in this big city with nearly 3 million inhabitants. Unfortunately, it is not easy and most of them end up in poverty in the many slums of the city. The everyday life in the slum is complicated and difficult, and even if those who live there work very hard it is almost impossible to get out of poverty, due to the way that Ecuador looks today.

OBJECTIVES

This thesis is about studying and understanding the slum areas in the city of Guayaquil in Ecuador, and analyzing their problems but also their possibilities. Further, the aim is to come up with a proposal for a centre for knowledge and culture in one of the worst affected slum areas of Guayaquil, Isla Trinitaria.

There are two fundamental ideas with a centre for knowledge and culture in the slum. First of all it is to provide tools to people that have very little, tools that can enable them to help

themselves improving their economical situation. Second of all it is that the identities and self esteem of the inhabitants will be strengthen as they will be given space for cultural activities. My intention is that in the long run people in this neighbourhood will be helped out of poverty, and the development of Isla Trinitaria will take a step in the right direction.

The problem of poverty in Ecuador is too big and complex to deal with in an architectural master thesis project; it is a problem that must be solved on a national and political level. However, I do believe that to start working locally, and with the people, we could get great results! That is why an important part of this thesis is about getting to know the beneficiaries and the context that I will be working in. How does it look today, and how is their everyday life, what is needed and how can it be possible? How do these people see on their own future?

METHOD

The process of this project has been divided into two phases. The first phase was all about travelling to Guayaquil as an exchange student during three months and to get to know the context that I would be working in; Ecuador and its culture, history, nature, economy and people, and Guayaquil and the different parts of the city - and its many slum areas. Finally, after visiting the slums find out in which one I wanted to continue to develop my project. The second phase has been about developing the project, and create an architectural respond to the program I had established before.

This project has been a great opportunity for me to deal with issues that I personally think are very important, namely helping and working in third world countries. In the future, I hope that I will be able to continue doing that somehow, as a professional occupation or as a hobby, and working with this project has given me a hint about how it works.

Coming from Sweden where (most of) the people are equal and we have a developed social safety net, I realized how important it is to really know the context you are working in. When I first came to Ecuador in April 2012, I found myself in a totally new world, and in the beginning I was exhausted from all the impressions. I realized that to even consider proposing an architectural project from the other side of the planet, without having experienced the true atmosphere of this place with its hot and humid climate, inhabitants, culture and traditions etc, would be impossible. I could not imagine how it would be until I really got there. People were in general nice and friendly to me, but it was painful to see so much pollution in Guayaquil where cars always are prioritized, and so much poverty and a clear segregation between rich and

poor.

One of the many unfortunate consequences of poverty is criminality and danger, which has led to that those who can afford it build high walls or put up electrical fences around their houses or neighbourhoods to avoid burglars and uninvited guests. Guayaquil is the most dangerous city in Ecuador, highly due to the poverty, the lack of good public education and health care, and the easy access to drugs. Everyone in the entire city, rich as poor, will be a winner if the poor people in the slums will no longer be neglected and be better provided with opportunities of creating a better life for themselves, with for instance good education. Good public services should exist in all the parts of the city, so that the inhabitants understands that they are all equal and have the same rights to have a good life. No matter how rich or poor they were when they were born. Could this be a reality in Guayaquil?

In the very south of Guayaquil, the suburb Isla Trinitaria appears as the bad conscious of the city. It truly is the dirty side of town, but not the only one, and I was strongly advised many times not to go there. If people only knew that their

warnings made me want to go there even more! I have from the beginning in the process of this project been very driven by the challenge of working in a hopeless area, because clearly those areas are the ones who need to be given most attention to.

I left Guayaquil in July 2012 with certain optimism. Because in spite of all the problems there is today, I see so much potential for this city to become a wonderful place on earth. It will probably take time and there need to be many people involved and actions must be done on many different levels.

My project is an example of what could be done on one level, and I hope that you will enjoy reading about it!



PART 1

BACKGROUND -
ECUADOR, GUAYAQUIL
AND SLUMS

ON THE WAY FROM QUITO TO
MISHUALLI, JUNE 2012



ECUADOR IN THE WORLD

00°9'S 78°21'W

Timezone: UTC/GMT - 5 hours,
Galapagos Islands UTC/GMT - 6

Land area:
total: 283,561 sq km
land: 276,841 sq km
water: 6,720 sq km

Population: 15,007,343 (July 2011)
Rural population: 33% of total population (2010)
Urban Population: 67% of total population (2010)
Rate of urbanization: 2% annual rate of change (2010-15)

Official language: Spanish
President: Rafael Correa (since 2007)
National Day: 10th of August

Capital: Quito 2 million inhabitants
Biggest city: Guayaquil 3 million inhabitants

Currency: US Dollars
Ecuadorian GDP per capita: \$8 300 (2011)
country comparison to the world: 120

Sweden GDP per capita: \$40 600 (2011)

Labor force :
Agriculture: 27.6%
Industry: 18.8%
Services: 53.6% (2010)

Unemployment: 4,2 % (2011)

Population below poverty line: 28.6% (December 2011)

Alfabetism: 9,1 % (2001)

Ecuador is a country situated right on the Equator in the north western part of South-America. Its area corresponds to about 60 % of the area of Sweden. Ecuador is a land with many contrasts, as the stunning landscape with tropical beaches, dramatically high mountains and forever green rainforests. Not to forget the Galapagos Islands with species of animals and plants that are endemic - not to be found anywhere else in the world. Ecuador also has many cultural contrasts, the land has for many years been influenced by different cultures. It is widely known that a person from the highland, La Sierra, is very different in its way of behaving and speaking than a person from Guayaquil, La Costa, or not to mention a person from the jungle, El Oriente, which sometimes lives exactly the same way that his ancestors did many hundred years ago.

However, in spite of the richness of the Ecuadorian nature, 28.6% of the population was living below the poverty line in December 2011. The poverty and the uneven distribution of income in the country is one of the biggest problems there. In the 1960s, oil was found deep in the Ecuadorian jungle, and the

consequences has not only been good - foreign investors has benefitted more than the native people who are living in the forest, and who has had their land exploited and lakes polluted. This could also be compared to the colonial era, when Ecuador was a colony under Spain between the years of 1531 and 1822. Back then, Spanish conquerors made profit of the richness of the land, and left nothing for the native Indian population. Today, there are still huge differences in income among the people in Ecuador and poverty rates are in general higher for indigenous people, afro-descendants and people living in the rural areas.

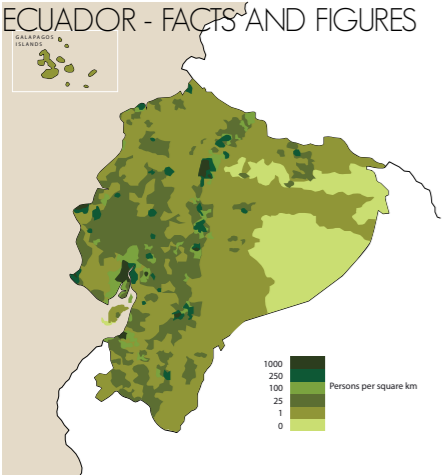
The climate of Ecuador depends much on the altitude, but generally there is a dry season and a rainy season.

Quite frequent are earthquakes and volcanic activity and flooding due to heavy rain during the rainy season. Every 5-10-20 years or so, the tropical storm El Nino is causing big damage mostly along the coast of Ecuador and Peru. People loose their homes, and farmers and fishermen get much of their products destroyed. Other regions also get affected by the heavy rain, causing devastating landslides and river

overflows.

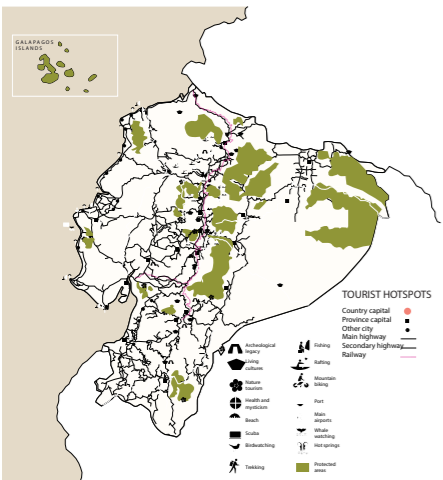
Unfortunately, Ecuador has suffered many manmade disasters too through the years like political instability and corrupt regimes, and pollution of water in lakes and floods and ecologically sensitive areas in the Amazonian rainforest has taken a lot of damage because of the oil industry.

ECUADOR - FACTS AND FIGURES

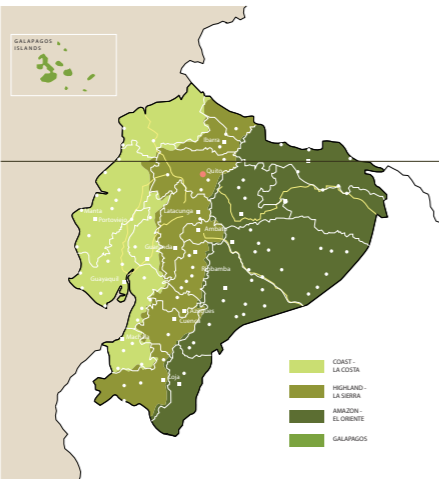


ECUADOR - POPULATION AND DENSITY
Ecuador has about 13,5 million inhabitants. Around 3 million live in Guayaquil and 2 million in Quito. Most dense is it in Guayas province or in the highlands. In the Amazonia there is in the opposite few people living.

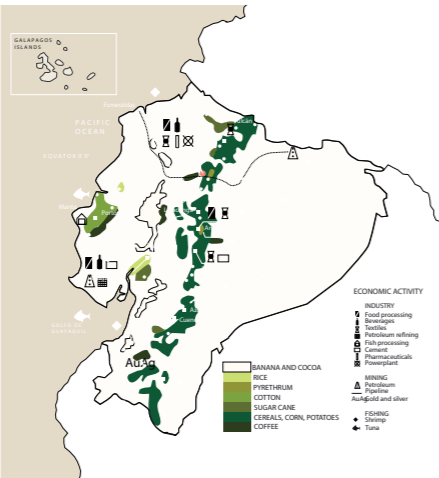
Ecuador is ethnically diverse. The breakdown of the population is as follows: mestizo(mixed blood, 65%), Amerindians (25%), Euro-Americans (6%), Afro-Americans (3%), and Oriental (1%). Further, Ecuador's Amerindians are divided into 12 distinct indigenous nationalities.



ECUADOR - TOURIST HOTSPOTS
Every year about many visitors come to Ecuador from all over the world. Most of hem go to Galapagos Islands, to Quito, Cuenca and the highlands. Many also visit the rainforest and practice trekking and extreme sports.

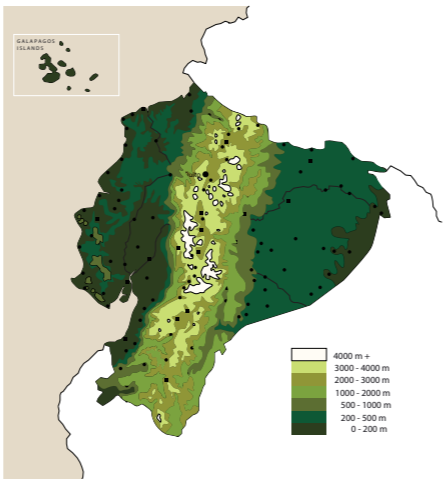


ECUADOR - GEOGRAPHY
Ecuador has about four very differents kinds of landscapes. The contry is divided by the Andean mountains, east of the Andes is the Amazonian rainforest and west of the Andes is a strip of lowland and coast. The Galapagos Islands, situated 960 km from the ecuadorian coast, are volcanic and are geologically quite new.



ECUADOR - ECONOMY
Most of the economy is related to the export of oil and petroleum. Also bananas, cooffee and cacao beans, shrimp and tuna, and sugar cane are big exports. The tourists that come every year are also very important to the economy of the country.

The tropical climate allows almost anything to grow in Ecuador, and for a long period of time the country had one of the biggest exports of banana in the world.



ECUADOR - TYPOGRAPHY
Ecuador has a quite dramatic typography. The Andean mountains that divide the country goes up to over 6000 meters above sea level, however not far away by the coast and in the Amazonia the level is only zero to a few hundred meters above sea level.



ECUADOR - CLIMATE
The climate is depending much on the altitude, but generally there is a dry season and a wet season.

WORLD ECUADOR

2011: WORLD POPULATION REACHES 7 BILLION
2011: ARAB SPRING
2001: 9/11 WTC ATTACK
1992-95: BOSNIA WAR
1989: FALL OF BERLIN WALL AND COLLAPSE OF SOVIET BLOC IN EUROPE
1969: FIRST MAN ON THE MOON
1955-75: VIETNAM WAR
1954: CUBAN REVOLUTION
1949: NATO CREATED
1939-1945: WORLD WAR 2
1936 - 1939: SPANISH CIVIL WAR
1929: WALL STREET CRASH, GREAT DEPRESSION
1917: RUSSIAN REVOLUTION
1914-1918: WORLD WAR 1
19TH - 20TH CENTURIES: MANY COLONIZED COUNTRIES AROUND THE WORLD CLAIMS AND WINS BACK THEIR INDEPENDENCE

1804: WORLD POPULATION REACHES 1 BILLION
1789 - 1799: FRENCH REVOLUTION
1572: THE LAST INCA LEADER TUPAK AMARU IS EXECUTED IN CUZCO, PERU, BY SPANISH CONQUISTADORES
1543: COPERNICUS DISCOVERS THAT THE SUN IS IN THE CENTER OF ALL PLANETS
1492: CHRISTOPHER COLUMBUS SAILS TO AMERICA

476: END OF ROMAN EMPIRE
60 000 BC: FIRST HUMAN SETTLEMENTS IN THE WORLD (AFRICA)

DEC 2011: 28,6 % OF THE POPULATION LIVES BELOW THE POVERTY LINE
2007-PRESENT: RAFAEL CORREA PRESIDENT OF ECUADOR
2003: 40% OF THE POPULATION LIVES BELOW THE POVERTY LINE*
2001: DOLLARES INSTEAD OF SUCRE
1999: FINANCIAL CRISIS
1999: CUENCA ON UNESCO WORLD HERITAGE LIST
1997-1998: EL NIÑO WEATHER PHENOMENA, MORE THAN 2000 DEATHS
3 JUN 1828 - 26 OCT 1998: ECUADORIAN - PERUVIAN TERRITORIAL DISPUTE

1982-83: EL NIÑO WEATHER PHENOMENA
1978: QUITO ON UNESCO WORLD HERITAGE LIST
1972-79: MILITARY GOVERNMENTS

1967: OIL FOUND IN AMAZONIAN ECUADOR

1941: ECUADORIAN - PERUVIAN WAR



1860: THE FLAG OF ECUADOR, AS WE KNOW IT TODAY, IS CREATED.

1830: (SHORTLY AFTER) ECUADOR IS INDEPENDENT FROM GRAN COLOMBIA
1830: ECUADOR IS IN UNION WITH GRAN COLOMBIA
1822: ECUADOR BECOMES INDEPENDENT FROM SPAIN.



1538: GUAYAQUIL FOUNDED
1531: ECUADOR BECOMES A SPANISH COLONY

1463: ECUADOR BECOMES A PART OF THE INCA EMPIRE

11TH CENTURY: QUITO FOUNDED

MANY DIFFERENT CIVILIZATIONS IN ECUADOR - VALDIVIA, MACHALILLA, QUITUS, CAÑARI, ETC

16 000 BC - FIRST HUMAN SETTLEMENTS IN ECUADOR

A BRIEF HISTORY OF ECUADOR

About 18000 years ago, Ecuador was probably inhabited for the first time. Soon there were many different tribes of native Indians living in what today is Ecuador and its surrounding land areas, and there were often conflicts. In the 11th century, the city of Quito was founded by one of the tribes. In 1463, after many battles, the country became a part of the Inca Empire, coming from where Peru is today. However, in 1431 Ecuador was taken over by Spanish colonists and the Inca Empire was brutally torn down.

In 1822, after 400 years of being a Spanish colony, Ecuador got its independence. In 1830 the country was during a short period of time in a union with Grancolombia. After the independence of Grancolombia, Ecuadorian history was affected by political revolutions and territorial disputes with Peru. Oil was found in the 1960s and the economy of Ecuador got very dependent on the oil market. In 1999 there was a big financial crisis in the country and after that about 40% of the population lived below the poverty line. In 2002 Ecuador switched currency to US dollars, which has helped the economy at least to some degree. Today Rafael Correa is president and he has managed to reduce the poverty during the latest years but there is still a lot to be done.



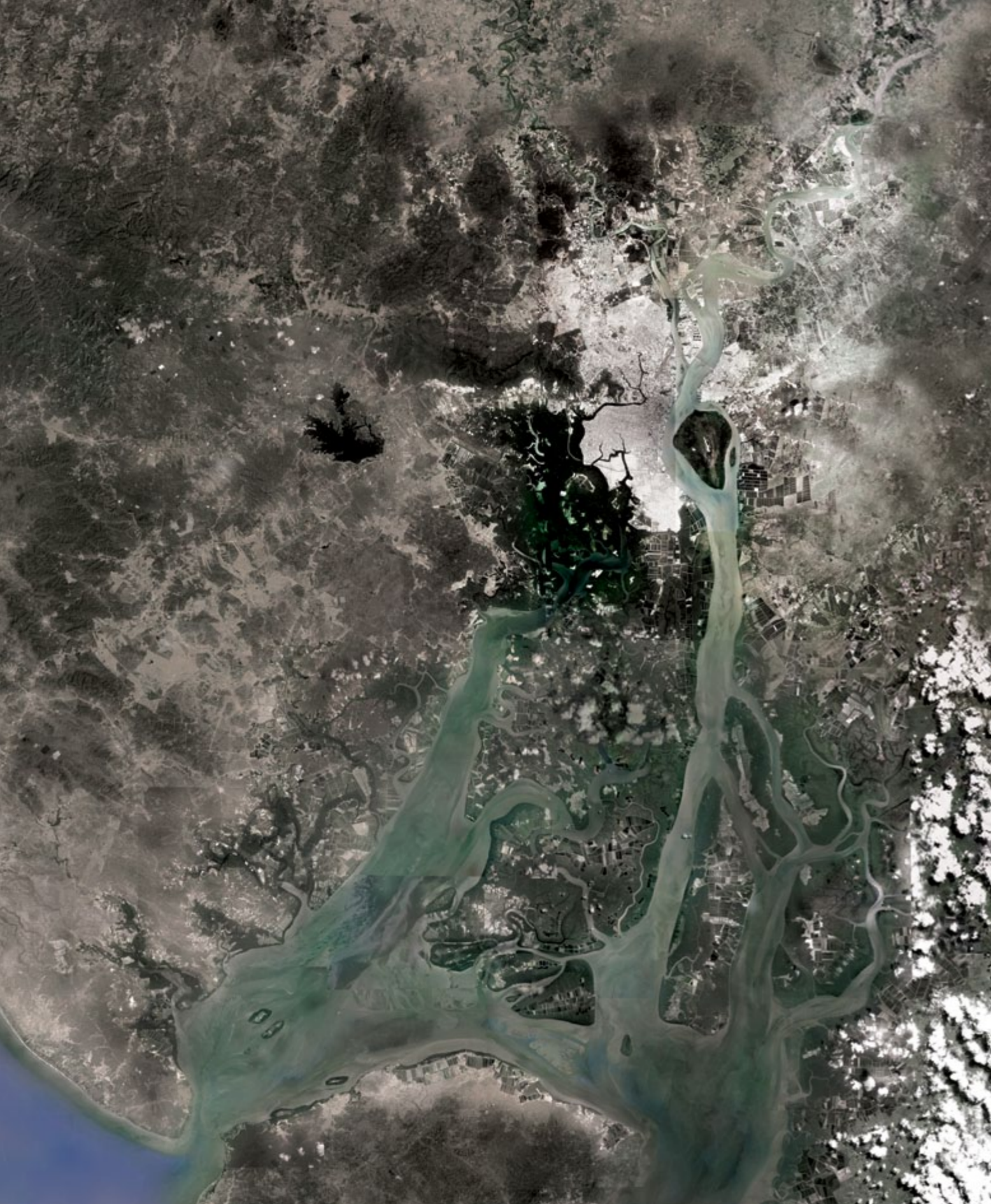
LAS PENAS

MALECON 2000

GUAYAS RIVER

AVENIDA VICENTE ROCAFUERTE

ISLA TRINITARIA



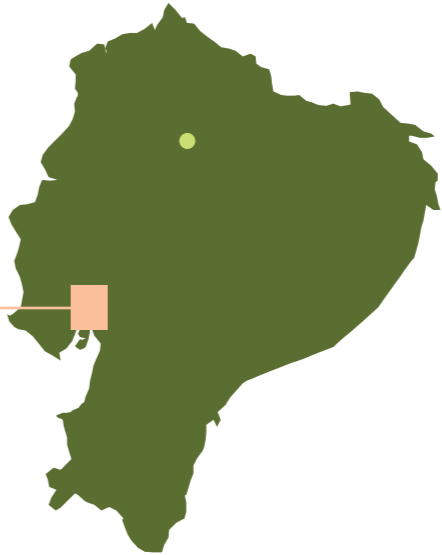
Original name: Santiago de Guayaquil
Nickname: La Perla del Pacífico

Province: Guayas
Canton: Guayaquil
Mayor: Jaime Nebot

Area:
• Total 133.01 sq m (344.5 km²)
• Land 122.17 sq m (316.42 km²)
• Water 10.84 sq m (28.08 km²)

Population (2009)
• Total 2,526,927
• Density 19,547.40/sq m(7,547.16/km²)

Elevation: 4 m - 250 m
Average rainfall: 917 mm/year
Mean humidity in average year: 75,7%
(70% Dec, 81 % Fev)



Guayaquil was founded by Spanish colonists in 1538 on the western bank of the Guayas River. The river flows into the Pacific Ocean at the Gulf of Guayaquil. The whole area was originally swamplands with rich mangrove vegetation, and today most of that is gone in the urbanized area.

Guayaquil is the biggest city of Ecuador with a population of 3 million inhabitants. It has the most important and biggest port and the city is today the

economical and industrial center of Ecuador. Here are important industries and headquarters for business companies.

Poverty and segregation is today a big problem in Guayaquil. The city is growing fast, as the slums in the urban outskirts are constantly increasing.

During the last 15 years, mayors of Guayaquil has had some projects for cleaning up the city and also to try to put its name on the map and make the city attractive for tourists - the big promenade Malecon 2000 is one example. Some improvements has been shown, but still Guayaquil has big issues of poverty, danger and segregation.

Guayaquil has a tropical savanna climate, with an average temperature of 30°C. Between January and April the climate is hot and humid with heavy rainfall, especially during El Niño years when it increases dramatically and severe flooding usually occurs. Between May and December is the dry and cooler season.

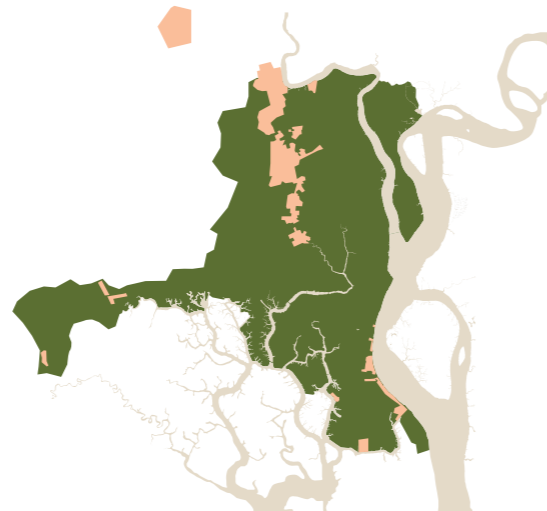


GUAYAQUIL - LAND USE

INFRASTRUCTURE
MAIN ROADS



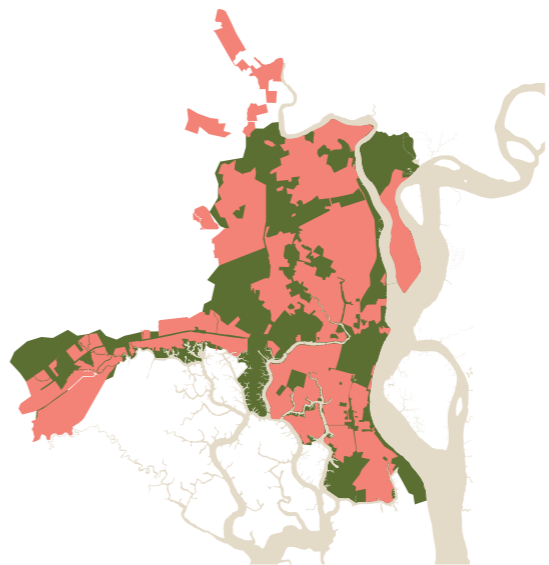
INDUSTRIAL AREAS



GREEN AREAS



DWELLINGS



BUSINESS

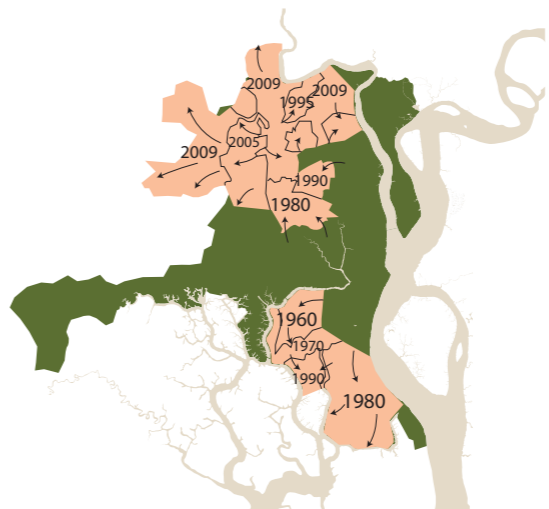


SLUM AREAS 2012

65 % OF THE POPULATION IN
GUAYAQUIL ARE LIVING IN SLUM SET-
TLEMENTS

ILLEGAL OCCUPATION OF LAND -
INVASIONES - FIRST APPEARED IN THE
SOUTHERN PART OF
GUAYAQUIL (1960S)

TODAY INVASIONES
APPEAR, VERY FAST, IN THE HILLY
LANDSCAPE IN THE NORTH
WESTERN PART OF THE CITY











FINDING AND
DEFINING MY SITE

-

VISITING THE SLUMS OF
GUAYAQUIL

Mapasingue

Guasmo

Opposite:
this image concludes the different types of slum areas
in Guayaquil - on the swamplands in the south and on
the hills in the north.



I had the privilege to join the organizations Hogar de Cristo and Accion Solidaria when they were working in the slum areas of Guayaquil. Going there alone would not be an alternative, since I had been strongly recommended by practically everyone that I met to stay away from the slums and all the danger that could happen to me there. Especially since I looked like a gringa!*

In the beginning of my study trip to Guayaquil, it was very important to get to know the city well and in particular the slum areas. Visiting the different slums would give me an impression of where it should be needed most to develop a project. Although this is only a school project, I wanted to think that maybe, if the timing is good and I will get to know the right people, I could make it happen. Maybe I could contribute to create a better everyday life for the people living there.

The slums of Guayaquil are all in a poor state and the people living there have often social problems or problems with drugs or alcohol. But I realized quite soon, after having visited some of the neighbourhoods and talking to professionals at the organizations and

at MIDUVI, that not all of them are the same. A mayor difference is that the slums in the south of Guayaquil are older and more established, also considered more dangerous, and the ones in the north western part on the hills of Monte Sinai are brand new and constantly growing in a rapid speed in this very moment as we speak. Many of the people moving to the north west are from a new generation, they are the children of the people from the south who are trying to find a better and safer place to live in and for their families to grow.

I couldn't help but wonder - will the history repeat itself? In the future, will the neighbourhoods in the north be as problematic and dangerous as they are today in the south, and will people move elsewhere, to new slums? The goal should be to have sustainable solutions for housing and public facilities in these areas - in all areas - so that people want to stay and invest in their neighbourhoods and make it a common joy and responsibility.

Following are some images I have taken during the visits to the slums. Please see appendix 1 for more images!

Opposite:
The white van of Hogar de Cristo. People that wanted to apply for a subsidised (?) bamboo house made by HC. needed to prove thier state of poverty first. Me and my student assistant Enrique joined them as they were making home visits to applicants. April 2012.

*a gringa or a gringo is an american tourist, and the name is because the dollar bill is green



NORTH

ILLEGAL LANDDEALERS THAT OCCUPY THE LAND THAT BELONGS TO THE MUNICIPALITY/GOVERNMENT AND SELL IT

LACK OF PUBLIC SERVICES - ROADS, STREETLIGHTS, WATER,PUBLIC SPACES (PARKS ETC)

BAD PUBLIC EDUCATION AND PUBLIC HEALTH CARE

SCHOOLS (NEAR) AND PLACES WHERE KIDS CAN PLAY IN SAFETY

LANDSLIDES

VIOLENCE

POVERTY

INSECURE FUTURE - LAND IS SUPPOSE TO BE FOR AGRICULTURE, RISK OF RELOCATION (CIUDAD VICTORIA EXAMPLE OF NEW NEIGHBOURHOOD THAT WILL HOUSE RELOCATED PEOPLE)



SOUTH

DRUGS, DRUGDEALERS AND ALCOHOL

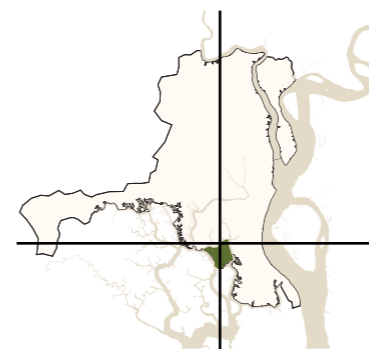
VIOLENCE

GANGS ON THE STREETS CAUSING TROUBLE

POVERTY - DIFFICULT TO GET A JOB (RACISM)

LACK OF PUBLIC SERVICES - ROADS, STREETLIGHTS, WATER, PUBLIC SPACES (PARKS ETC)

BAD PUBLIC EDUCATION AND PUBLIC HEALTH CARE
SCHOOLS (NEAR) AND PLACES WHERE KIDS CAN PLAY IN SAFETY
FLOODING



The area I ended up with to continue my work is situated the northern tip of Isla Trinitaria in the zone Independencia. This is one of the most torn down and problematic areas of the island. During my visits to the slums of Guayaquil I particularly felt that this is where I should develop my project because this area really needs to be improved.

As mentioned before, the areas in the south are older and more established slums. Although it is important to deal with the growth of the city in the north, the areas in the south should not be forgotten. There must be a strategy for making these places better to live in. What we see in the south today will probably be what we will see in the north in twenty years from now.

Working in the south is also relevant because of the estuary. Before this was urbanized, it was all green mangrove forests. Today, only very little forest is left where the urbanization has taken over, and even though it now is forbidden to cut down mangrove trees, people do it anyway because of the good building material that it is. The pollution in the water and the cutting down of mangrove trees has affected the whole ecosystem in the estuary in a

very negative way.

With the very kind help from the organization Accion Solidaria I got to visit Isla Trinitaria many times and they put me in contact with important key persons, such as informal leaders of the community. Thanks to them, I have managed to get a really good base for my project. I have found out that the biggest issues in this specific area often are socially related. Many (mostly kids) do or deal with drugs, and many do not go to school or finish school. Teenage pregnancy is a big problem, such as violence and killings. In addition to that we have the lack of public services - health care and education, roads, street lights, water. No public spaces (like parks, open squares, etc), and if there was they probably would be occupied by a certain group (squatters or drug dealers).

My site is a piece of relatively "new" land situated on the northern tip of Isla Trinitaria. Here are some last remnants of mangrove forest, and I shortly after taking the decision found out that the municipality have some plans for the development of this area. Perhaps we could help each other?



TELLING THE STORY ABOUT ISLA TRINITARIA

ISLA TRINITARIA

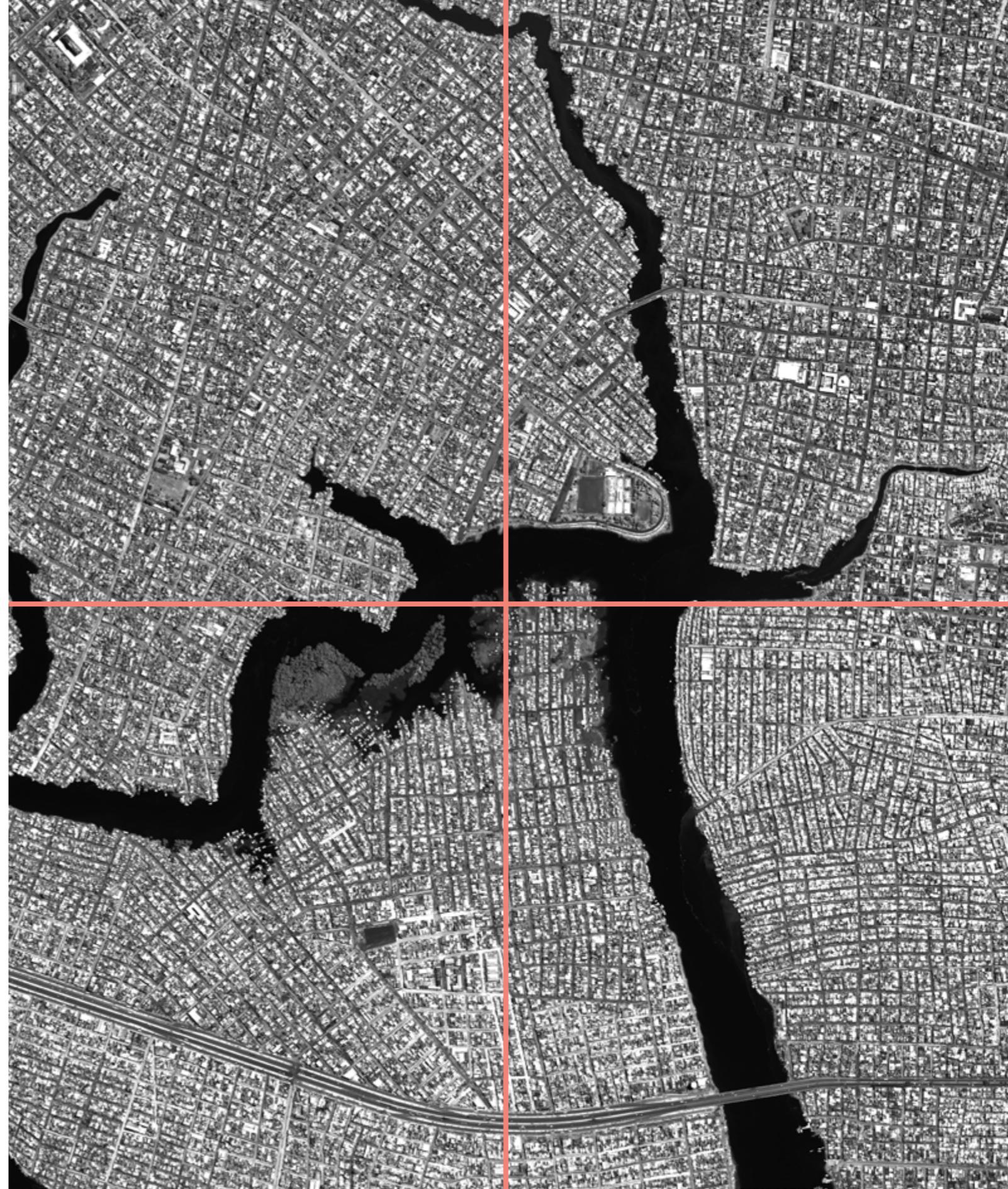
About 40 years ago, the swamplands in the southern outskirts of Guayaquil started to get invaded by people seeking for new lands to dwell on. These people could not afford to live in the city, but were very much dependent on it in order to find a job and get an income, in order to survive. Building houses on poles over the water was for free – the water did not belong to anyone as the ground did. During the process of time the spaces underneath the houses were filled with new soil taken from other parts of Guayaquil, and with lots of garbage. Like that the land has been changing and growing, and it still does.

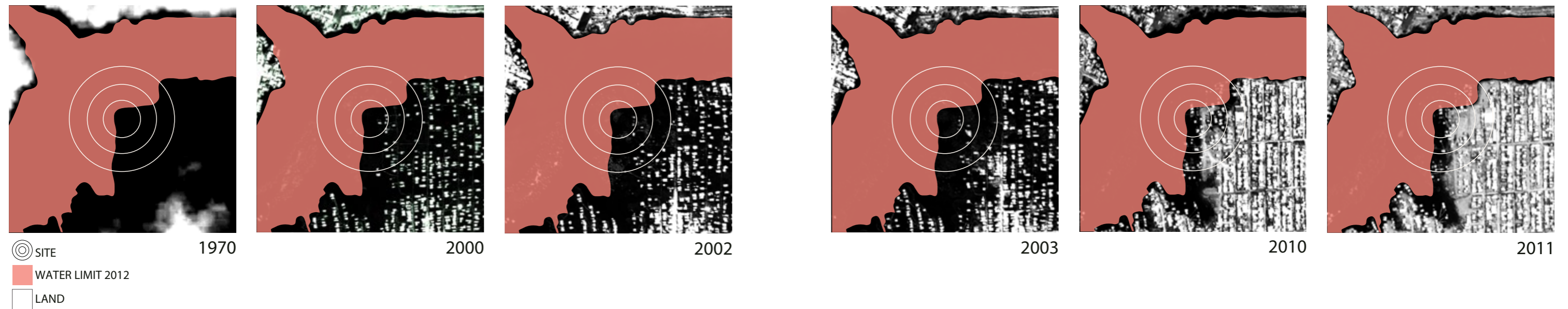
In 1986, there was a huge project in Guayaquil regarding a new highway, La Vía Perimetral, that would lead the heavy traffic around the city instead of inside it. From now on, the little island called Isla Trinitaria was the next part to be invaded by squatters. Very soon the

island was the home of many hundred thousands of inhabitants.

Today, Isla Trinitaria has a reputation of being one of the most – perhaps the most – dangerous and problematic slum areas of Guayaquil and thereby of the entire Ecuador. Whether this is true or not, a reality for sure is that its inhabitants are suffering from poverty and to some level an exclusion from the rest of the city, since the barrier that the surrounding estuary makes also is a mental barrier.

Most of the people living here come from the province of Esmeraldas, and they are ancestors to African slaves that escaped from a shipwreck during the time when Ecuador was a Spanish colony. Or at least, that's what people say. However, the majority here are Afro-Americans, and that is the reason for one of the neighbourhoods here being called Nigeria.





By looking at old satellite images I have been able to see how this area has changed through the years.

It is remarkable how quickly it has developed and what great impact man can have on nature. In 1986 the Via Perimetral was built and the aim was to relocate the traffic around the city instead of inside it. The new highway with possibilities for commuting to the city where the jobs were made this a good new place to live in for those who came here.

Quite soon mangrove forests were cut down, to room new houses but also to be used as building material. Mangrove wood is a very useful building material in these environments. Houses were to begin with built on poles, because of the tide and the flooding half of the year during rainy season. And - building over water was at least not to break the law, since the water did not belong to anyone.

During the process of time, and the fact that more people started to live here, the land was growing out in the estuary as people filled out the land with all kinds of garbage, and with new soil taken from other parts of Guayaquil (you could typically buy a truck with soil for a few dollars, someone told me). The impression lately among people in Isla Trinitaria is that the problem of flooding during rainy season has gotten worse. That is actually not the case; it is the same amount of water as before that comes. But since the estuary has gotten smaller, the water has nowhere to go -

but up on the land! We cannot change the weather and the forces of nature. This is the natural way of being for the estuary.

Since this land was, to begin with, illegally occupied and often by land dealers who split and sold the land, the municipality has not been particularly interested in giving these neighbourhoods good infrastructure and admit that they are a part of Guayaquil. Along the years, and often right before time for elections, the current mayor has to some degree given people right to their land and some basic infrastructure. This happens in all slum areas of Guayaquil. Since the majority live in the slums, their votes are very important...

The people in the area of Independencia are in the process right now of getting legal rights to their land. The reason is by no surprise an upcoming election, and a project of a new promenade along the shore of the east and west side. This is also a strategy for stopping the island to grow, and in relation to that about 60 families formerly living along the water will be relocated. Their new homes will be just about south of my site.

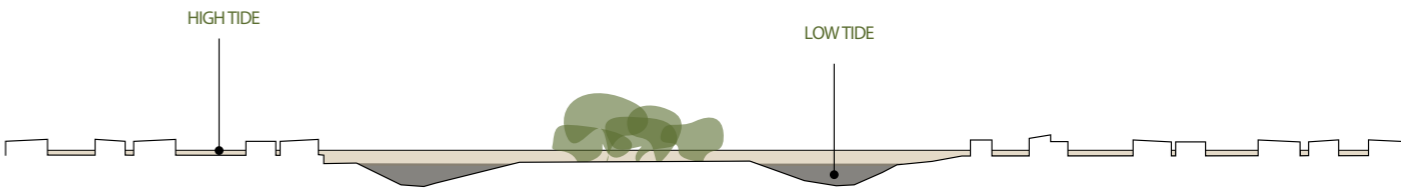


The MANGROVE TREE naturally cleans the water in the estuary from pollution. But too much pollution in the water and only few mangrove trees left affects the entire eco system in a very negative way. All life in the estero dies. Today it is forbidden by law to cut the mangrove trees, but some people do it anyway because of the good building material the tree is.

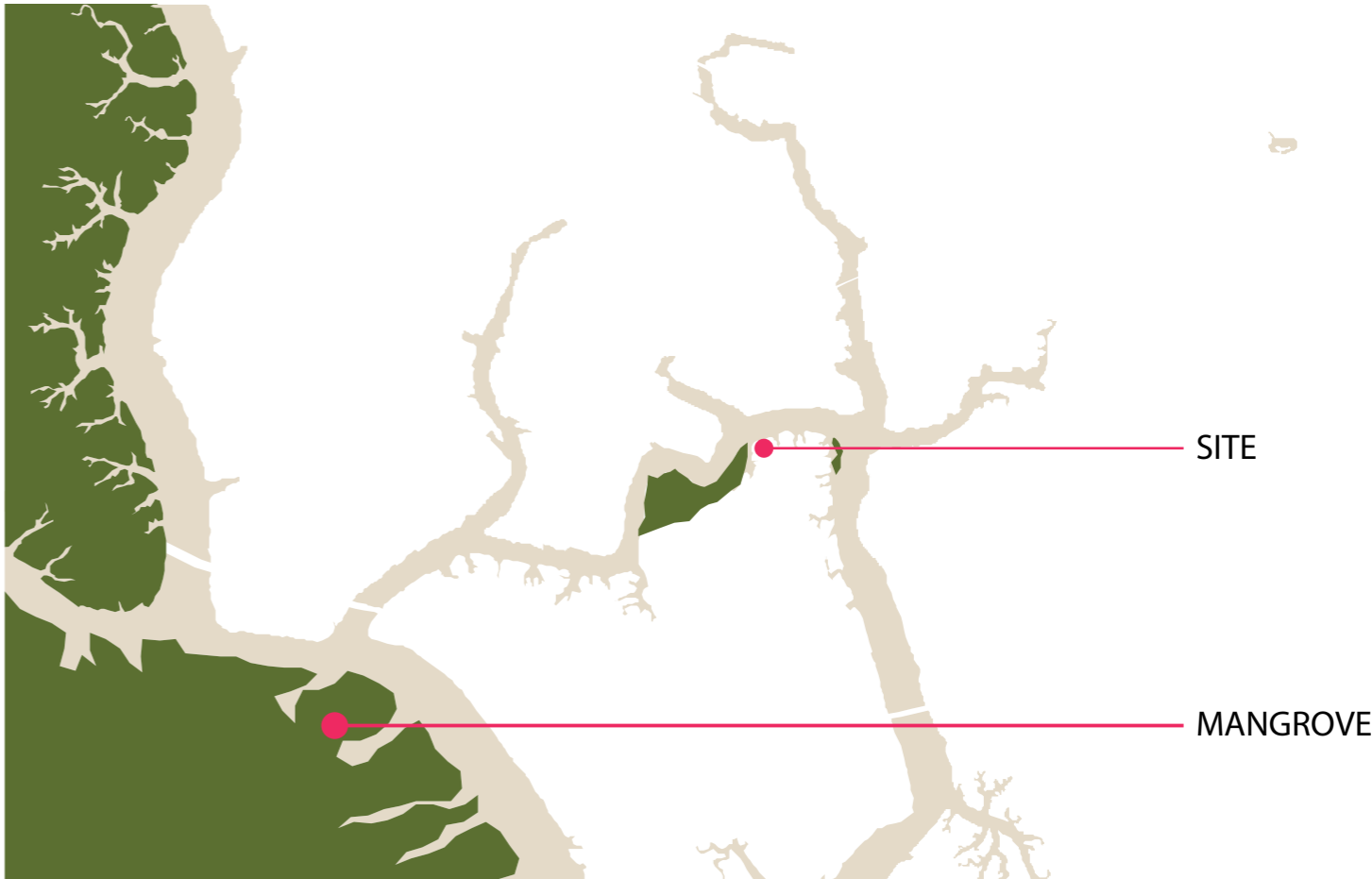
Around the mangrove tree live crabs, shells and shrimps that people living in the Guayas region normally has been eating since the first people there. Today there is not as much as before which is very sad since people have always been dependent on getting food from the mangrove.

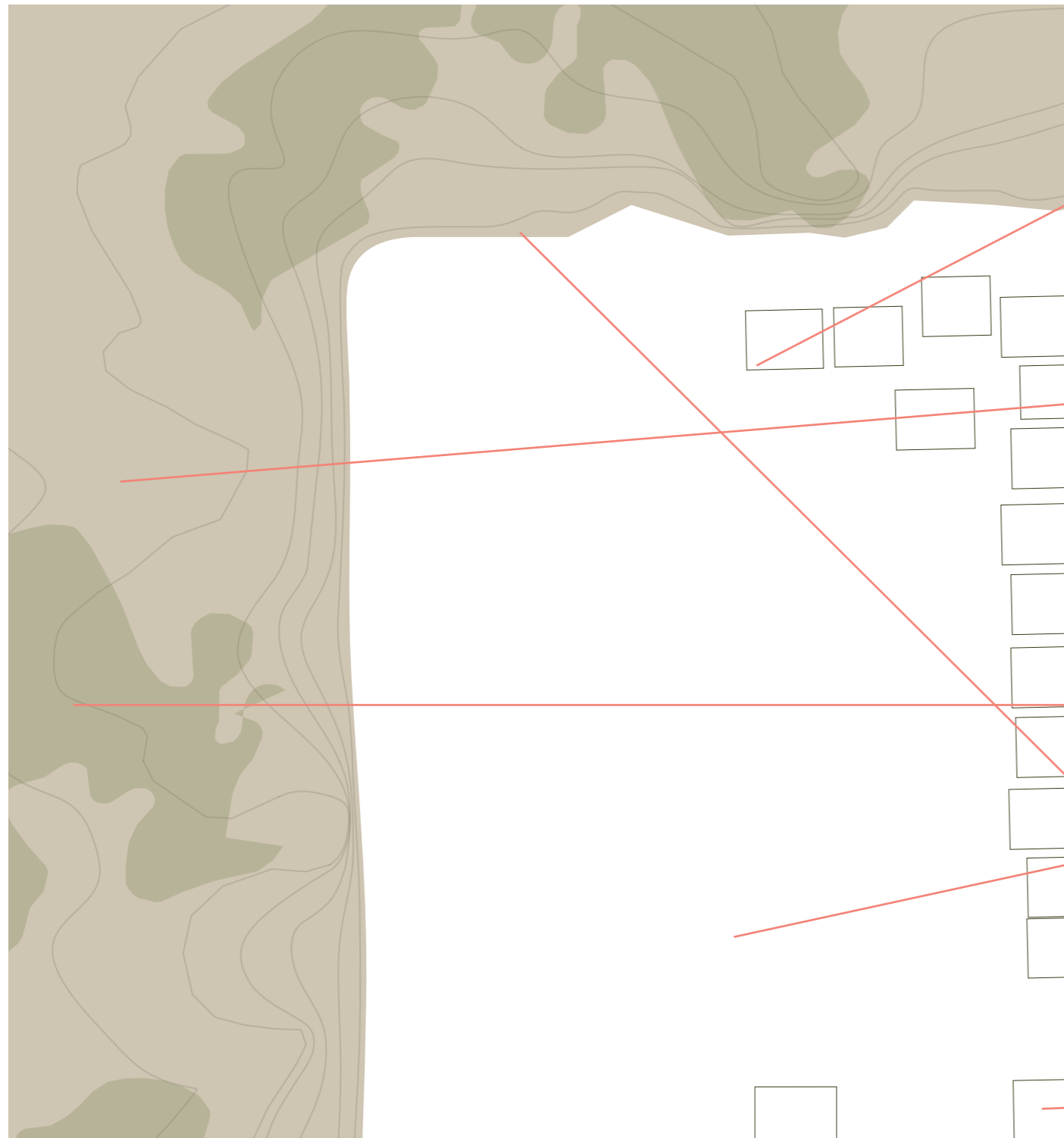


MANGROVE SWAMP - SOUTH OF GUAYAQUIL AREA BEFORE URBANIZATION



SOUTH OF GUAYAQUIL AREA TODAY. DURING HIGH TIDE STREETS AND BUILT ENVIRONMENT IS FLOODED. BECAUSE OF THE INCREASING OF THE LAND, THE WATER HAS NOWHERE ELSE TO GO BUT UP ON THE STREETS.



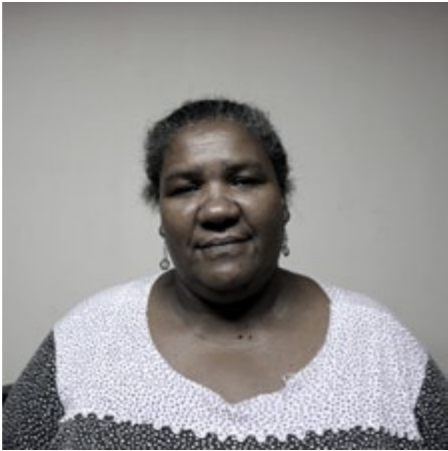


MEETING THE BENEFICIARIES



Name Ana Ortiz
Age 38 years old
Area Coop Independencia 2
Lived there for 17 years
Family husband, 3 children, 1 grandchild
Occupation housewife

My dream her children will be professionals. Want to help children and old people.



Name Julia Angulo Cabezas
Age 49 years old
Area Coop Independencia 2
Lived there for 20 years
Family 2 children, 2 nephews, husband
Occupation housewife and running a small restaurant

My dream That there will be a good union between the members of the community. That the projects in the community will go well.
personal dream - have a restaurant with afro-ecuadorian food, to keep the culture alive.



Name Washington Angulo
Area Mercado
Age 39 years old
Area Coop Independencia 2
Lived there for 21 years
Family 6 children, 2 grandchildren, wife
Occupation neighbourhood leader

My dream children and young people will have a future and get respect from other people for what they do. So they can be somebody, do something good with their life.

to have a title is a way of doing that. also to be honorable.
"ser alguien en la vida"
to be somebody in the life



Name Nicefra Tenorio
Age 40 years old
Area Coop Independencia 1
Lived there for 17 years
Family 4 children, 1 husband
Occupation housewife, and has a small business

My dream That my children will become good professionals.

Name Jerson Israel
Age 1 year and 7 months



Name Gilda Caicedo
Age 30 years old
Area Independencia 2
Lived there for 15 years
Family 1 daughter, 1 husband
Occupation housewife

My dream That my daughter will manage school and will be able to go to university and later get a good profession.



Name Patricia Prado
Age 44 years old
Area Coop Independencia 2
Lived there for 23 years
Family 3 children, 1 husband, 2 grandchildren
Occupation housewife, and has a small business

My dream That my daughters will be professionals and that my business will grow, also dream about living in an other place.

With the help from Ricardo Pozo at Universidad Catolica and the foundation Accion Solidaria I arranged some focus group meetings and discussions with people living in Independencia, close to my site. It was important for me to get an impression of how they experienced their surroundings, what does and what does not work well in their daily life and to find out about their hopes and dreams for the future. I also wanted to see if my own ideas of how to develop my project on this specific site corresponded with what I found out talking to the inhabitants and hearing their stories. I valued the opportunity of having this meeting very much, because if my project was to be built these people surely would be affected somehow. In a positive way, I hope!

And now I got a good chance of better finding out.

I wanted to talk to one group with young people - the new generation. It was interesting for me to hear what they wanted for the future, what they wanted to become and do for themselves.

The other focus group was with the first generation that lived in the area. It was important for me to find out how life had changed for them while living in the area. Hopefully, they would give me the true story and background of the life in the suburbia, and since they are the experts of the area and the people living there, the social patterns and

relations, I was hoping they would share some of their knowledge.

The third focus group was with only women. Since Ecuador has a strong masochism culture I thought it was important to also work with this in mind and to have a gender perspective.

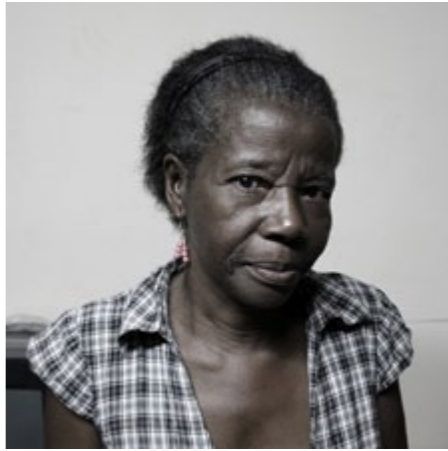
I recorded the whole interview and I finished with taking an individual picture of each one of the participants. Meanwhile I also asked them about their family and living situation, and most importantly I asked them if they had a dream in life and in that case what it was.

Please see appendix 2 for further information from the recordings.



Name Manuel Quimi Rugel
Age 60 years old
Area Independencia 2
Lived there for 10 years
Family 4 sons, wife, parents in law
Occupation Technician

My dream The community will wake up and get a better self esteem. That this part of the city will become a turistic center, with beaches and recretive areas.



Name Maria Segura
Age 48 years old
Area Independencia 2
Lived there for 17 years
Family 1 husband and 8 grandsons
Occupation housewife

My dream grandsons will be professionals and that they will have a good carreer.
personal dream to become a history and geography teacher.



Name Bella Bone
Age 41 years old
Area Independencia 2
Lived there for 17 years
Family 5 children, 1 husband
Occupation housewife

My dream the kids in the neighbour hood stop doing drugs, and that her two sons stop doing drugs.



Name Rosa Ocampo
Age 43 years old
Area Independencia 2
Lived there for 16 years
Family 3 sons, 1 grandson
Occupation housewife, has an own business

My dream business grows and that her sons will be able to graduate and become what they want



Name Gisela Pilaloo Paz
Age 29 years old
Area Coop 3 de Mayo
Lived there for 15 years
Family 2 sons
Occupation cleaning in other familys houses in other parts of the city. Temp job only.

My dream Study gastronomy, become a chef. Also dream of becoming a journalist. that her sons will finish their studies. Was my dream when I was young, but now it is "too late" ...



Name Glaiver Vernaza Merlin
Age 47 years old
Area Coop Independencia 2
Lived there for 19 years
Family 4 hijos, 4 nephews, 4 grandsons
Occupation has a guarderia (informal kindergarden) with 70 kids totally that she is guarding

My dream Young people in the area will develop, drug problems will stop and also teenage pregnancy.



Name Eva Wilson Valencia
Age 20 years old
Area Coop Independencia 2
Lived there for 18 years
Family mom and two sisters
Occupation just finished school, waiting for a job.

My dream to work with human ressources, to work close with humans. Want to help 60 people to develop themselves.



Name Kerly Brigitte Quintero
Age 18 years old
Area Independencia 1
Lived there for 18 years
Family 4 siblings, mom and dad
Occupation just finished secondary school, waiting for job

My dream to become a professional football player.



Name Elizabeth Vidal
Age 19 years old
Area Coop Independencia 2
Lived there for 16 years
Family 4 siblings, mom, dad, 1 nephew
Occupation Just finished secondary school, waiting for job

My dream to have a dancing school where she could teach all kinds of dancing. Loves afro-ecuadorian dance.



PART 2 PROJECT

EARLY VISION OF A PLACE I WANTED TO CREATE

After meeting the people living in the area around my site, I was more certain of what should be proposed there. I now had more good arguments for why there should be an educational centre, with library and a workshop so that people can educate themselves both practically and intellectually. I want to give them the tools so that they, if they want to, can be helped to improve their economical situation.

One thing that I had noticed during my visit to Guayaquil is that Guayaquilians are amazing entrepreneurs - they can always find a way to make business. I believe that a project like this could be appreciated here, because it would give many new opportunities for business. In the neighbourhoods surrounding my site, many families has their own little shop, or bakery, or food stand.

I also felt that I had good reasons for a recreational and a cultural centre with possibilities for a rich social life. The cultural identity among the people in Isla Trinitaria is very strongly rooted, in particular with music and dance and cuisine. The beauty of culture is that it cannot be measured in money, only in emotions and experiences. That is why

I think it is so important that Independencia will get a place where their culture can bloom. In the program is a large communal multi-use space that with benefit could be used for cultural activities such as dancing or music. It is also connected to a kitchen, where maybe Senora Julia on page x and her friends can have their cooking business! This large multi use space could also be a room where people in the community could get together and have meetings in order to organize their society and their future.

Other important parameters for the architectural design of this project were the climate, and the estuary with the former mangrove forest and the massive flooding during rainy season.

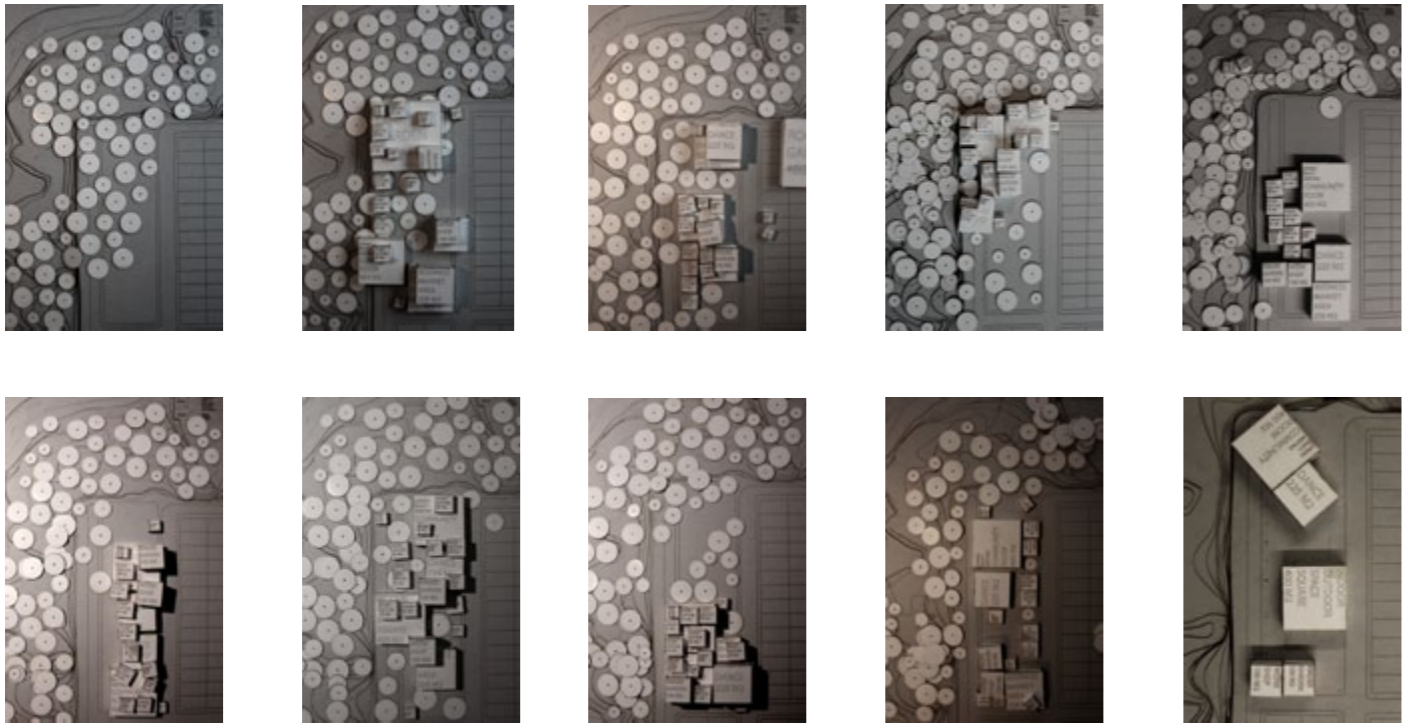
In the second and final phase I have been working on how an architectural answer that corresponded to these parameters could be.

ROOMS AND FUNCTIONS
Early on I made a schedule over functions in the building and how much space I assumed each would need.

In my calculations was also level of privacy, level of light, level of isolation for sound, on which floor level each function should be situated and whether they should be connected and be accessible directly from outside.

Because of the hot and humid climate with occasional flooding, it would be necessary to raise the building so that most of the functions are on 1st floor. Like that the ground floor, where the entrance is, could be used during dry season as an additional large common area. Also since the temperature always is around 30 degrees, having the building raised and the ground floor free will allow breezes of air to flow under the building and help cool it from underneath.

Room overview	Size	Social room	Semi-private room	More light	Less light	Needs silence	Placement ground floor	Placement 1st floor	Placement 2nd floor	Connection to space outside
Indoor outdoor space	400 m2	•			•		•	•		•
Community room	400 m2	•		•				•		•
Recreative room	50 m2		•	•				•		•
Kinder garden	100 m2		•	•				•		•
Market / business	225 m2	•		•	•		•	•		•
Entrance	50 m2	•		•			•			•
Changing room	20 m2		•		•			•		
Bath room	10 m2		•		•			•		
Library	36 m2	•	•	•		•			•	
Kids library	36 m2	•	•	•		•		•		
Kitchen	25 m2		•	•	•			•		•
Dance studio	225 m2		•	•				•		•
Workshop	100 m2	•	•	•				•		•
Garden	900 m2	•		•			•	•		
Study / lecture	50 m2		•	•		•			•	
Mangrove promenade		•		•						•



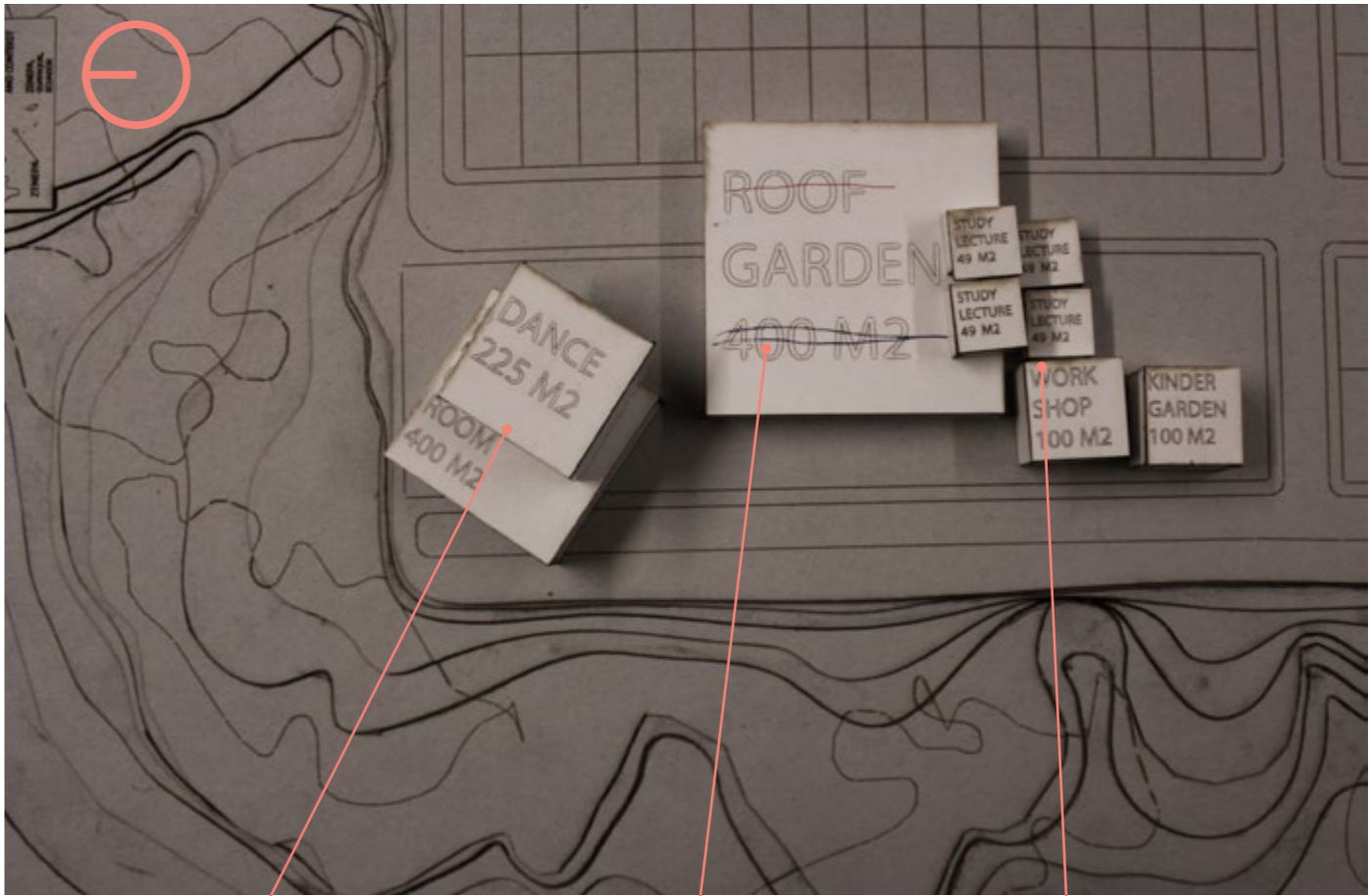
With a model in a scale of 1:400 of the site and its contexts I made a series of tests on how the functions could be on the site. The functions were represented on a square by the size of the square meters and corresponding to which height the room should need. The round shapes represent vegetation, and in most cases mangrove trees. With these tests I intended to find out how the functions in the best way could relate to each other and to the surrounding context. Please note that it is on a diagrammatic level and the squares could as well represent another shape.

I started with an idea of the mangrove forest being allowed to grow next to, and also on the site. I wanted the building to possess the quality of being next to these interesting trees and instead of building out and try to reach them I wanted to let nature come back and reclaim its land. I had in mind that all of this used to be mangrove forests..

I also aimed for keeping the privacy on the two streets where people would be having their dwellings. That could be done by having more quiet and semi-private functions along the streets, and the entrances on corners where many people move. Also keeping the pri-

vacy within the building so that louder functions like music would not disturb more quite ones like the library. The one I ended up (opposite side) with has a kitchen, garden, workshop, learning lab and kindergarten towards the street. Towards the water is a public boardwalk and a multi use community room.

The building has two zones. Coming from the road in the south is the working zone. Coming from the north east and the end of the new riverside is the recreational and cultural zone. The two zones are divided by a big garden and vertical elements of bamboo.

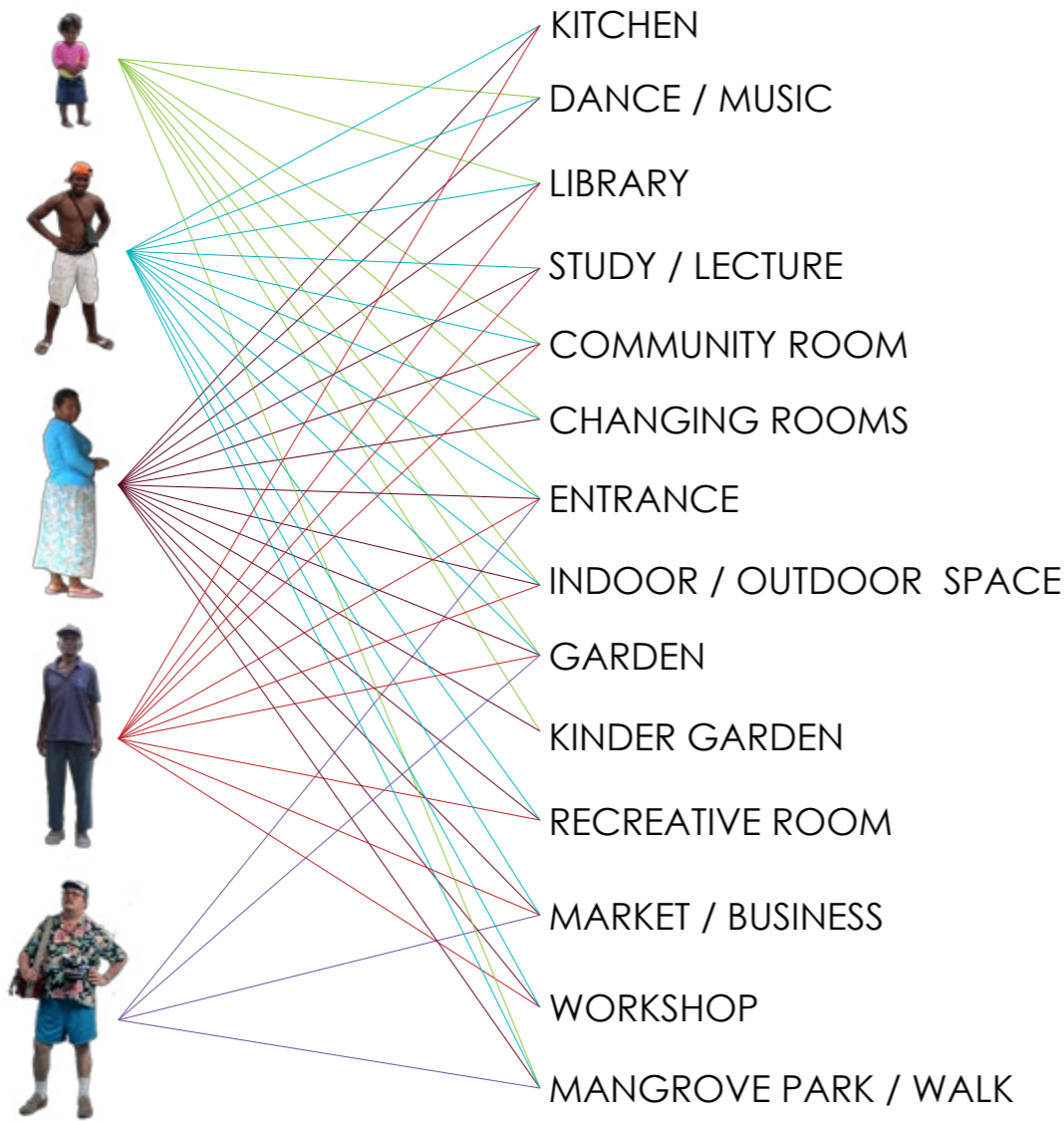


RECREATION

VEGETATION

WORK

BENEFICIARIES AND
USE OF BUILDING



I started to imagine scenarios that the different beneficiaries would have. How would they use the centre? Who would use what, and when?

On following page are some of those stories presented, and a diagram that shows how each visitor at the centre would probably be connected to the functions there. I have had in mind the child, the young person, the adult and the elderly. Clearly, I want this to be a place for everyone, and I want them to be able to use it at the same time, without possibly stepping on each others toes.

I added a scenario with a tourist, because during the working process of this project I imagined it could be an added benefit with the project. The idea is that the inhabitants of Isla Trinitaria occasionally could receive tourists and it would be done totally on their own premises. The advantage of that is that it would generate jobs as guides and the world would see the problems in the slums, instead of neglecting them.

A DAY AT THE CENTER, IN A PERSPECTIVE
FROM THE CHILD:

Early in the morning my parents take me to the kindergarten in the centre, because they are going to work and they need someone to look after me. Here I am really enjoying myself and I play with many kids from the neighbourhood.

A DAY AT THE CENTER, IN A PERSPECTIVE
FROM THE YOUNG:

In the morning I come to the centre to go to the learning lab, where I meet up with some others who also want to improve their grades in order to get into the university. There are some voluntary workers too and they are very helpful. In the afternoon I go to the big community room, where a friend of mine is arranging a dancing

A DAY AT THE CENTER, IN A PERSPECTIVE
FROM THE ADULT:

In the morning I come here to go to the workshop, and before that I leave my child at the kindergarten. Together with some friends we have our own business; we are making the costumes for the staff at a big hotel chain in Ecuador. It is

A DAY AT THE CENTER, IN A PERSPECTIVE
FROM THE ELDERLY:

Early in the morning I come to the centre to do some voluntary work in the garden. We have so much delicious fruits in the garden, and I can eat

A DAY AT THE CENTER, IN A PERSPECTIVE
FROM THE TOURIST:

I wanted to experience Guayaquil beyond the Malecon 2000 and someone mentioned that there is a place in the outskirts of the city that could be worth a visit, because there I would see the reality. I came here by boat on the estuary, and when I arrived to Isla Trinitaria I was received at the centre by a nice young guy called Cesar. He was my guide and he showed me around in the neighbourhood, as he told me fascinating stories about the people living here.

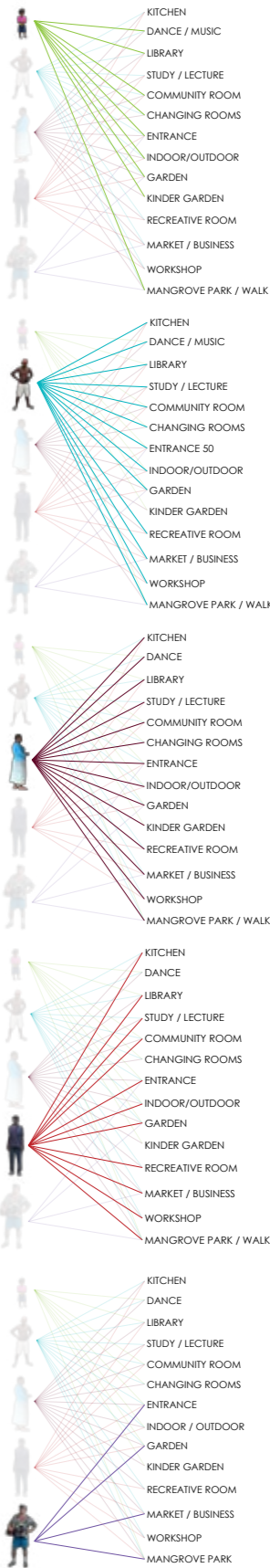
Before noon we go to the kids section in the library, and they have many books with fairy tales! In the afternoon we go down to the "mangrove walk" where we fish for crabs, because by the roots of the trees lives many crabs. In the afternoon my parents come and pick me up, and I give them crabs for dinner!

class. Us people that live here in Independencia feel that we are very connected to our Afro-American roots and a way of expressing that is by music and dance, which we love to do. Afterwards we have dinner together in the centre, delicious food made by one of the best chefs in Isla Trinitaria! Finally in the evening, there is shown a movie from a projector on the big screen on the wall in the community room. It is as good as going to the movie theatre!

perfect for us to have a space like this where we can work, close to our homes, and where all the necessary tools we need is provided. It is not only us who work here, in the workshop is also other businesses, and we help each other and share our knowledge. For instance there are some people that are growing coffee - Isla Trinitaria Coffee - and the tourists love it!

as much as I like! In the afternoon I sit with my friends in the shadow on the boardwalk along the water and we listen to the sounds of the mangrove forest -some species of birds has come back again to this area, since the mangrove forest was replanted.

He told me about their everyday struggles and the history of the island. We finished the tour again at the centre, where I bought some great souvenirs made by the locals and some tropical fruits directly from their garden. Now I am on the boat again back to the centre of Guayaquil, and I look at all the many houses along the shore of the estuary, so many of them are in a really poor state. This experience has surely been something extra and it has made me realize that the world is unfair. But maybe it is not too late to do something about it?



Bamboo (Bambusoidae) is the largest of the grasses family (Poaceae). There are at least 1250 species of bamboo in the world, and some of them can grow up to 30 metres. As a construction material bamboo has been traditionally used in many cultures of Asia, South Pacific and Central- and South America. It is highly appreciated for its strength and complexity of use, and for its ability to contribute to a cool microclimate in a building. Bamboo is easy to cultivate and it grows quickly, and if it is used correctly in a construction it can be almost as strong as steel. It is also possible to manipulate the grass to grow in a certain direction, or in an arc or a shape.

Bamboo has not only been traditionally used for constructions. The fibres in this wonder grass can be used for all kinds of purposes - making paper, furniture, clothes, towels, food, cooking ware...

In Ecuador, there is plenty of bamboo. And traditionally people have for many thousands of years used it to build their houses. It is for free and easy to work with, and it keeps most of the heat away when built with openings for natural ventilation.

Today, bamboo is not as much used as before since it is considered to have

a low status, some people call it "the poor mans building material". When people start to invade the land in the suburbs, like what has happened in Isla Trinitaria, they typically start with a bamboo house. But as soon as they can afford it they build with brick or concrete. Sometimes I have seen the ground floor of a house built in concrete, and the upper floor in bamboo. Building a house is a process over time and the general attitude is that people prefer buildings made of brick or concrete, or other materials that are from the western world. These materials have higher status and it is a pity, since they are in completely different contexts! Being in a concrete house in a tropic hot humid climate is not very comfortable, unless there is much air conditioning or very big openings in the wind direction. In general a concrete house does not breathe in the same way as a bamboo house does; it won't ventilate and keep cool in the same good way. Too much money is spent today to cover the costs of electricity for air conditioner in hot humid areas all over the world, money that could be used for much better purposes, such as food and health and education for the kids. The slums of Guayaquil are not an exception.

Now and then there are earthquakes

in Guayaquil and this is important to remember when designing a house. Bamboo is a very resistant earthquake material since it doesn't break easily but it bends. It is also quite light; if the house would collapse over you the consequences would not be as devastating as if it was a concrete building. For instance this is what happened in Haiti 2010, and I have noticed that some people in Guayaquil are concerned about this will happen in Guayaquil too. Also, a bamboo house can be rebuilt quite fast and cheap, compared to a brick or concrete house.

Although the benefits are in a clear majority, there are some backside in connection to building with bamboo. Since it is grass it burns down very easy and quickly. I have read that it is recommended to treat the newly cut bamboo with a fire retardant and insecticide, and there are many ways of doing that. They could for instance be naturally treated with smoke or soaked in water for 3-4 weeks. They could also be treated with chemicals like borax and boric acid, but there is an ongoing debate on how these chemicals affect the health of people in the building. The life length of a bamboo house is shorter than a concrete house, but if it is maintained well and repaired every five years it is still a very good alternative.





THE CASE OF FOLKETS
HUS
(THE HOUSE OF THE PEOPLE)
IN LUND

Folkets Hus in Lund was founded about 110 years ago, when people from the working class started to organize themselves in unions to claim their rights. They needed spaces where the union could have meetings, and where they could have other activities such as education (non-formal) of children but also

study circles for adults, and hold different types of cultural events.

Everyone payed a small part of the price and together they could buy the building where their events could take place.

The organization has worked out very good through the years, and the concept has been successful.



THE CASE OF THE
ESPANA LIBRARY IN
MEDELLIN, COLOMBIA

Giancarlo Mazzanti 2005 - 2007

A library situated in one of the slums of Medellín. Its placement there is part of the government's social master plan program to give equal economic and social opportunities to the population.

This project is inspiring to me because everyone in the neighbour-

hood/society can benefit from it. It gives everyone the chance to educate themselves which is important in a well functioning democratic society.

their situation.

I also like the concept of building something nice and new (and probably quite expensive) in the slum, where you wouldn't expect it! I think it has the effect on people that they get inspired and feel that they are not forgotten - although they are poor they too can do something to change



KLONG TOEY COMMUNITY LANTERN - A MULTIUSE SUSTAINABLE SOCIAL CENTER IN A BANGKOK SLUM

Made by the Norwegian firm TYIN Tegnestue in 2011.

Klong Toey (or Khlong Toei) is the largest and oldest area of slum dwellings in Bangkok with more than 140,000 people living in sub-standard housing with little to no rights. With a lack of public services like healthcare,

affordable education, sanitation and electricity, the area has an extensive drug problem, high unemployment rates, along with violence and crime. TYIN Tegnestue wanted to do something for the community to improve the social sustainability, encourage community interaction and provide a safe space for children to play.

The structure's simplicity, repetitive logic and durability ensures that it will be long lasting and of

use to the community for many years. Its design also encourages adaptations or updates as the community sees fit over time. TYIN Tegnestue sees the Klong Toey Community Lantern as part of a long term strategy towards sustainable development in the area. Klong Toey Community Lantern and TYIN Tegnestue have recently been shortlisted to the 2012 Civic Trust Awards.



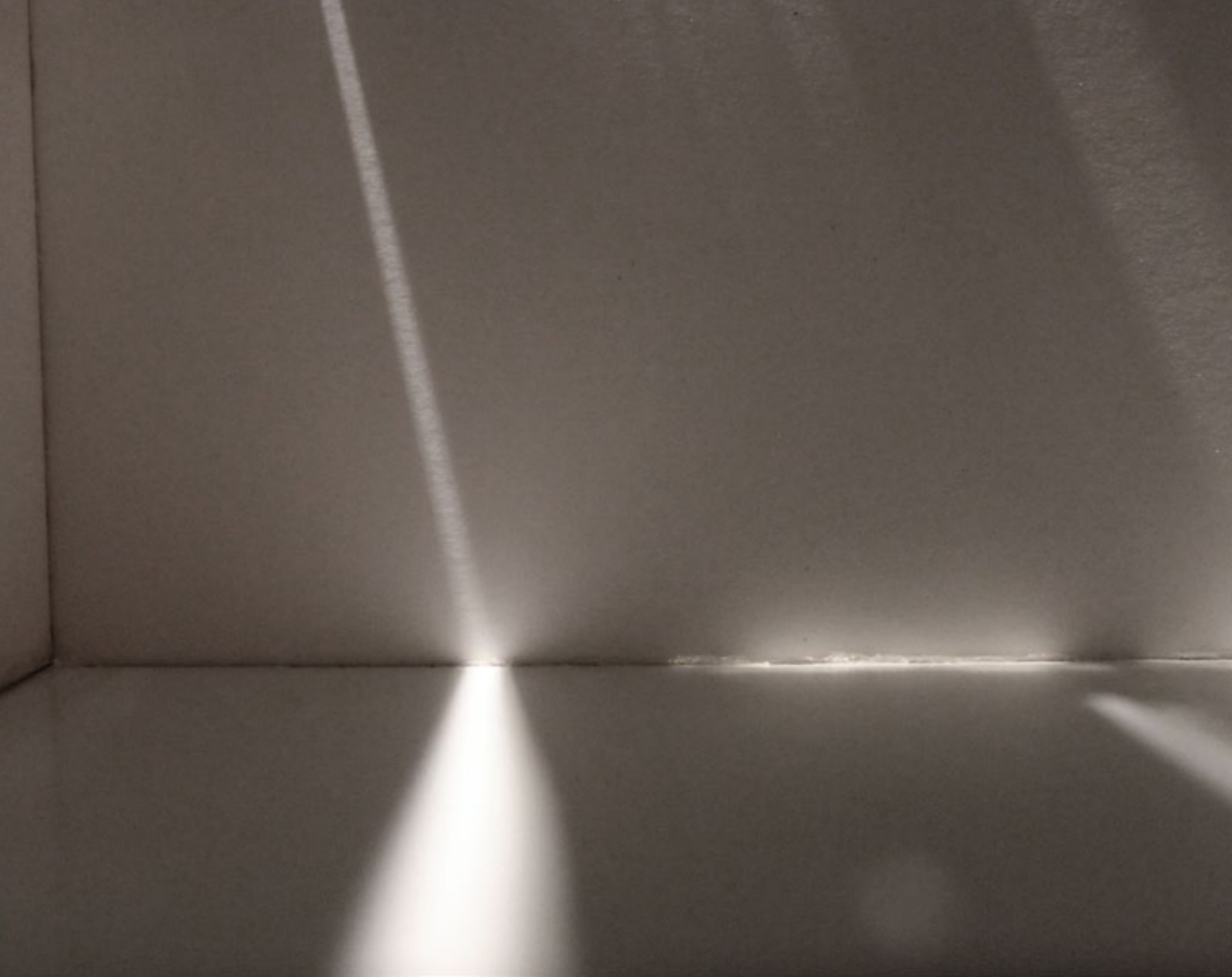
Slum tourism

During the latest years there could be seen a trend of slum tourism in some big slum areas of the world. A new expression - "slum tourism" to describe the phenomena. The basic idea is to turn the shanty towns into tourist attractions, giving the visitors an opportunity to see the "real" city. Local slum dwellers are trained to become "slum guides" and they show the visitors the real life in the slum. Like this the visitors will understand the hard life in the slum and meet the people who

work hard to make both ends meet and hopefuller their preconceptions will be changed to the better.

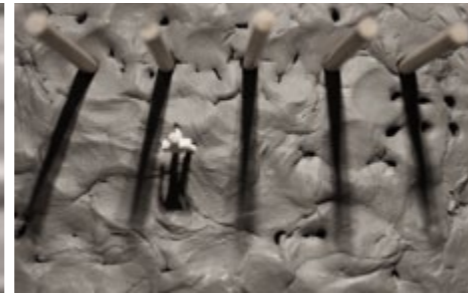
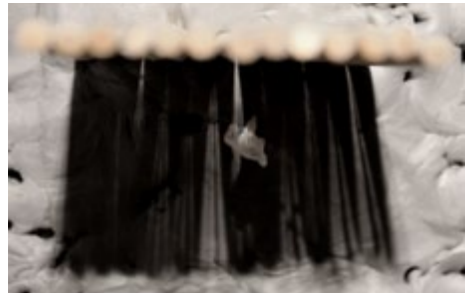
The people living in the slums will get an opportunity to show their situation and maybe discuss their problems - and maybe there could be born some new solutions. Local people living in the slum can be trained to become a "slum-guide" and like that get an income. The aim is to support the community and break boundaries....

WHAT I WANT:
Local communities lead the tours so that their cultural identity is reinforced and the income they earn directly benefits community members. INSTEAD OF TRAVEL AGENCY GET (SOME OF) IT.



SPATIAL INTENTIONS -
WHAT CAN WE DO WHEN
WE HAVE LOTS OF
LIGHT AND
BAMBOO?

PROCESS - FINDING AN ARCHITECTURAL ANSWER



VERTICAL BAMBOO ELEMENTS
STANDING TIGHT

-DIVIDES A SPACE

VERTICAL BAMBOO ELEMENTS
STANDING WITH LITTLE DISTANCE

-ALLOWS AIR AND SOME VIEW TO-
COME THROUGH

VERTICAL BAMBOO ELEMENTS
STANDING WITH MUCH DISTANCE

-ALLOWS AIR AND VIEW AND A POS-
SIBILITY TO WALK THROUGH

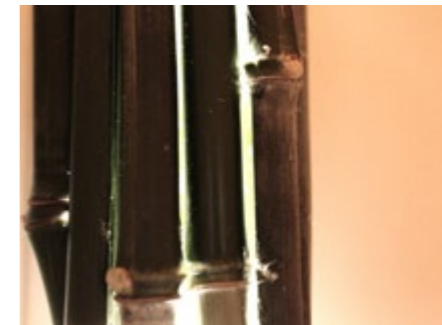
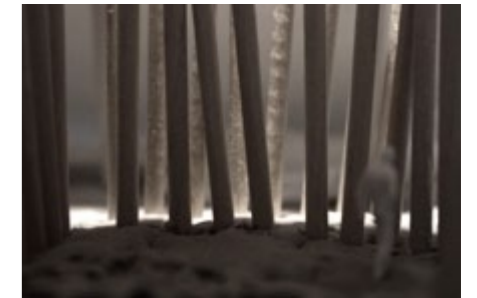
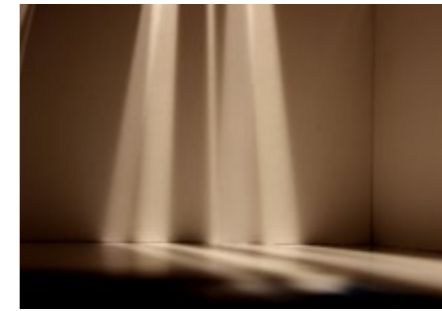
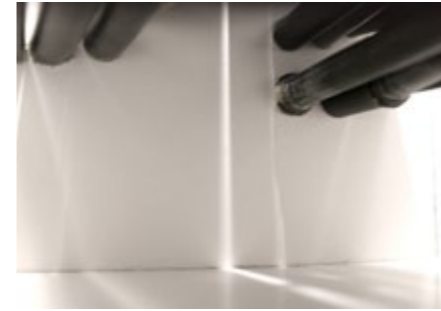
In Guayaquil there is constant summer, even though Ecuadorians at times prefer to call it "winter". The sun is always very strong, and when it is hiding behind the clouds you can still feel the rays. Traditionally in Ecuador and other tropical climate zones people want to keep the sun out as much as possible but the cool breezes of wind in. The warm climate allows bamboo to grow very quickly. With this stated and with the knowledge of the benefits of bamboo, I wanted to figure out how I could use the endless sources of light and bamboo, to create (low cost) architecture.

The intention has never been to show Guayaquilians how to build a house with bamboo; they are already very skilled bamboo constructors with many generations of knowledge on how to do it. The intention with this project has rather been to examine how architectural qualities could be established, from what they already had to work with (the light and the bamboo). Could there be something more than just four walls and a roof and could the building be experienced in another way? Could the light be filtered in ways so that exciting spaces would be created underneath and behind, and could there be good

shaded spaces where the air there would be cooled down and start a reaction of movement of the air that would ventilate the house?

In the studio at LTH in Lund I made some studies of light and bamboo. As a starting point I had three different ways of putting vertical bamboo elements together (see images above). These could be used in the building to achieve different levels of openness, privacy, ventilation and filtering of light. From a quite simple starting point these could be combined in many ways.

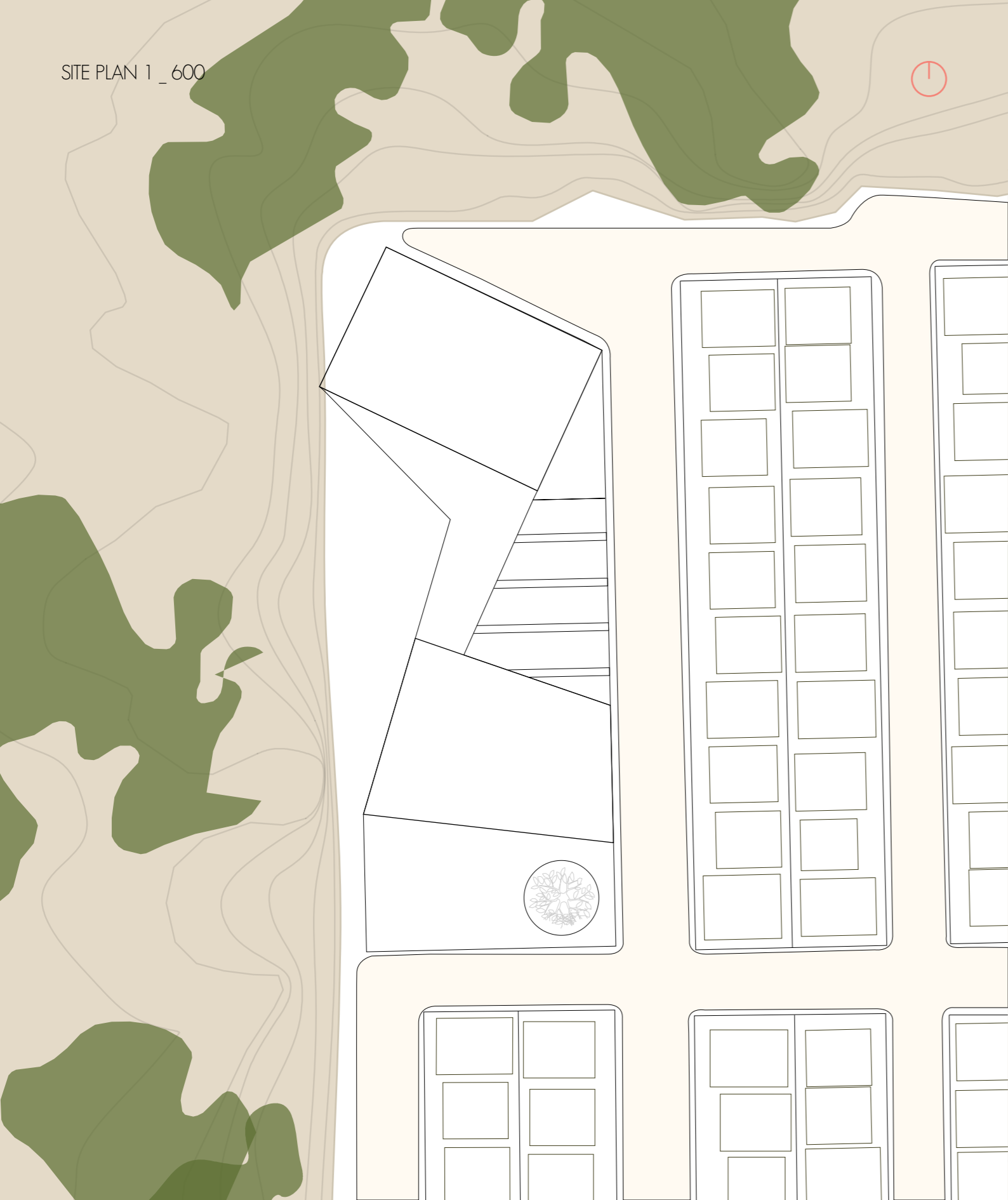
LIGHT AND BAMBOO STUDIES



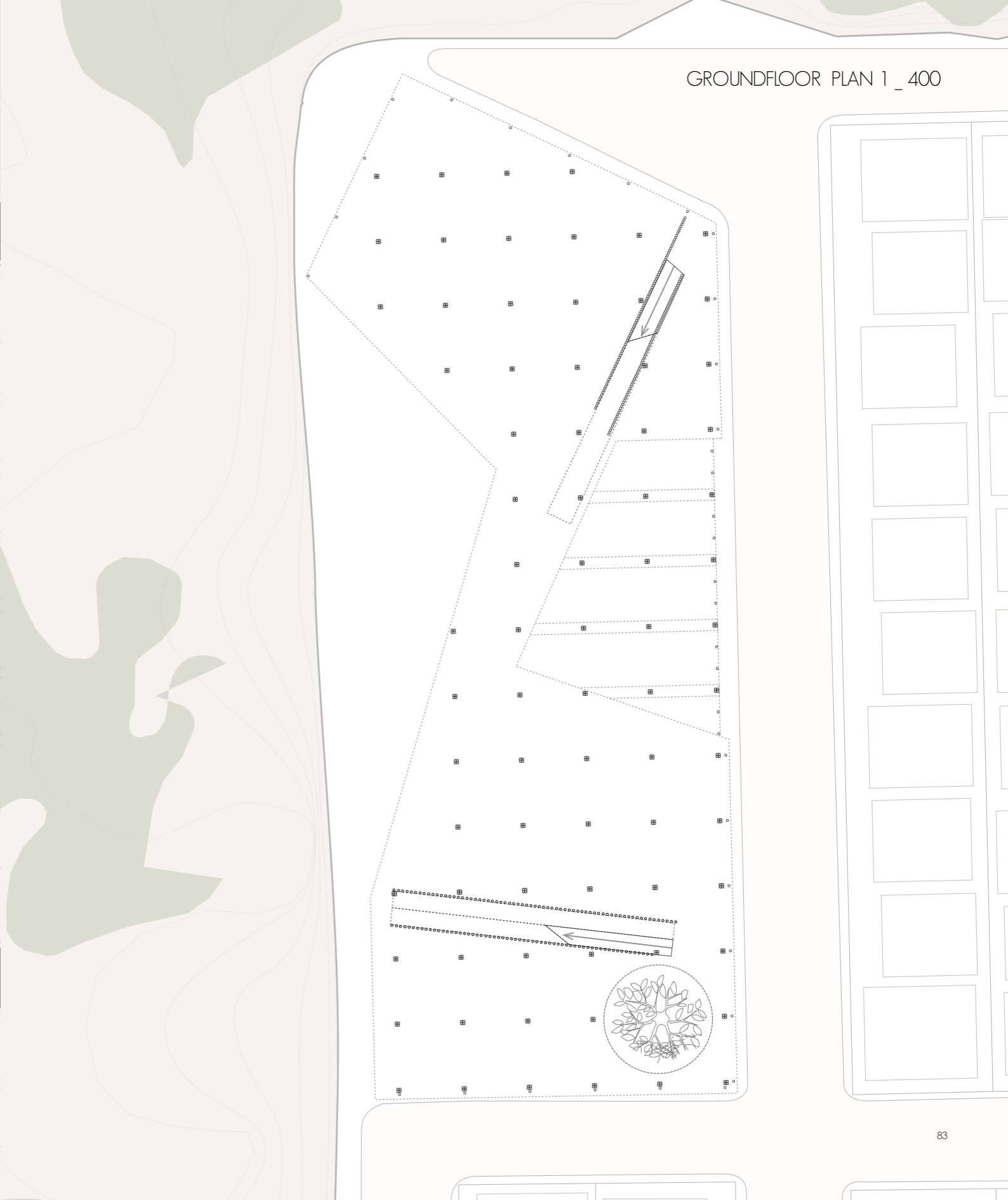
PROPOSAL

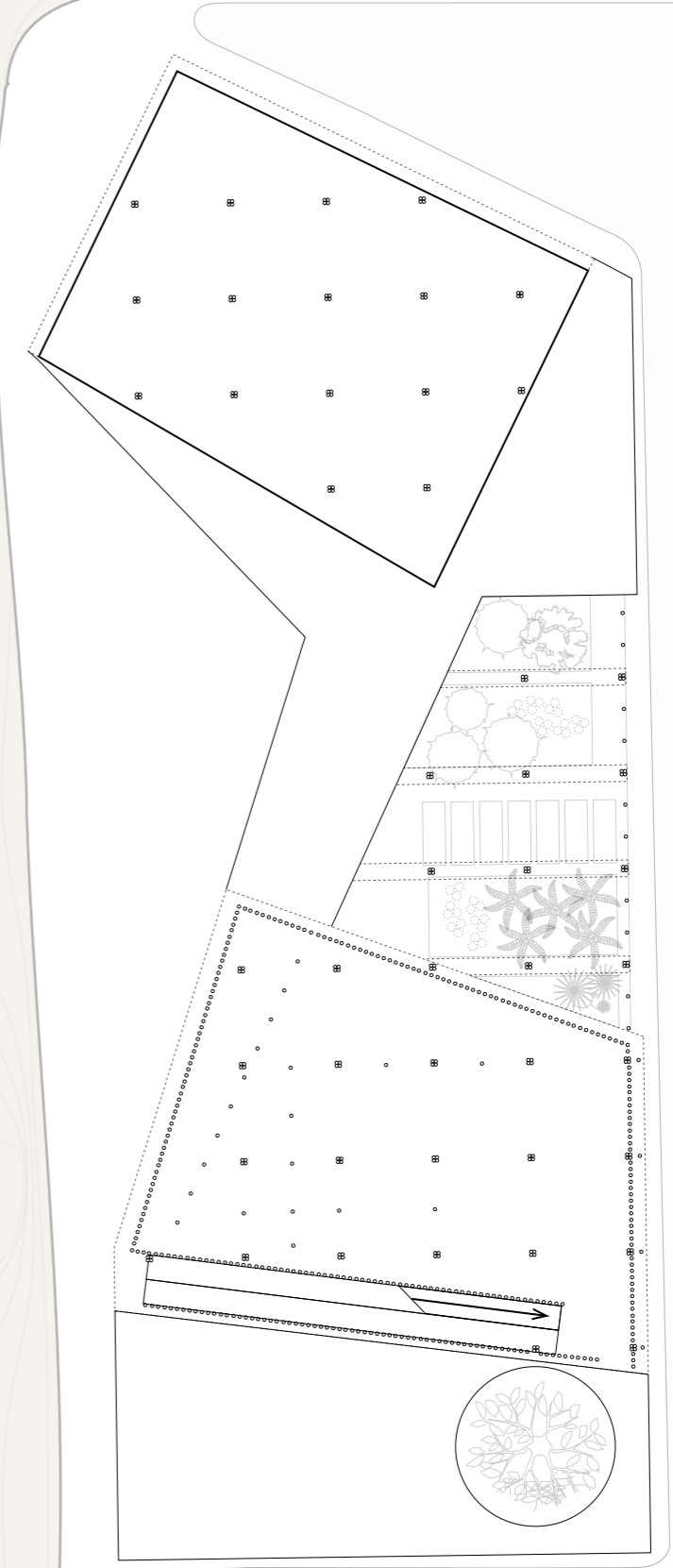
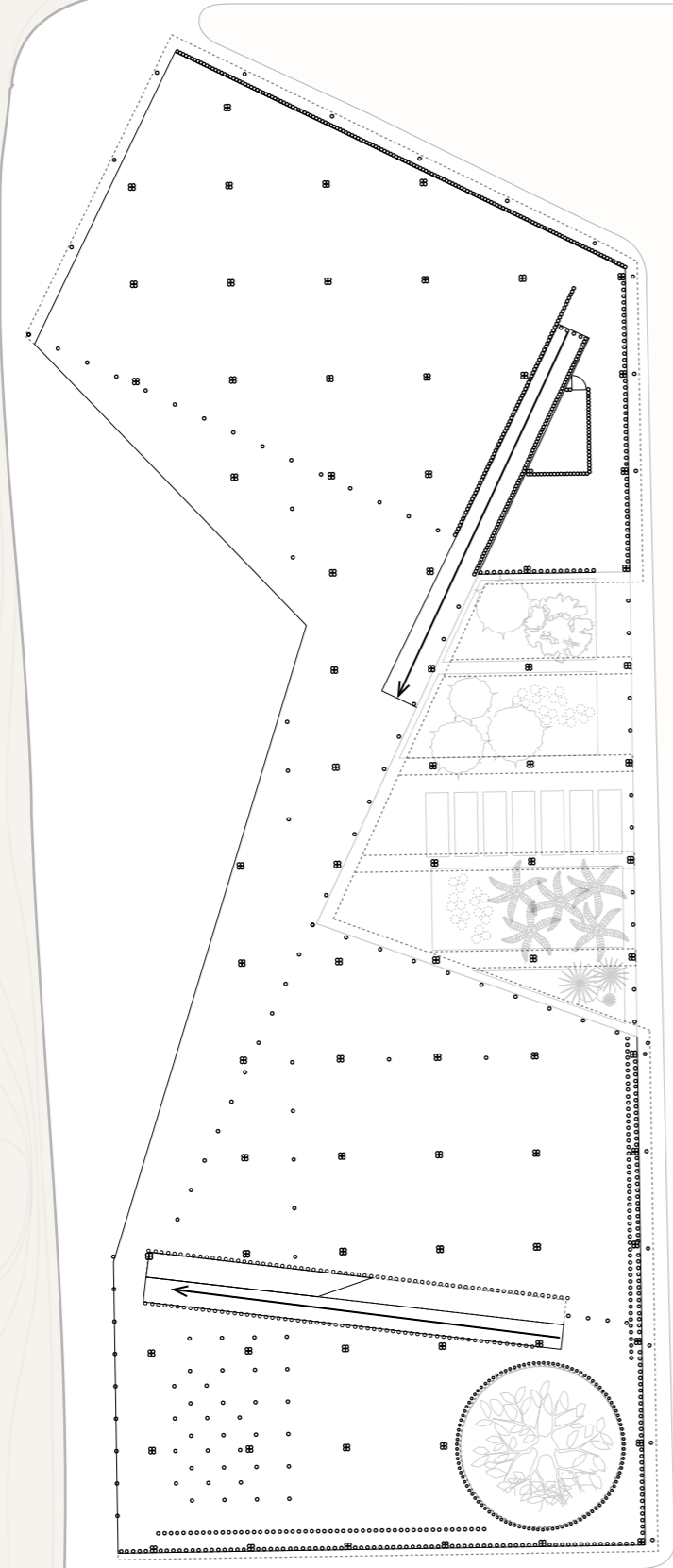


SITE PLAN 1 _ 600



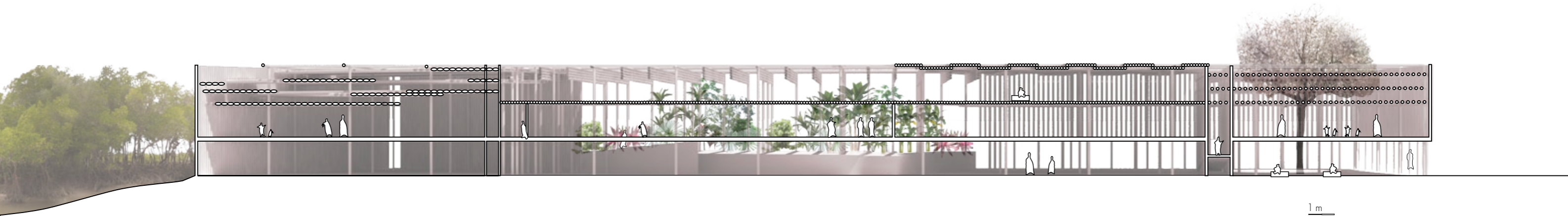
GROUNDFLOOR PLAN 1 _ 400



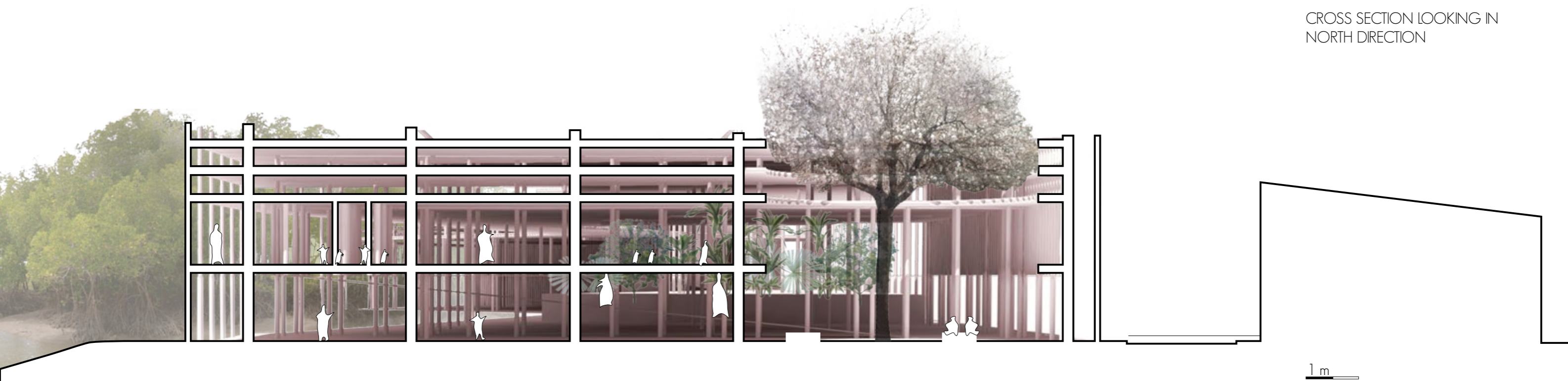


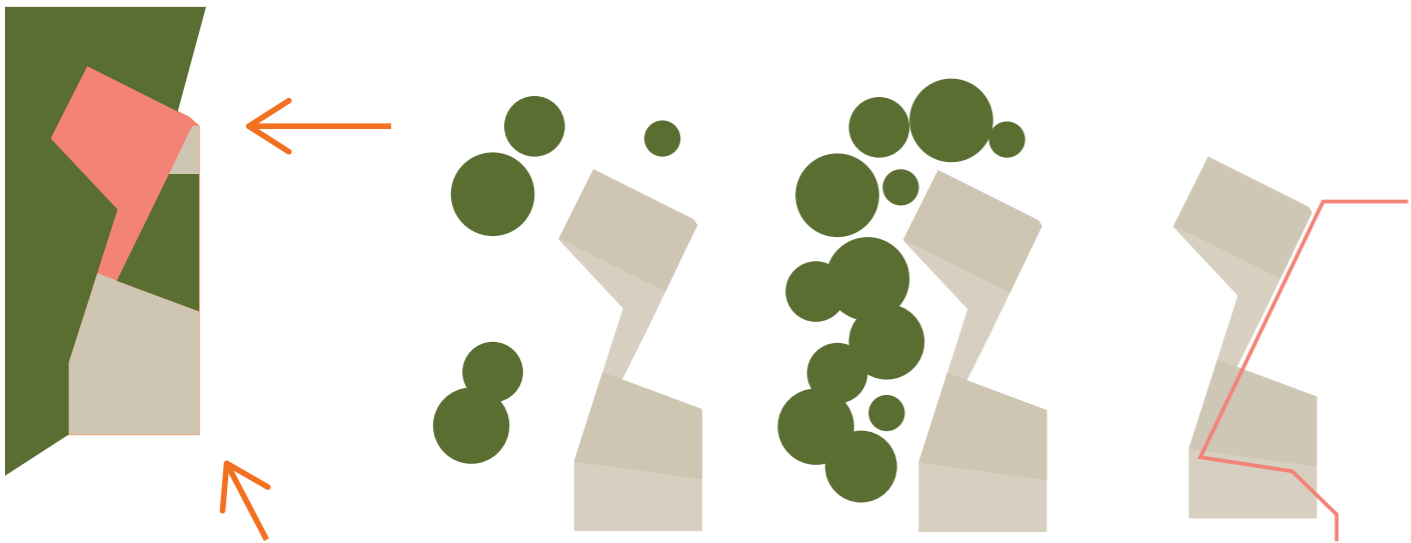
HERE I WILL ADD MORE INFOR-
MATION ABOUT CONSTRUCTION
AND MATERIAL DETAILS,
AND SPATIAL DETAILS IN A SCALE
OF 1:20

LONGSECTION LOOKING IN
EAST DIRECTION



CROSS SECTION LOOKING IN
NORTH DIRECTION





- MANGROVE FOREST OR GARDEN**
- RECREATIONAL AND CULTURAL ZONE**
- WORKING ZONE**

FUNCTIONAL ZONES IN BUILDING

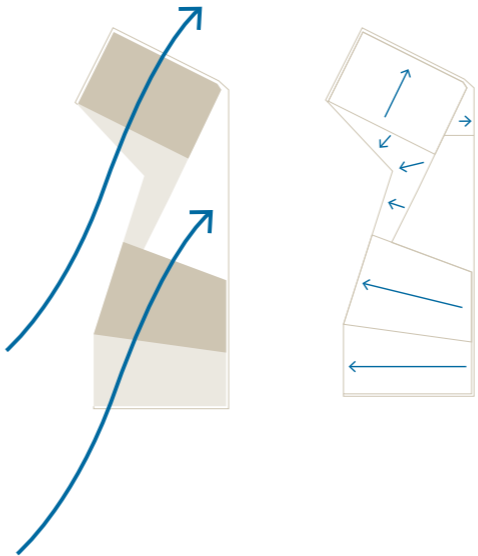
The working zone is physically connected to the street and the urban environment. The recreational zone is connected to the waterside, and could be seen as a continuation of the new promenade along the northern shore of Isla Trinitaria.

MANGROVE FOREST AND TIME ASPECT

My intention is to plant new mangrove trees and during the process of time these will grow up along the building. I wanted to create an atmosphere of "finding oneself in the mangrove forest" when being on the boardwalk at the edge of the house. Instead of building out in the water to create that feeling, I let the forest come to the house instead, like if it was claiming back its land.

Vegetation, inside and around the building, will help to create a better microclimate.

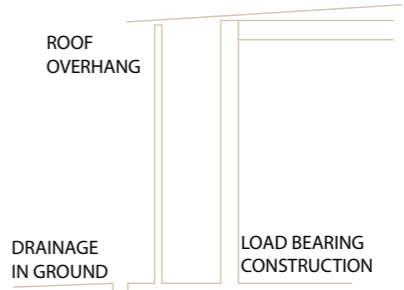
MOVEMENT THROUGH BUILDING



CLIMATE
SUN AND GENERAL WIND DIRECTION IN GUAYAQUIL

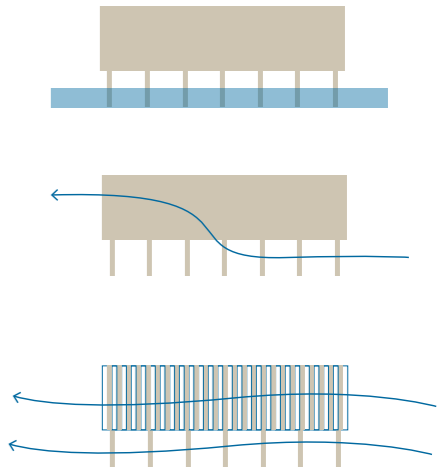
Being so close to the Equator, the sun is most of the time in zenith during the day.

The wind blows in general mostly from south west. That is why the building is oriented with its biggest openings in this direction, in order to take advantage of natural ventilation as much as possible.



DRAINAGE ON ROOF

During rainy season it rains a lot. It is important to have proper drainage for rain water. Important to lead away the water from the soil where the load bearing construction is.



RAISED ON POLES

The building is raised on poles in order to not be affected by the flooding of the estuary. When there is a dry season the space underneath the building can with advantage be used as an additional common space in the shadow.

Being raised on poles also allows breezes of wind to cool the building from underneath. Openings for ventilation in the floor lets in cool air in the building, as the warm air raises and goes out through openings higher up, like that constant cross ventilation. The facade is like a skin that breathes, a skin made of bamboo.



1 m

Working with this project has been an exciting journey from the beginning to the end. I started with a flying ticket in my hand, and ended up with an architectural project in a context that is in all possible ways different from the context that I am used to.

In my thesis I have been highlighting urban poverty, as in the case of the slums of Guayaquil. In fact, I have only been showing one small example of a big serious global problem -billions of people live in absolute poverty in slums all over the world.

I hope to give a contribution to the discussion on how poverty in slums could be reduced. What I am proposing on a site in Isla Trinitaria, Guayaquil, is one way of dealing with the problem on a local level. But surely there could be many more ways!

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(THERE ARE MANY MORE REFERENCES AND I WILL ADD THEM LATER)