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CAMP AS CATALYST FOR HEALTH & EDUCATION

**THE CAMP'S PERIOD, A SPECIAL STATE WHICH ALLOWS BETTER HEALTH
AND EDUCATIONAL SYSTEMS**

CAMP'S TEACHINGS & THE RETURN

STRATEGIES FOR THE "RETURN"

Health and Education
Hans Leidescher



DRAFT

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INTRODUCTION

HEALTH & EDUCATION TOGETHER

In this current chapter health and education have been analysed together.

Both topics need to be understood as fundamental necessities for human's life in order to exist.

When this two needs are being supplied, a big part of human's life is ensure.

UN determines HDI (human development Index) based on tree facts from which two are health and education.

At the creation of the camps, the saharawi population was complete aware of this, and based their entire development program on this two issues which shape the main pillars of the saharawi society and through already more than 35 years has been an absolute success. Raising from less than 10% of literacy rate in 1975 to nearly 90% today, with a total schooling of the population of 3 to 16 years. And almost a 100% medical coverage.



YOUNG GIRL BY THE IBRAHIM ACHMA SCHOOL IN SMARA, AND AN AMBULANCE IN THE BACKGROUND



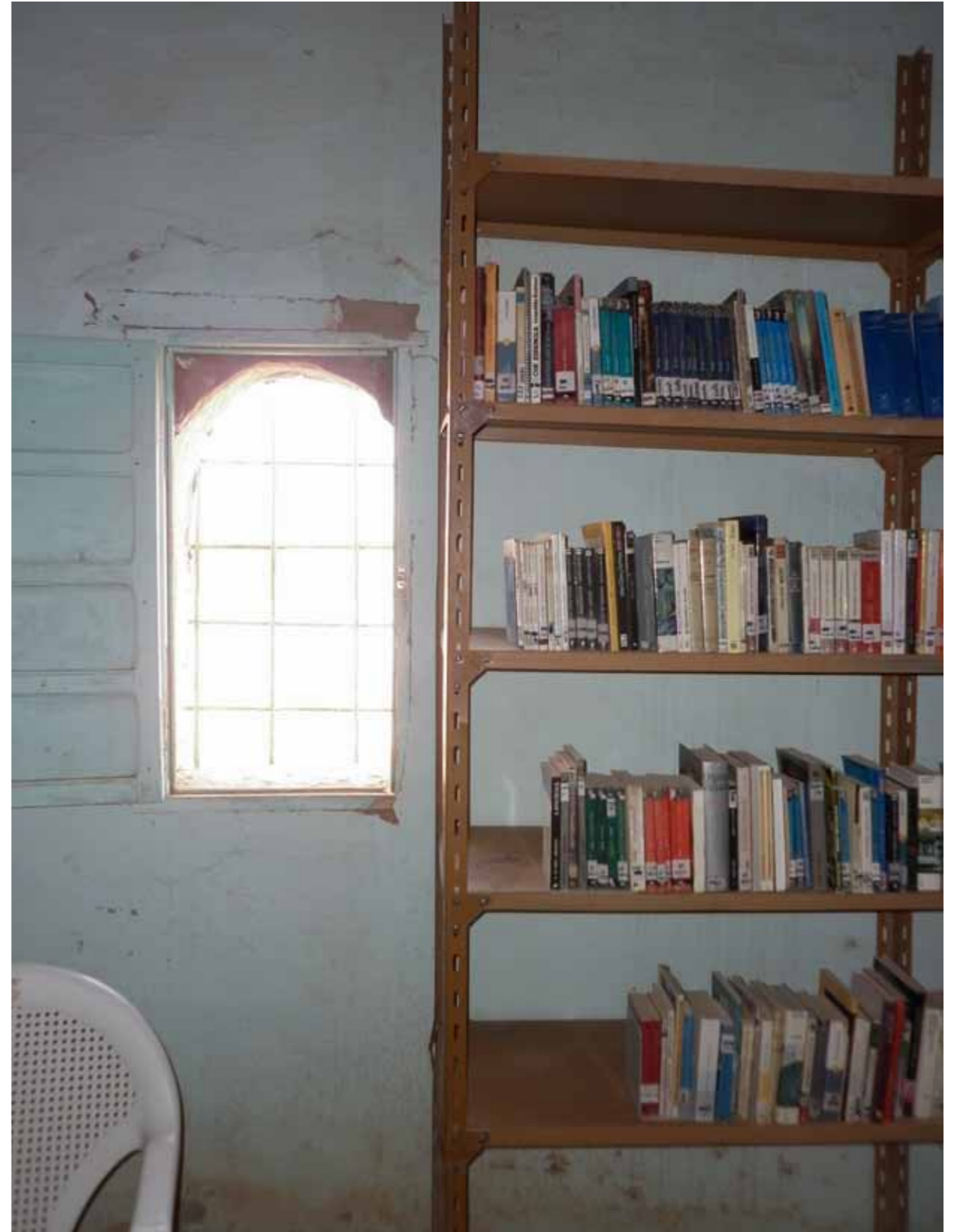
DRIVER SAYING HI FROM A RED CROSS TRUCK, RABOUNI



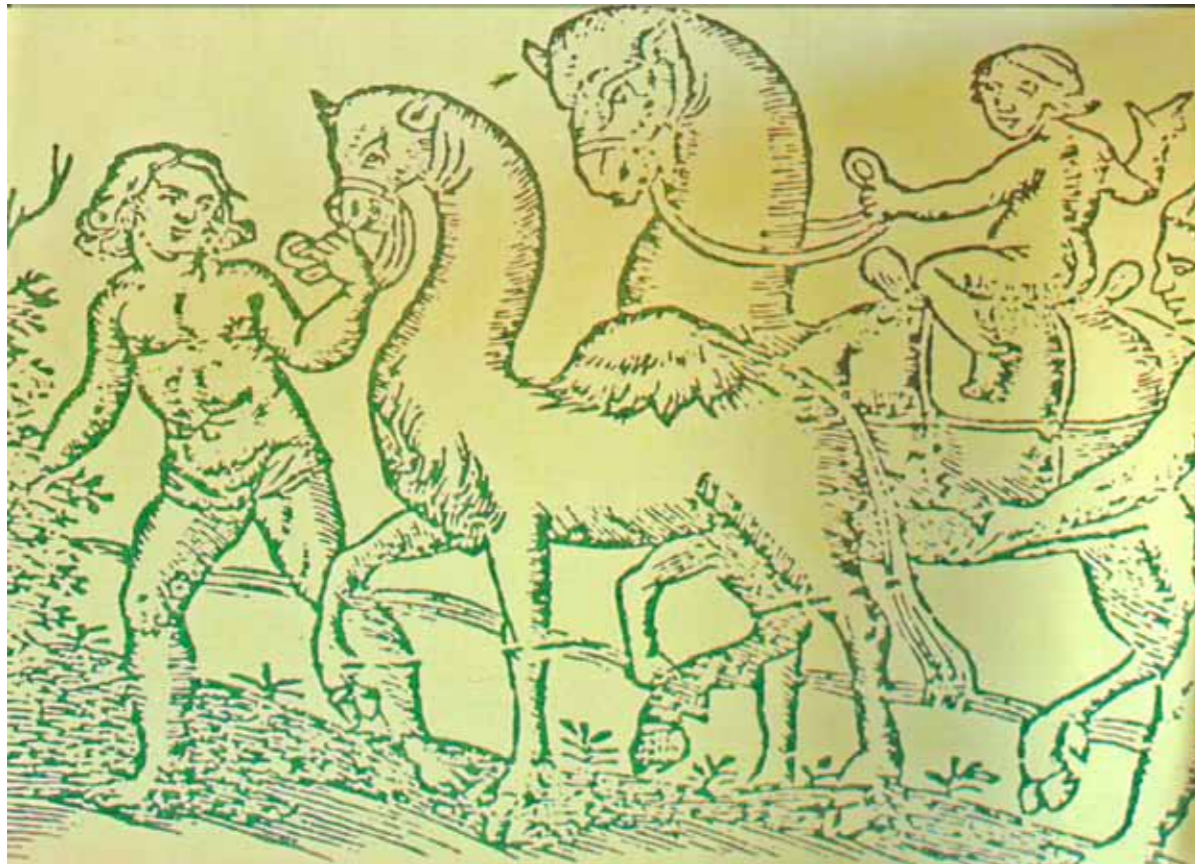
HADDIA MAMMUT SCHOOL, EL AAJOUN LAST DAY OF CLASSES BEFORE HOLYDAYS



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ROOM IN REGIONAL'S HOSPITAL IN EL AAJOUN
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VIEW OF THE 27. FEBRUARY LIBRARY



SANHAJA CIVILIZATION; IMAGES : NATIONAL MUSEUM, 27 FEBRUARY CAMP

HISTORY

About 3000 years ago the “Sanhaja” a group ancestors of the Berbers, began migrating from the north to the northwest of Africa.

In their advance they were driving south darker-skinned populations, who lived in the Sahara, thus occupying the entire territory.

However, their total control over the Sahara desert just found place until they started using the camel, some 2000 years ago, that allowed them a wider expansion.

For many centuries the Sanhaja clashed with other groups, in order to maintain control of trade routes that crossed the desert from north to south.

The arrival of the Almoravid civilization, brought the islamization, this process lasted from the eighth century until the eleventh century with a final unification between Almoravids and Sanhajas.

This new group had managed to expand widely on the territory, towards south regaining lost lands, and north, reaching the Iberian peninsula, today known as Andalusia.

In the early XIII century, a Bedouin Arab tribe from Yemen, the Beni Hassan, arrived into the territory. The relationship between the Beni Hassan and the Sanhajas was very complex, after clashes and agreements clashes this two groups ended up by fusioning.

PRECOLONIAL TRIBES

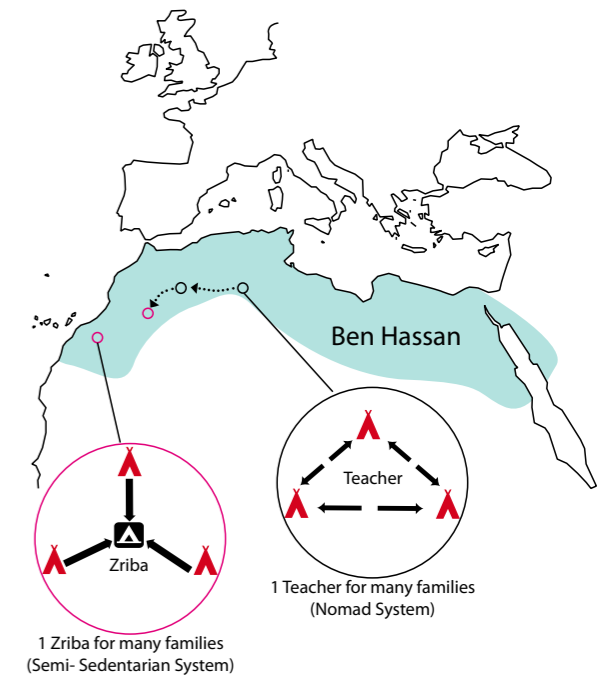
900 years ago

The Almoravids



700 years ago

The Ben Hassan



Almoravids had a very strong influence in the saharawi culture, with the implementation of the Coran together with the first nomad school systems, where one educator used to teach several families, the concept of fix school didn't exist at that time.

The Ben Hassan, even they were half Nomad, they brought a much more sedentarian behaviour into the Sanhaja's culture which allowed a better organized school system and with it first fix schools were established the so called the Zribas.

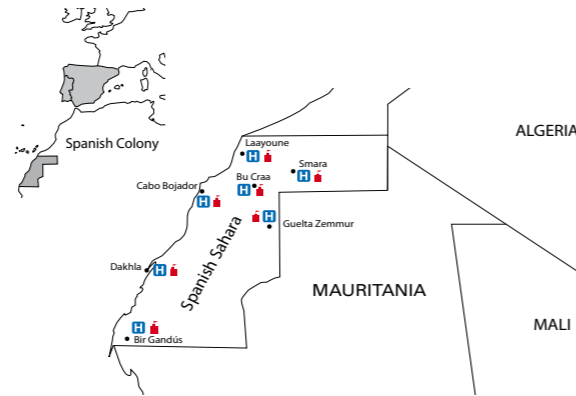


ANCIENT SAHARAN TRIBES, IMAGES : NATIONAL MUSEUM, 27 FEBRUARY CAMP

SPANISH COLONY

Spain, except of Smara, founded the big cities and with them the health and educational system. Hospitals and schools were built in the cities. Nonetheless, at the end of the colonial times, illiteracy reached a 96 %. In 1976 the number of Saharawi University students wasn't higher than 20.

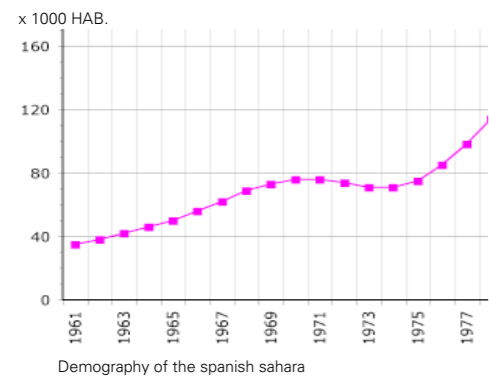
Those few who had access to spanish universities were not allowed to follow political sciences, sociology, or journalism.



City of "EL Aajoun" 1958-59 by Yoly



School in EL Aajoun by Juan José Vázquez 1963



FACTS (1965):

Educational Units	44	
European Teachers	37	
Saharawis	15	(Coranic lessons)
Primary Students:		
European	850	
Saharawi	1162	
Intermediate (Secondary):		
European	370	
Saharawi	82	

Saharawi Professionals

The minuscule Number of Saharawi higher Degree holders in 1975 is due to the fact that Spain just from 1968 on allowed Saharawis to study at spanish universities, by the end of the colonial period only 2 Saharawi had higher University degrees, and only 12 had advanced technical Diplomas.



Saharawi Haimas by Alfonso Serrano 1930



El Aaiún 1971



Hospital el Aajoun, 1975, by B. Alvarez Muñoz



El Aaiún 1972 by Juan Piqueras

FACTS (1972):

two Hospitals for the entire population	
one Hospital bed per 239 people	
4.65 doctors/ 10'000 Hab.	
(WHO 2011):	
Mali	0.5 doctors/ 10'000 Hab.
Algeria	12.1 doctors/ 10'000 Hab.
Mauritania	1.3 doctors/ 10'000 Hab.
Morocco	6,2 doctors/ 10'000 Hab.

Health

Due to the fastest growth of the population, the implementation of several small dispensaries, and paramedics was needed. The whole Region count with 2 Hospitals, and 29 Doctors, this means an average of 1 Doctor per 2'150 habitants, and 1 hospital bed per 239 people, and even the fact aren't very alarming, the mayor health infrastructures primary served the spanish army.

WOMEN AND THE GENESIS OF THE CAMPS

While Men were at war, women built the camps, founded the schools, raised children and hold the family together.

Already from the beginning of the establishment of refugee camps in the zone of Tindouf in 1975, the education was a high-priority subject.

With the motto: "saharawi that knows is saharawi that teaches", the educative attention to the children began to improvise itself to those who fled from the attacks of the Moroccan army, having as educators few teachers who study in times of the colony, as well as with university or secondary students, which had to quit their studies temporary.

The classes took place outdoors and the absence or resources was replaced with good doses of imagination: for example, it was obtained ink from the coal.

From those first times, the Polisario Front practically initiates the process of creation and organization of schools and an exchange program with foreign countries

Also in those first moments, a necessity to improve the education in the camps begins to raise. A new program which contributes to the development of a national saharawi culture, and adapts itself to the conditions that the war of liberation imposes.

The educational program started being bilingual (in Arab and Spanish), this second one has stayed in the saharawi educational system by own will of saharauis,

Although the hard situation and the difficulties derived from war, saharawi people have done enormous efforts and spectacular advances in the educative area, and even if is not excent from errors and problems, it does has a very positive balance compared to the surrounding African context.



Haimas in the beginning of the camps



Women reunion



First teaching meetings



Men at war



all images: National Archive; Rabouni



First schools in the camps



Polisario Soldier

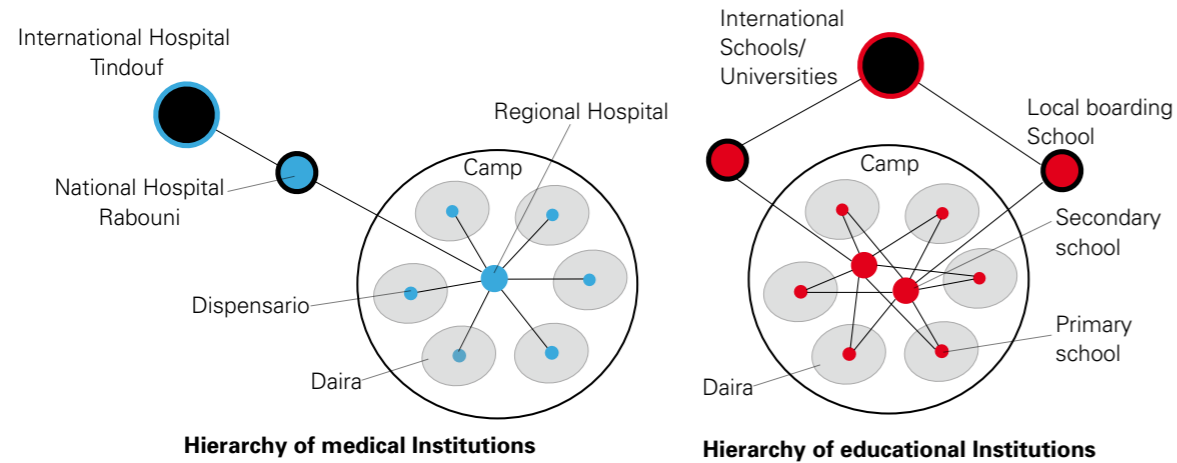
a lesson in arab



the first educators were a few teachers who study in times of the colony, as well as some university or secondary students, which had to quit their studies temporarily in order to help the community.

First lessons in the camps





	Rabouni	El Aiun	Smara	27. Febrero	Awserd	Dakhla
●	1					
●		1	1	1	1	1
●		6	7	2	6	7
●		2	2	1	1	2
●		6	7	2	6	7

STRUCTURE IN THE CAMPS

Camps or “WILAYAS” are organized in “DAIRAS” or districts which are subdivided in “BAR-RIOS” or neighbourhoods as well.

The Sanitary system is hierarchic established, in a local level: each Daira has it’s own small hospital called DISPENSARIO, which supplies controlling, maternity, children’s care, nutrition, pharmacy, and regular medical aid, treating patients with chronicle but not gravidance diseases.

Sporadically, there’s some small specialized Dispensarios, like in EL Aajoun, were in February 2011 the Maternities, and Children’s small hospital has been built.

On e bigger scale, we find the Regional hospitals which have bigger infrastructures, and a bigger medical personal, they also provide more services, like physiotherapy, x-rays, ecography, sicology, and laboratory of analisis. The regional hospitals also count with a professional nursing formations programm serving as educational hubs. On a National Scale there’s the National Hospital in Rabouni, where all medical cases of gravidance are transfered.

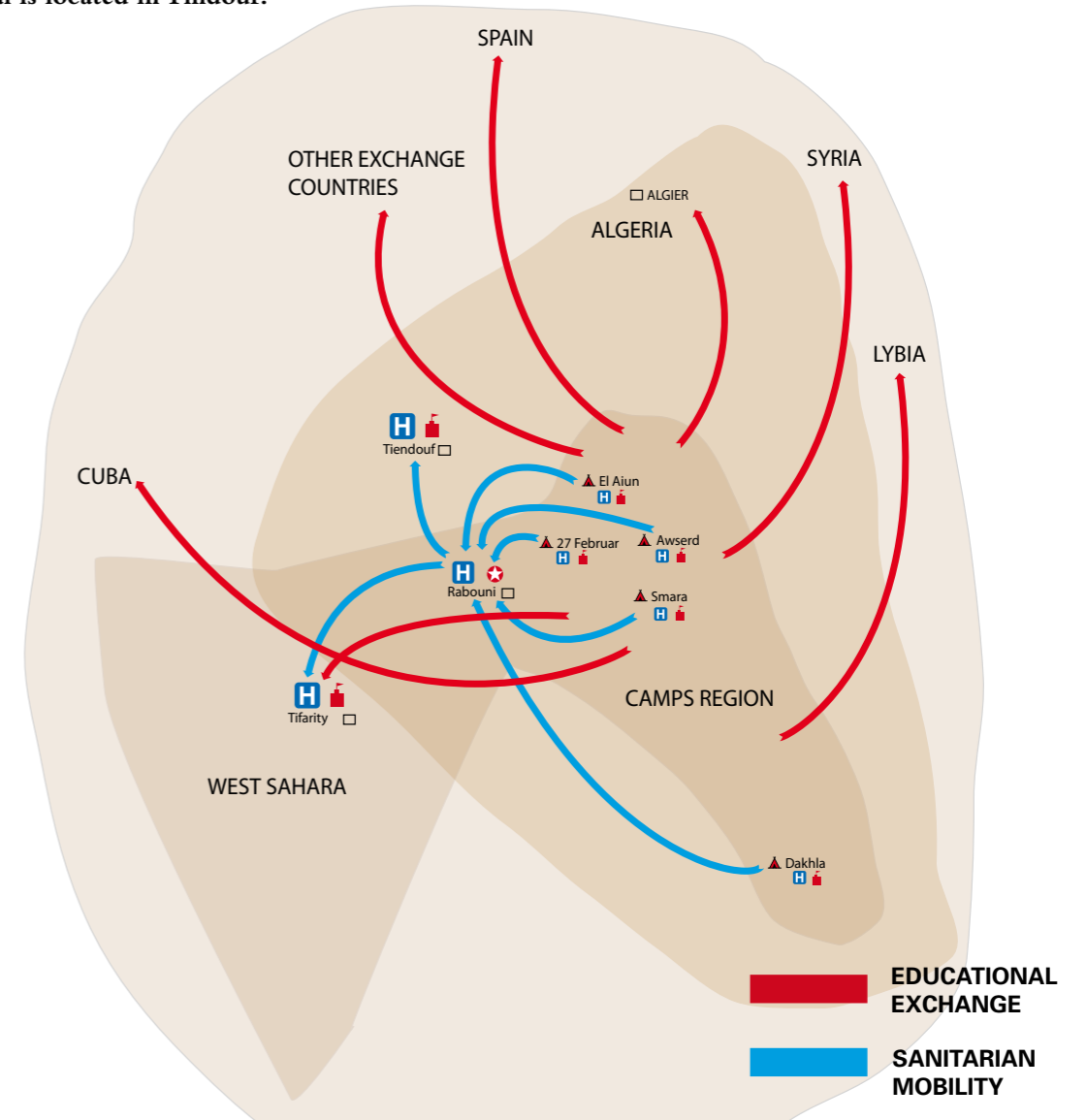
Schools are similar organized, on each camp there between 1 or 2 Secondary schools for the whole camp, usually they’re centrally located, while each Daira has it’s own primary school. Locally the camps don’t count with higher educational institutions, none the less, boarding schools like the 27. February offer further educational programms, like Nursing or as Educators.

Scholarships and international educational mobility programms have been established very succesfully with Cuba, Spain, Algeria, Syria and Lybia (before the conflict).

EXCHANGE

The international educational agreements, are supported by the hosting country with a government scholarship, this covers university fees, for all other costs, students depend from a small maintenance grant given by the polisario front.

In the medical field, there’s a very strong and generous cooperation with the algerian governement Algeria provides free medical assistance to the saharawi population at anytime, the closest algerian hospital is located in Tindouf.

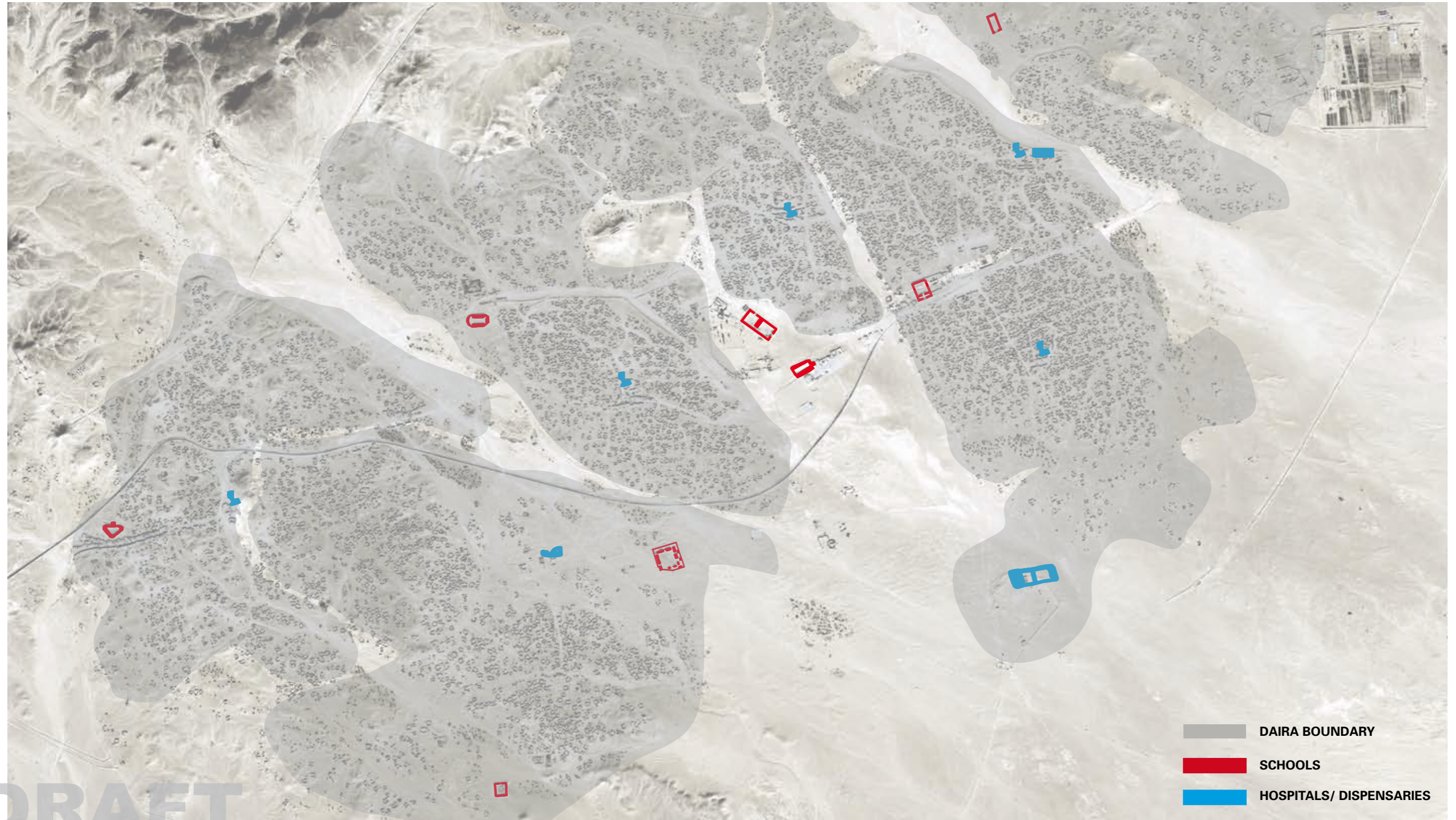


Saharawi Mobility Students in 2003:

Libya 2'000 Algeria 3'000 Cuba 1'400 Spain 1'189

(Coggan 2003/ Datos del Ministerio de Educación y Ciencia. Oficina de Estadística.Spain)

SCHOOLS AND HOSPITALS EL AAIÚN



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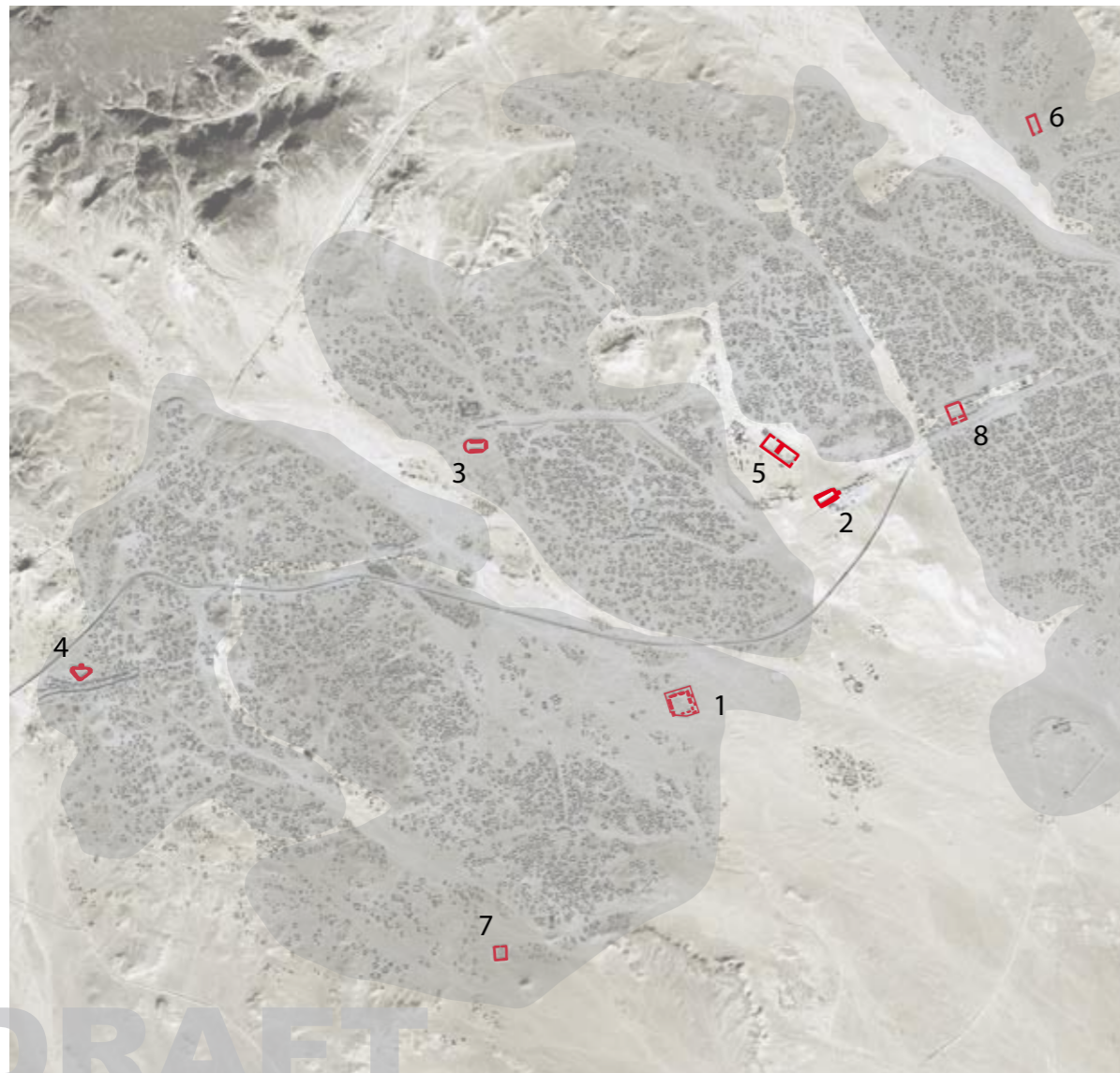
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SCHOOLS IN EL AAIÚN

Each Daira has its own primary school, and for the whole camp there's two secondary schools UMDRAIGA (1), and SAID (5), Additionally there's some other specialized schools.

The OLOF PALME WOMEN SCHOOL, teaches only women in upper educational level (after secondary school), women learn to weave, informatics, video and audio editing, nursing and languages, spanish, english, and arab.

Other schools treat handicaped children, teaching them carpentry and other manual works.

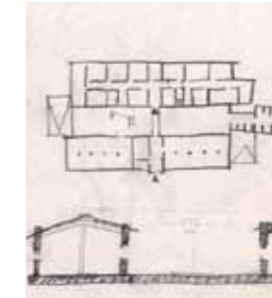


UMDRAIGA
SECONDARY
SCHOOL



1

OLOF PALME
WOMEN
SCHOOL



2

CANTABRIA
PRIMARY
SCHOOL



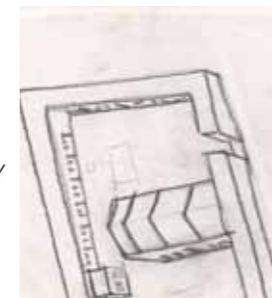
3

CORDOBA
PRIMARY
SCHOOL



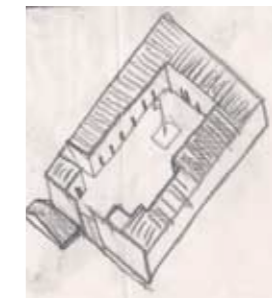
4

SAID
PRIMARY &
SECONDARY
SCHOOL



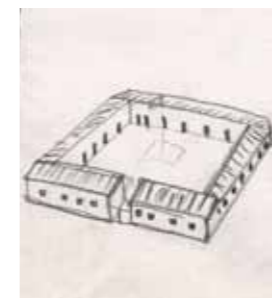
5

HADDIA
MAMMUD
PRIMARY
SCHOOL



6

LOGRONIO
PRIMARY
SCHOOL

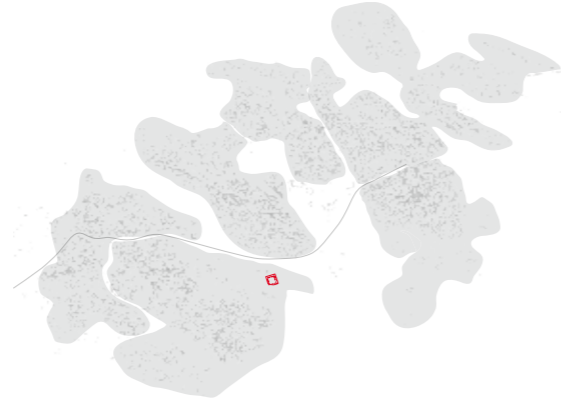


7

8 DE MARZO
PRIMARY
SCHOOL



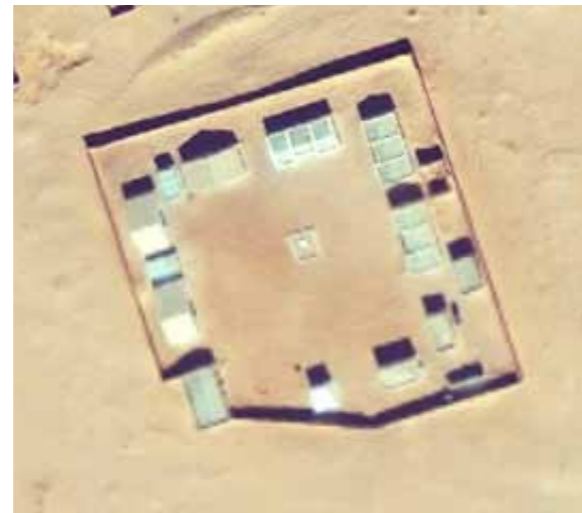
8



UMDRAIGA Secondary School

Founded: 1984
Location: Between Dairas Bucraa and Hagunia
Number of Students: aprox. 1000
Number of professors: 50
3 or 4 teachers per each subject

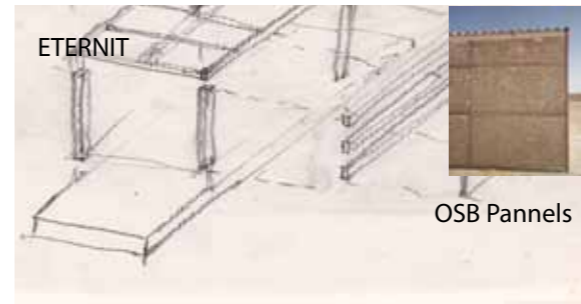
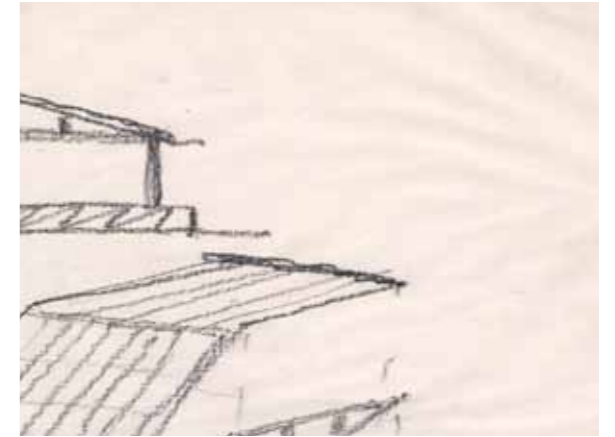
Subjects:
Languages in the follow order:
Arab, Spanish, English and French
Main Subjects:
Science, Physics, Mathematics, Geography, History, Islamic Education and Informatic
Other Subjects:
technical Drawing, Sports and Music.
Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



0 15 mts



Coutyard



Wood-Frame

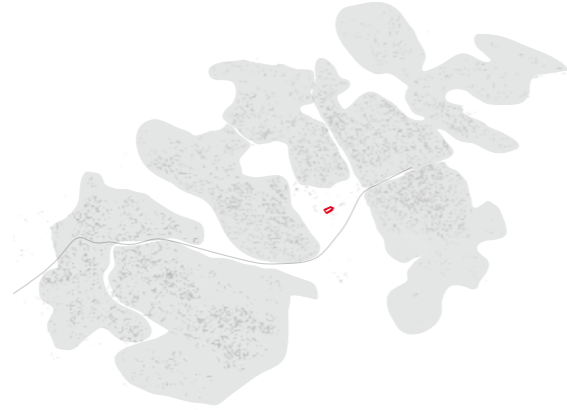
The school characterizes itself from the other school typologies in the camps. This one is composed by singular volumes, which create a small " school village " within perimetric walls. The volumes are located at the edge of the walls creating a courtyard in the middle which is used as volleyball and playground. Compared with the common schools from the camps, this one has been built with OSB wood and Eternit roofs. According to the guardians description this one material behave very good under the extreme heat conditions of the Sahara dessert.



Water Supply



Classroom



OLOF PALME women school

Founded: 1997

Number of Students: aprox. 160

Teachers: men and women (Director a woman)

Subjects:

Languages in the follow order:

Arab, Spanish, English

Main Subjects:

Multimedia, Informatic, Islamic Education, to weave...

Other Subjects:

technical Drawing, Sports and Music.

Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19

Winter: from 9 - 13 and from 16 - 18



0 30 mts



This school is specialized on teaching women, therefore it also counts with a nursery, day-care room where children can play while their mothers attend the lessons.

All the schools are built around a courtyard, and in the center from it there's a flag of the saharawi republic.

Each singular school has a ramp in order to make water supply possible, trucks arrive with water and from the ramp placed on a higher level, supply water into the tanks placed on a lower level.

The OLOF PALME SCHOOL was founded by the ex-prime minister of sweden, today is being supported by the spanish government.

Computers, weaving machines, several comunal rooms are totally at disposición for the students.



Hole in the wall for water supply



Water Supply



Childrens Room



Sewing Room



Informatics Room



CANTABRIA SCHOOL

Location:
Daira HAGUNIA

Subjects:
Languages in the follow order:
Arab, Spanish, English and French
Main Subjects:
Science, Physics, Mathematics, Geography, History,
Islamic Education and Informatic

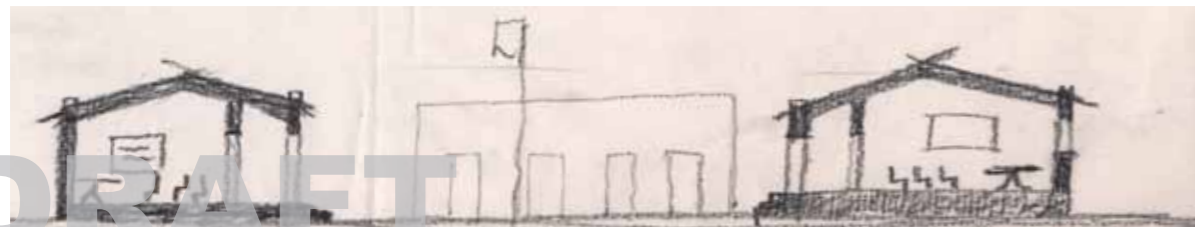
Other Subjects:
technical Drawing, Sports and Music.
Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



0 30 mts



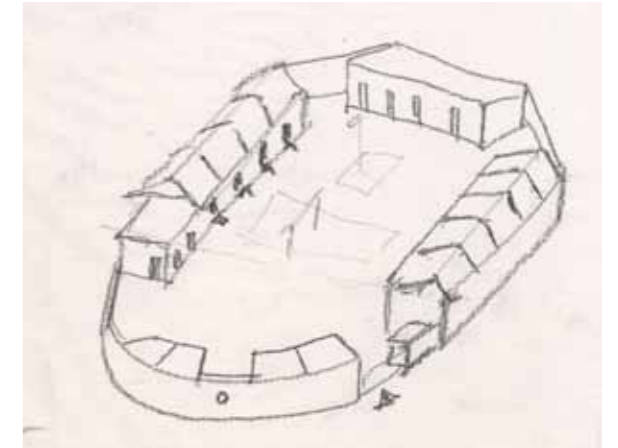
COURTYARD/VOLLEYBALL



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COURTYARD



AXONOMETRY



CLASSROOM



WC



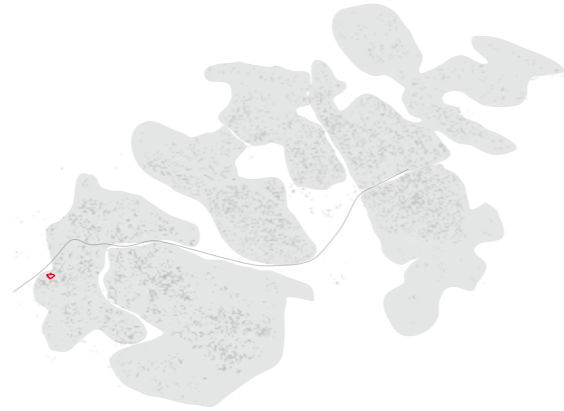
VIEW TOWARDS THE WC



DETAIL CORRIDOR



GATE



CORDOBA SCHOOL

Location: Daira ELGELTA

3 or for teachers/ subject men and women

Subjects:

Languages in the follow order:

Arab, Spanish, English

in Holydays special courses are given to women

Main Subjects:

Science, Physics, Mathematics, Geography, History, Islamic Education

Other Subjects:

technical Drawing, Sports and Music.

Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19

Winter: from 9 - 13 and from 16 - 18



0 40 mts



ENTRANCE



VIEW CORRIDOR



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SADIA SECONDARY SCHOOL

Location:
Daira HAGUNIA

Number of teachers: aprox 50
3 or 4 teachers per each subject men and women

Subjects:
Languages in the follow order:
Arab, Spanish, English and French
Main Subjects:
Science, Physics, Mathematics, Geography, History,
Islamic Education and Informatic

Other Subjects:
technical Drawing, Sports and Music.
Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



WATER TANK



CLASSROOM



DETAIL WINDOW

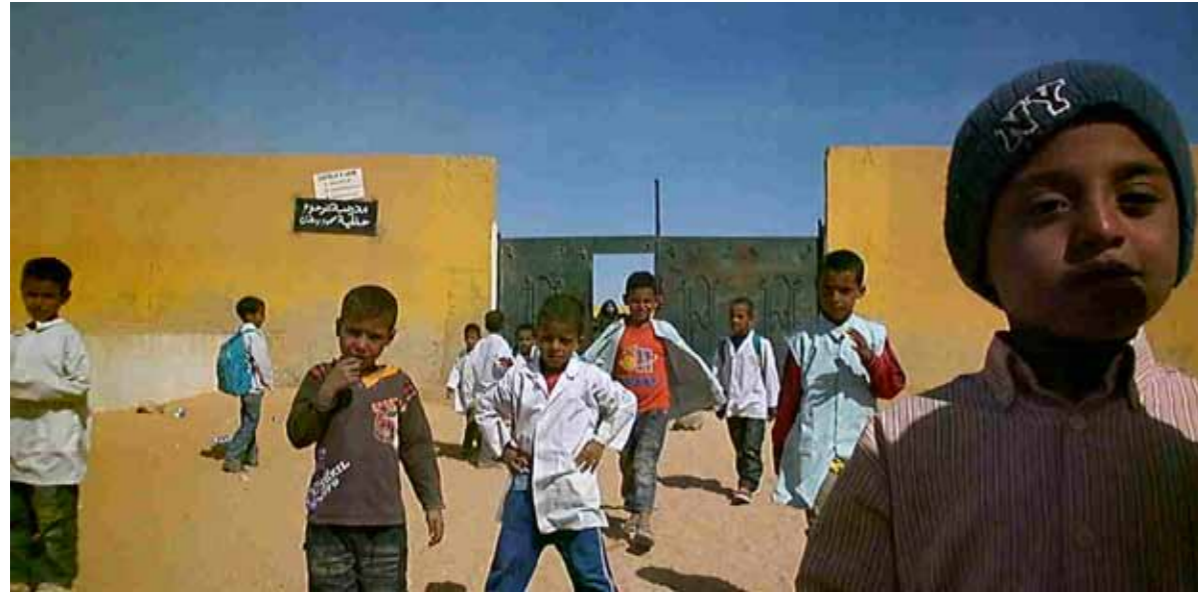


DETAIL WINDOW



LONGITUDINAL SECTION





HADDIA MAMMUD primary School

Location:
Daira EDCHERA
Number of teachers: aprox 35
teachers are men and women

Subjects:
Languages in the follow order:
Arab, Spanish
Main Subjects:
Science, Physics, Mathematics, Geography, History,
Islamic science.

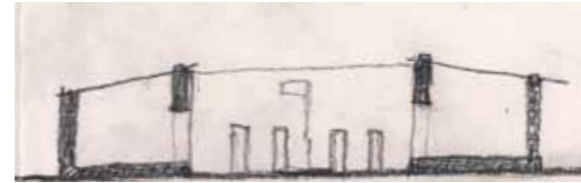
Other Subjects:
technical Drawing, Sports and Music.

Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



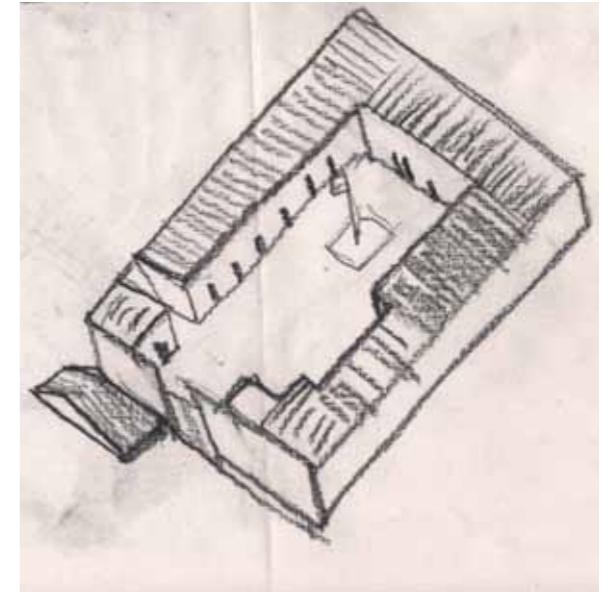
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SECTION

The school presents a typical courtyard typology, it counts with the conventional saharawi school infrastructures, WC, Direction, Volleyball field, playground, and the classrooms from 1st until 5th grade.

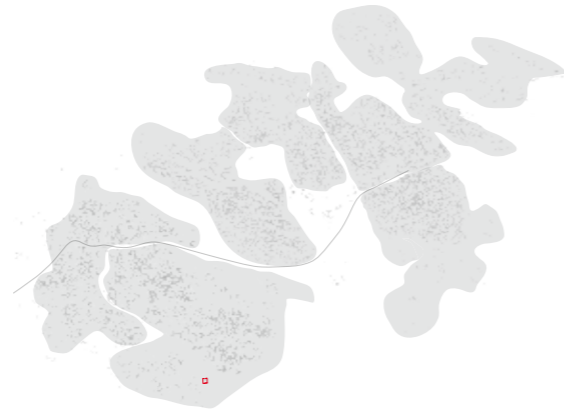


AXONOMETRY



COURTYARD AND PLAYGROUND





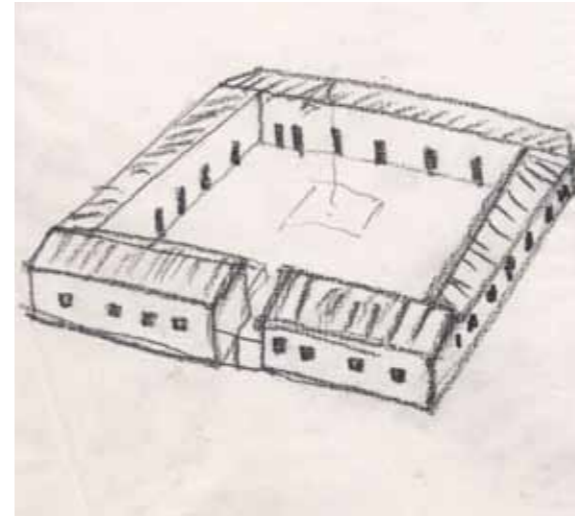
LOGRONIO primary School

Location:
 Daira BUCRAA
 Number of teachers: aprox 35
 teachers are men and women
 Subjects:
 Languages in the follow order:
 Arab, Spanish
 Main Subjects:
 Science, Physics, Mathematics, Geography, History,
 Islamic science.
 Other Subjects:
 technical Drawing, Sports and Music.

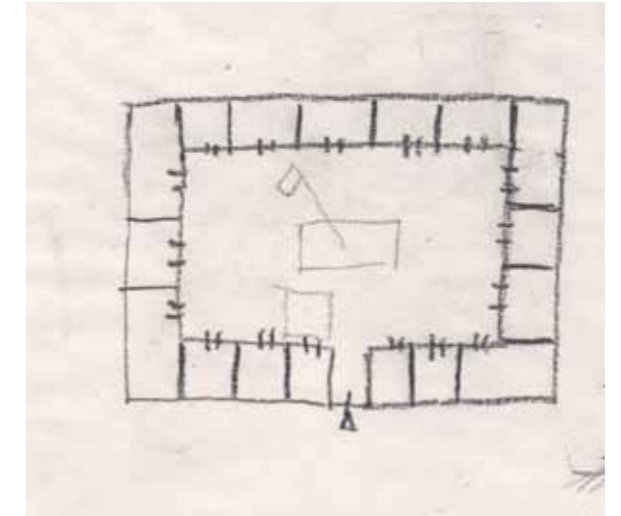
Schedule: from Saturday until Thursday, Fridays off.
 Sommer: from 8 - 12 and from 17 - 19
 Winter: from 9 - 13 and from 16 - 18



0 50 mts



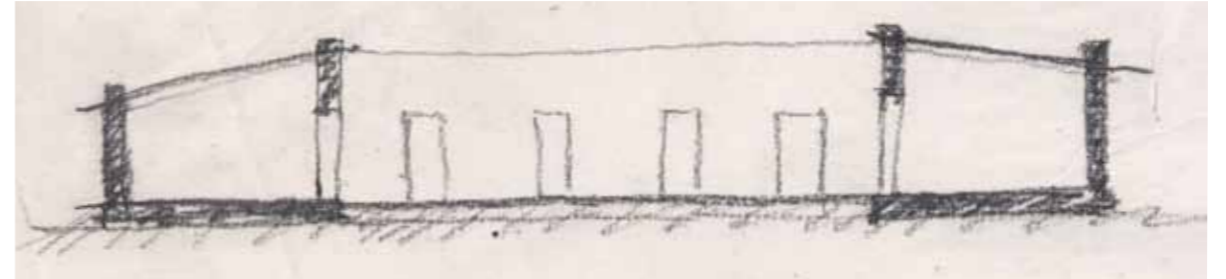
AXONOMETRY



GROUNDPLAN



FAR VIEW



SECTION

This school has been established after 2005 at the south west part of the camp, in the Daira Brucee, it presents a very simple courtyard Typologie, very common in the saharawi camps. the slope of the ceiling is towards the outside of the courtyard avoiding fluts inside the perimeter walls.

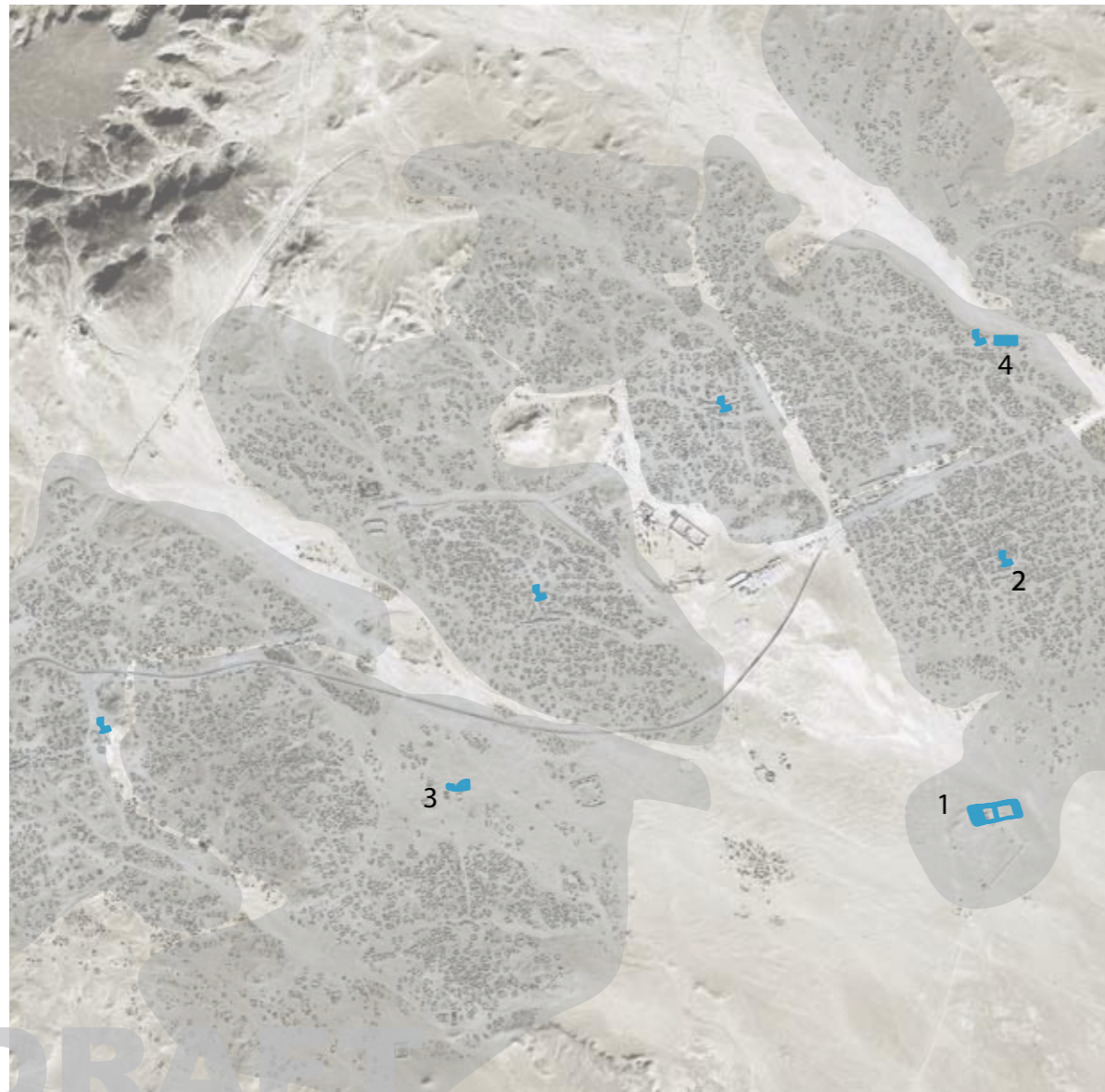
HOSPITALS AND DISPENSARIES IN EL AAIÚN

In the camp the medical system is organized as follows:

Each Daira has an own Dispensario, or small hospital, were first medical assistency, nutritions control and other services, like medicin distribution find place.

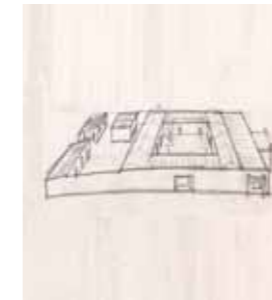
On a regional scale we find the Regional Hospital, here the patients are being treated and registered into an archive to have a better control over they treatment.

The Regional hospital counts with X-Rays, Pharmacy, Psychology departement, healing rooms Fisioterapy among others..., if the case is from higher gravidance the patients are translated into the Nacional Hospital in Rabouni or in harder cases unutil Tindouf were Saharawis have receive all medical care supported by the Algerian government.



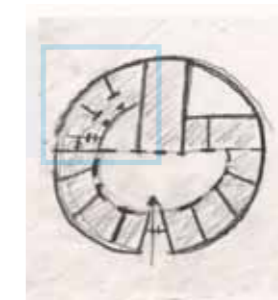
REGIONAL HOSPITAL

1



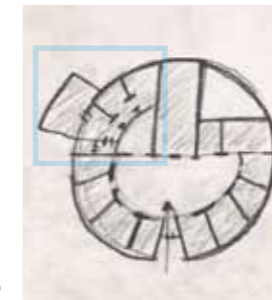
DISPENSA-
RIO TYP 1

2



DISPENSA-
RIO TYP 2

3



CHILDREN AND
MATERNITY'S
HOSPITAL

4





DISPENSARIO EL AAJOUN

Location:
on each Daira one.
Personal: One dispensario director, trained in Nursesing, Pharmacy, and sometimes even a Doctor
1 or two Nurses
Diseases:

Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18
Total a Day 6 Hours

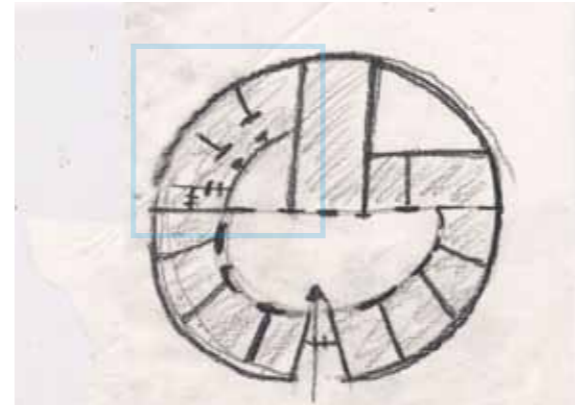
Functions:
First Medical Aid, Pharma supply, nutritions control, Maternity



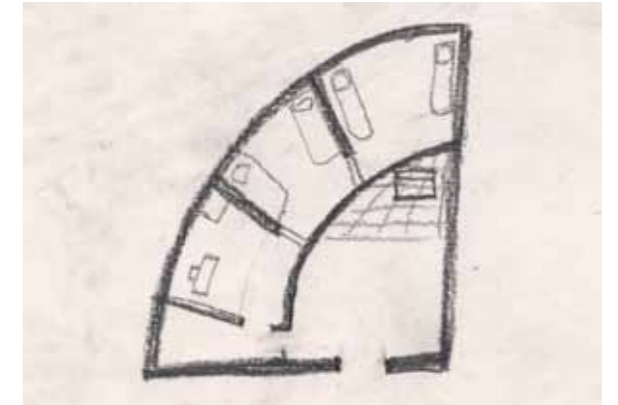
VIEW INSIDE



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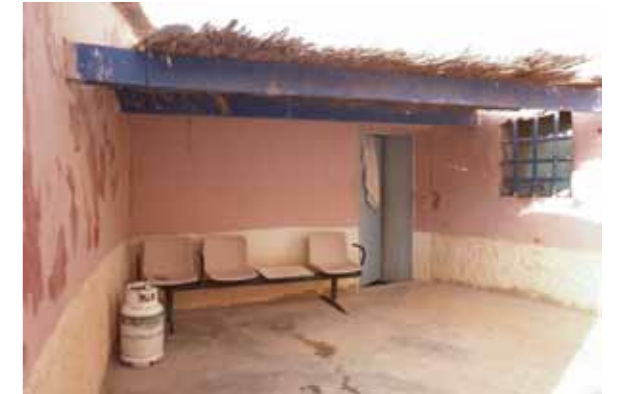
DAIRA'S ADMINISTRATION CENTER



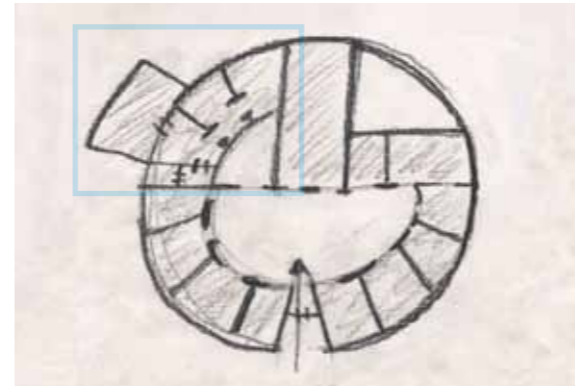
TYP 1



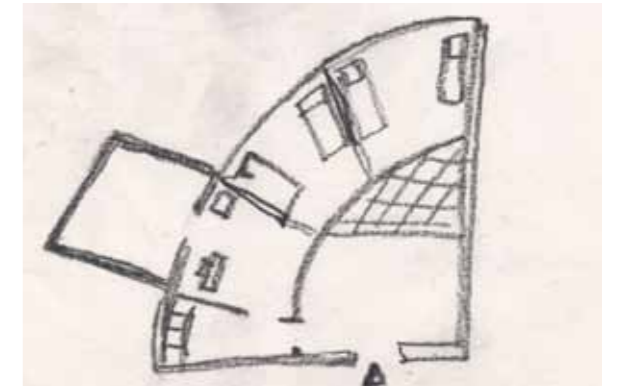
CONSULTORY



WAITING SEATS

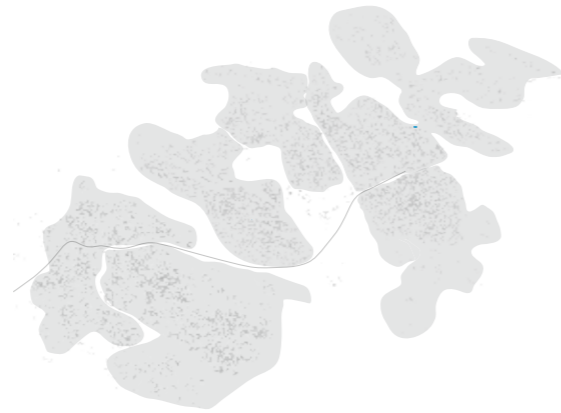


DAIRA'S ADMINISTRATION CENTER



TYP 2





MATERNITY HOSPITAL

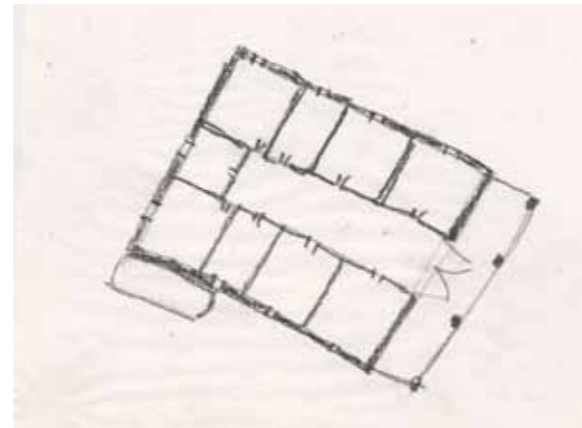
Location:
Daira EDCHERA
Personal: One dispensario director, trained in Nursesing, Pharmacy, and sometimes even a Doctor
1 or two Nurses

Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18
Total a Day 6 Hours

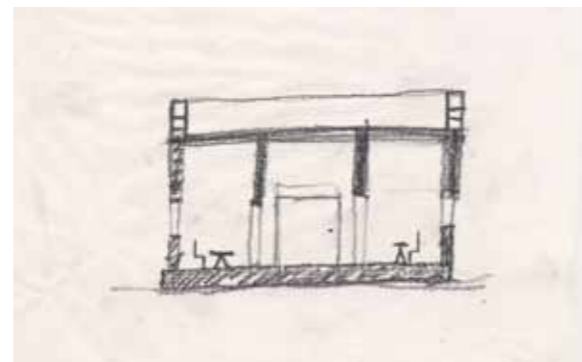
Functions:
First Medical Aid, Pharma supply, nutritions control, Maternity

Most frequent deseases:
There's two types of disseases:
Cronical and non cronical,

Under the cronical we have, Diabetes, Hypertension, Asma, Epilepsy, Celiacus (cannot eat Gluten)



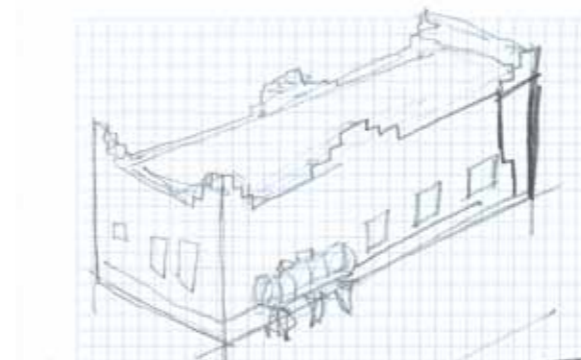
0 15 mts



SECTION



ENTRANCE



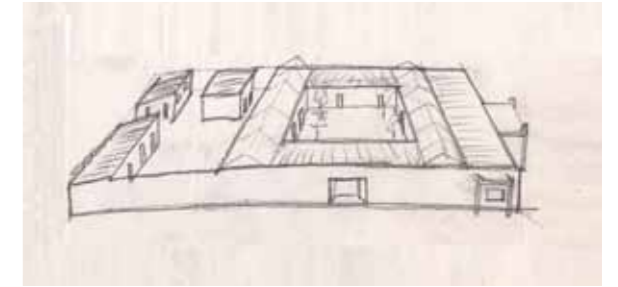
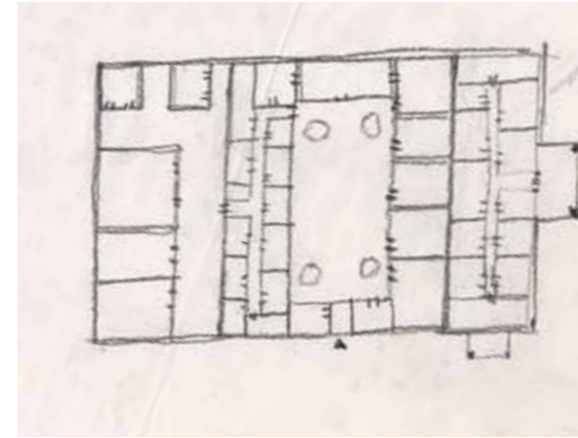
AXONOMETRY



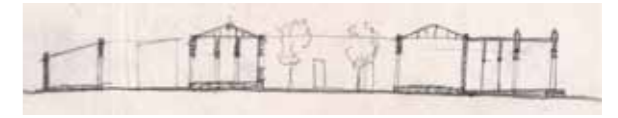
WATER SUPPLY



This Hospital has been constructed by Doctors from the World it is specialized in women and children, and counts with 1 hospital bed, maternity's room, consultancy, pharmacy and therapy's room



Axonometry



Section

Groundplan

Regional Hospital El Aajoun

Location:

Daira AMGALA

Personal: One Director, trained in Nursesing, Pharmacy, one Doctor, one Rotary specialist several Nurses

Diseases:

two types of diseases:

Cronical and non cronical,

Under the cronical we have, Diabetes, Hypertension, Asma, Epilepsy, Celiacus (cannot eat Gluten)

Non Cronical:

Feber, Diarrea, Amigdalitis, Cepholica, Arthrosis, and Knees pain.

Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19

Winter: from 9 - 13 and from 16 - 18



0 30 mts



PHISIO THERAPY



ARCHIVE



INTERVIEWS



Name: Minatu Mohame Salama

Age: 33

Adresse: El Ajoun, Daira Edchera, Barrio 1

Civil status: Married

Children: 2

Education: 15 years after secondary School in Cuba, Nursing, Laboratory training/ Medicin.

Position: chief Doctor of the Maternity's local Hospital in el Ajoun (Dispensario)

Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19

Winter: from 9 - 13 and from 16 - 18

Salary: each tree months receives a bonification from the government, it's not a formal salary, i don't work for the money

Languages: Arab and Spanish

Why did you become a Doctor?
To help the Saharawi comunity, my people!

Wich are your duties as chief Doctor of the Dispensario?
Everything, from Administration, and medical history recording, until healing and direct treatment with patients.

Who founded the Hospital?
It was founded by World Doctors (Medicos del Mundo, www.medicosdelmundo.org) on February this year

Who finances the Hospital?
Several NGO's.
Every type of help has to be approved by the government first, the medicine comes from Rabouni.

Which services give the local Hospital or Dispensario to the Comunity?

We supply first aid, mainly for women and children, also for men, we do periodical controls on cronical pacients and provide the necessary medicine. Although we mainly offer an ambulatory service, we also treat child-births, and postpartum cases.

Each patient is treated individually and has its own register.

People come here to have a first diagnostic, in case of emergency we send our patients to the regional Hospital.

Which are the most frequent diseases?

There's two types of diseases:
Cronical and non cronical,

Under the cronical we have, Diabetes, Hypertension, Asma, Epilepsy, Celiacus (cannot eat Gluten)

Under the non cronical we find: Feber, Diarrea, Amigdalitis, Cepholica, Arthrosis, and Knees pain.

Which are the priorities for the Saharawi population in terms of health?

There's a lot of "Brain Drain" many young professionals study uproad and never come back, doctor salaries in Spain are very good, and life conditions too.

We need more specialist more Doctors that work in our camps, we need to avoid this Brain Drain.

What about contraception?

The religion as well as the government prohibits planification, we are a small town which needs to grow. Condoms, pils or any profilactics, need to be bought in Tindouf, nonetheless some people use them in secret.

The most terrible thing which could ever happen to a young women, is to become pregnant before getting married, according to governmental rules she has to go to jail, until the father promises to get married.

How where medical services in the past compared to our days?

Well is dificult to know..., before war, there wasn't any really development, during spanish colonial times all the houses were equal the cities looked all the same, the Spanish built everything a like...
On the camps, there were just haimas...,

I thing this current years are good years for the Saharawi population.

What about the future, which are the plans or strategies for an eventual return into the West Sahara territory?

Well..., the idea is to keep working how we have been working here so far..., to apply the same systema we have overthere, for example the director of a Dispensario here in

" el Ajoun Camp" would go back to the city of "el Ajoun" there, etc...

INTERVIEWS



Name: Nah Lahse Ranban

Age: 52

Education: Training in nursing and medicine in the colonial times in " Al Ajoun " (City).
Direct trained at the Hospital.

Background: After two years of fighting in war he flew to the refugee camps.
- "Since 30 years i haven't seen my family" - he says..., when i speak with my mother she prefers me to be here but instead of loose my dignity by living under marrocan repression.

Position: Director of the Regional Hospital in "el Ajoun", nursing trainer, chosen directly from the health's Ministry in Rabouni.

Activities: Administration, nurse training, controls and healing:
..." With good reputation and intelligence you heal people, in terms of professional ethics, people need to believe in what you say, therefore i speak a lot with my patients.. and believe me!,

- he said - if you have washed a patient's clothes more than tree times, they definitely believe in what you say..."

Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18

Salary: each tree months receives a bonification from the government, it's not a formal salary

Languages: Arab and Spanish

How was the health's system organized in the past?
In times of colonies Spain built hospitals in the cities, the system was centralized, we where directly trained at the hospital where we got our education.

The first hospital built in the camps started with six Haimas, it was the Badir Saleh in 1977, while men where at war women built the hospital.

Today the Health's system is all organized in Rabouni, from the National Hospital which also has a tree years Nursing educational programm.

Each wilaya has a Regional hospital, and each Daira has it's own Dispensario, everything medicine, financial aid etc, has to pass through Rabouni before.
Concerning administration the health's ministry is encharged.
Medicine supply comes from the National Hospital in Rabouni.

We handle between 25 - 30 cases a day, our hospital has several departments such as: Laboratory, Nursing, Estomatology, Phisiotherapy, Psycology, Farmacy, Ecografy, X Rays, and staff facilities.

We even provide, odontological services, and veterinary. We also count with a specialist, a Ginecologist, who rotates from Wilaya to Wilaya, he's here every Saturday.

We also count with our PSI (Programa de Salud infantil) child's health programm.

Which are the relations in Terms of health between the camps and other countries?

We have very good relations with Cuba, Lybia, and Algier.
For example, Lybia and Algier they know what's to be a colony they have lived the revolution therefore they understand us, our situation.

There's some agreements with Cuba some of us are able to study in cuba the secondary, preuniversitary and universitarian studies.

Specialy with Algier we have a very good relationship, constantly we receive blood spendings from Tindouf, - "they are more than Brothers" -, says Nah, if one of us falls very ill we can anytime go to Tindouf and receive total health's assistency for free.

Which are the principal needs or priorities to focus on?

The lack of Medicine, lack of Specialist, we specialy need to focus on prevention, that means from the one hand: vaccination where we already are working on to prevent Tetanus, Polio, Hepatitis B, and Tuberculosis, from the other hand, we specialy need to improve hygienic conditions in the camps.
Another very important fact would be, to have acces to information without needing to go out from the camps, in other words access to knowledge. (Internet)

How do you find the health conditions today compared to older times, and how much do you think you have learned from the camps, wich can be implemented in the future, eventually by turning back to the occupied territory?

We definitely have learned a lot form the camps, we are more united, if you need something to eat, you could go to a haima anytime and anyone would offer you to eat, we share everything with everyone.

We also have improved considerably our hygienic living conditions, how to raise animals, also about water consumption. There has been lot's of meetings and conferences, from several organisations and NGO's, we have learned a lot from them.

Talking about the future, we definitely need to apply what we have learned, from this time here in the camps, but we also have to modify our System, to improve the quantity (more specialist per capita) and variety of our specialist in all several areas of the medicine, archieving a higher coverage.

We need to focus on prevention ensurering vaccination and constant provision of medicine.
Also we need to have easy acces to information, to knowledge.

There a plan to keep some structures in the administration, for example "El Ajoun" camp, would go to "el Ajoun" city, together with its Doctors and health administrators.
Thi is planned to make easier the process of resettlement.

SCHOOLS AND HOSPITALS IN SMARA



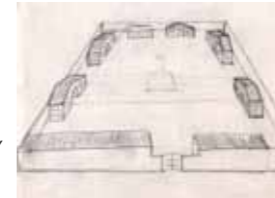
SCHOOLS IN SMARA

Like in the rest of the camps, each Daira has it's own primary school, and for the whole camp there's two secondary schools 17 JUNIO (1), and Abda Mohammed (2), Additionally there's some other like the ESSALAM ENGLISH CENTER.

This school is concerned about giving English lessons to the saharawi population in order to support and promote scholar or familiar exchange with the United States that like Spain has been participating with this programs more actively in the last years.



17 JUNIO
SECONDARY
SCHOOL



1

ABDA MOHAMMED
SECONDARY
SCHOOL



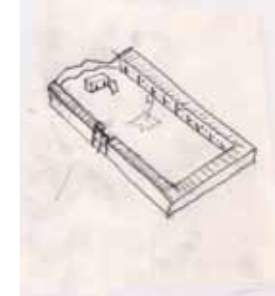
2

MUSTAFAH
MOHAMED
DACHMID
PRIMARY
SCHOOL



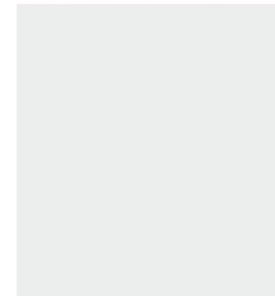
3

BALLA
HAEZNE
D
ZAED



4

ESSALAM
ENGLISH
SCHOOL



5

NACHNA
PRIMARY
SCHOOL



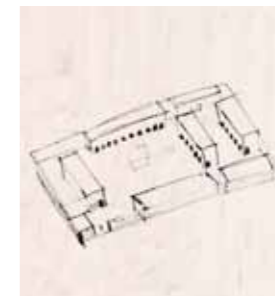
6

VALENCIA
PRIMARY
SCHOOL



7

CASTILLA
LEON
PRIMARY
SCHOOL



8



17. Junio Secondary School

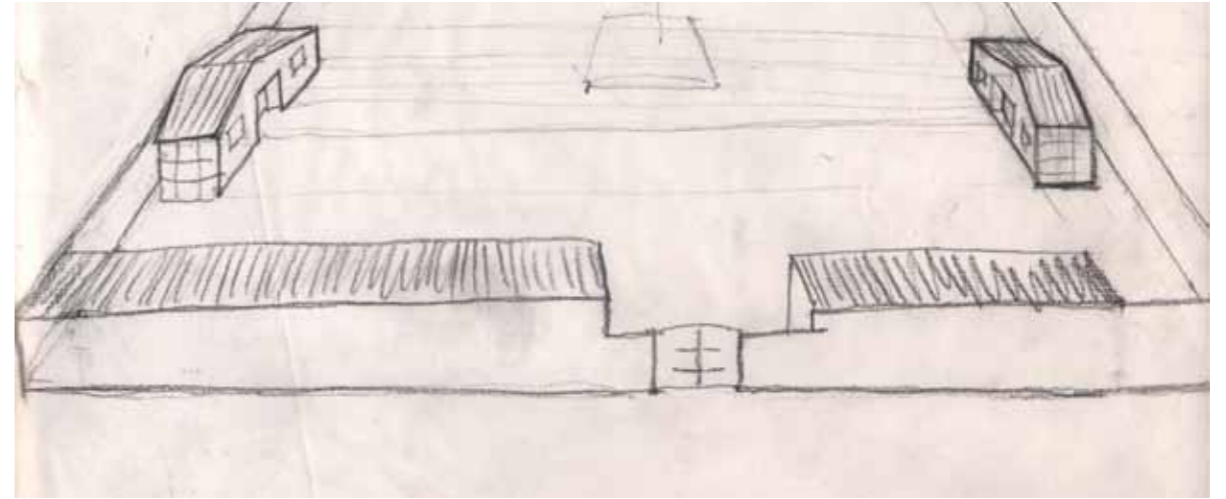
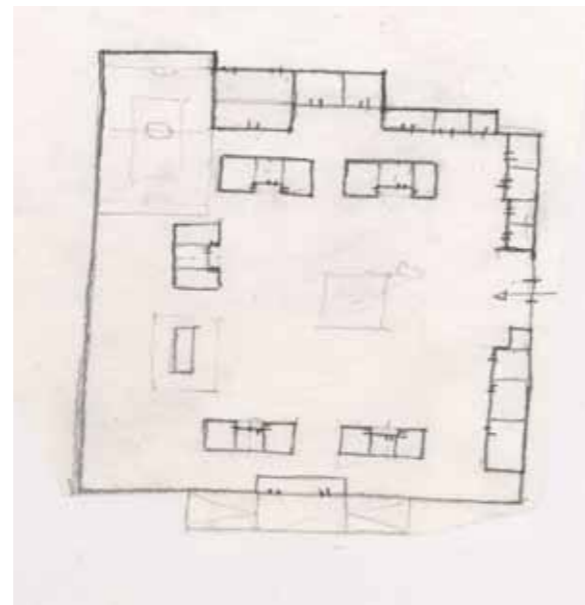
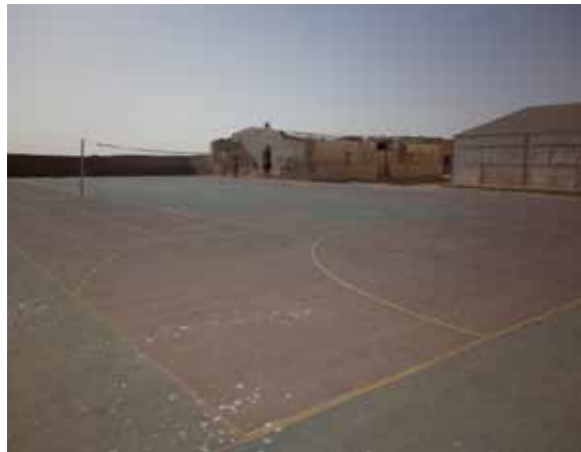
Number of teachers: aprox 50
3 or 4 teachers per each subject men and women

Subjects:
Languages in the follow order:
Arab, Spanish, English and French
Main Subjects:
Science, Physics, Mathematics, Geography, History,
Islamic Education and Informatic

Other Subjects:
technical Drawing, Sports and Music.
Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



0 30 mts



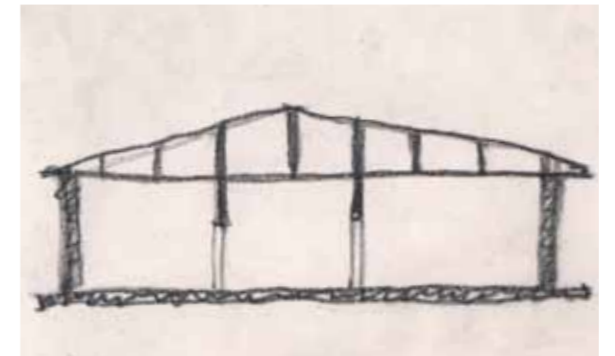
Axonometry



Scholar Houses



Scholar House



Section

Compared with the common schools from the camps, this one has been built with OSB wood and Eternit roofs. According to the guardians description this one material behave very good under the extreme heat conditions of the sahara dessert. Is shares the same construction's system wiith the Umdraiga School in El Aajoun and even the same Typology.



Abda Mohammed Secondary School

Subjects:
Languages in the follow order:
Arab, Spanish, English and French
Main Subjects:
Science, Physics, Mathematics, Geography, History, Islamic Education and Informatic

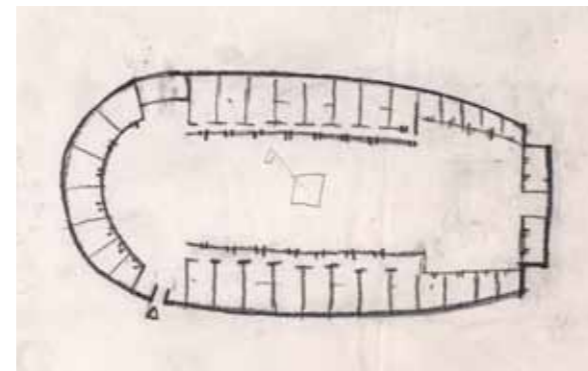
Other Subjects:
technical Drawing, Sports and Music.
Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



0 30 mts

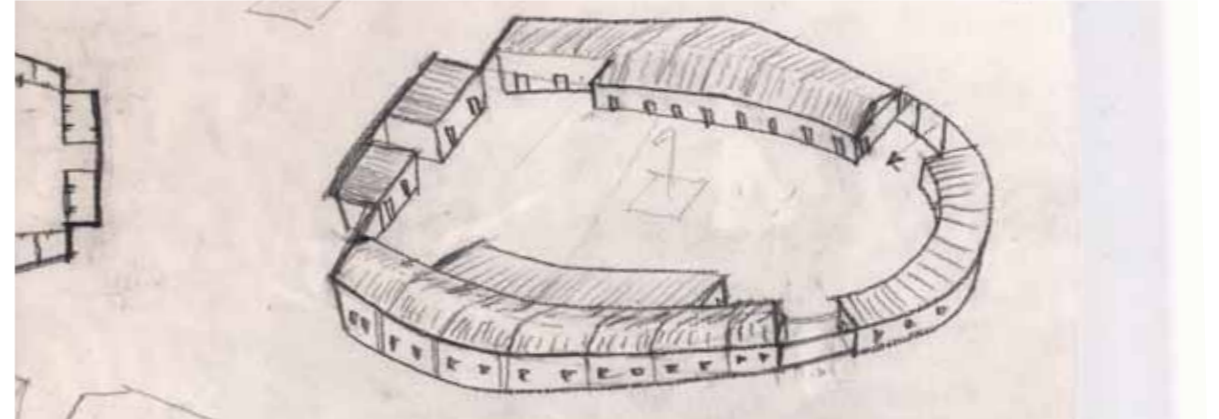


Ramp for Water Supply



Groundplan

DRAFT
© ETH Studio Basel



Axonometry



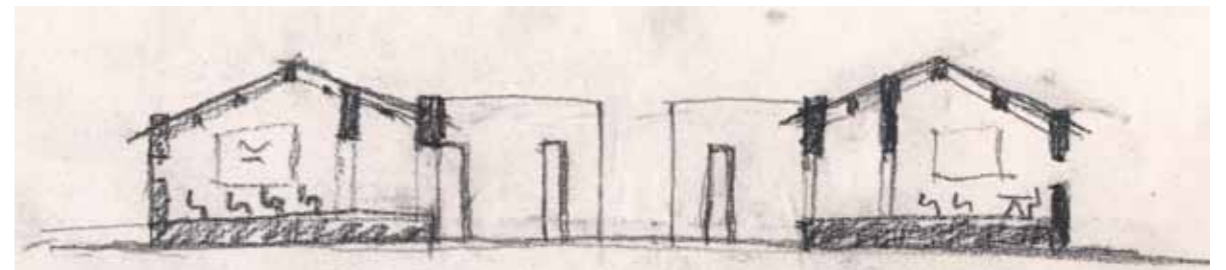
Hole for Water Supply



View from the Entrance



View into the courtyard





VALENCIA Primary School

Teachers: are men and women

Subjects:

Languages in the follow order:

Arab, Spanish

Main Subjects:

Science, Physics, Mathematics, Geography, History, Islamic science.

Other Subjects:

technical Drawing, Sports and Music.

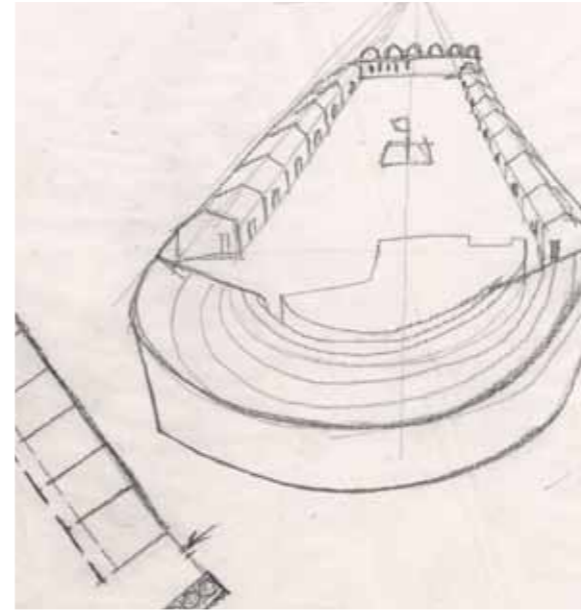
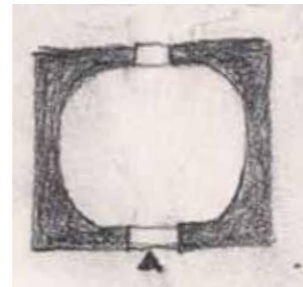
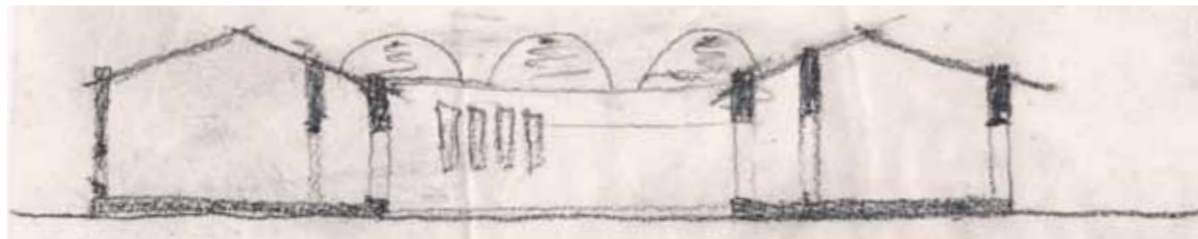
Schedule: from Saturday until Thursday, Fridays off.

Sommer: from 8 - 12 and from 17 - 19

Winter: from 9 - 13 and from 16 - 18



0 30 mts



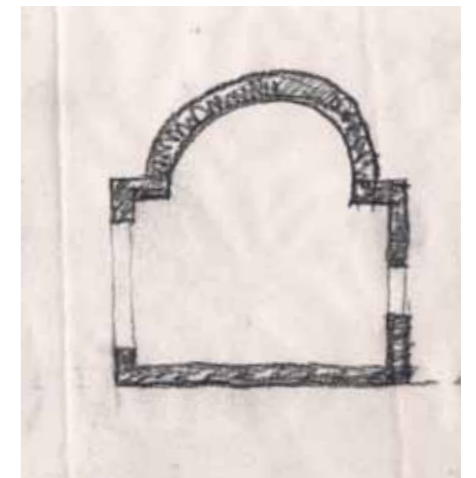
Perspective



View Corridor



Panorama an Theater



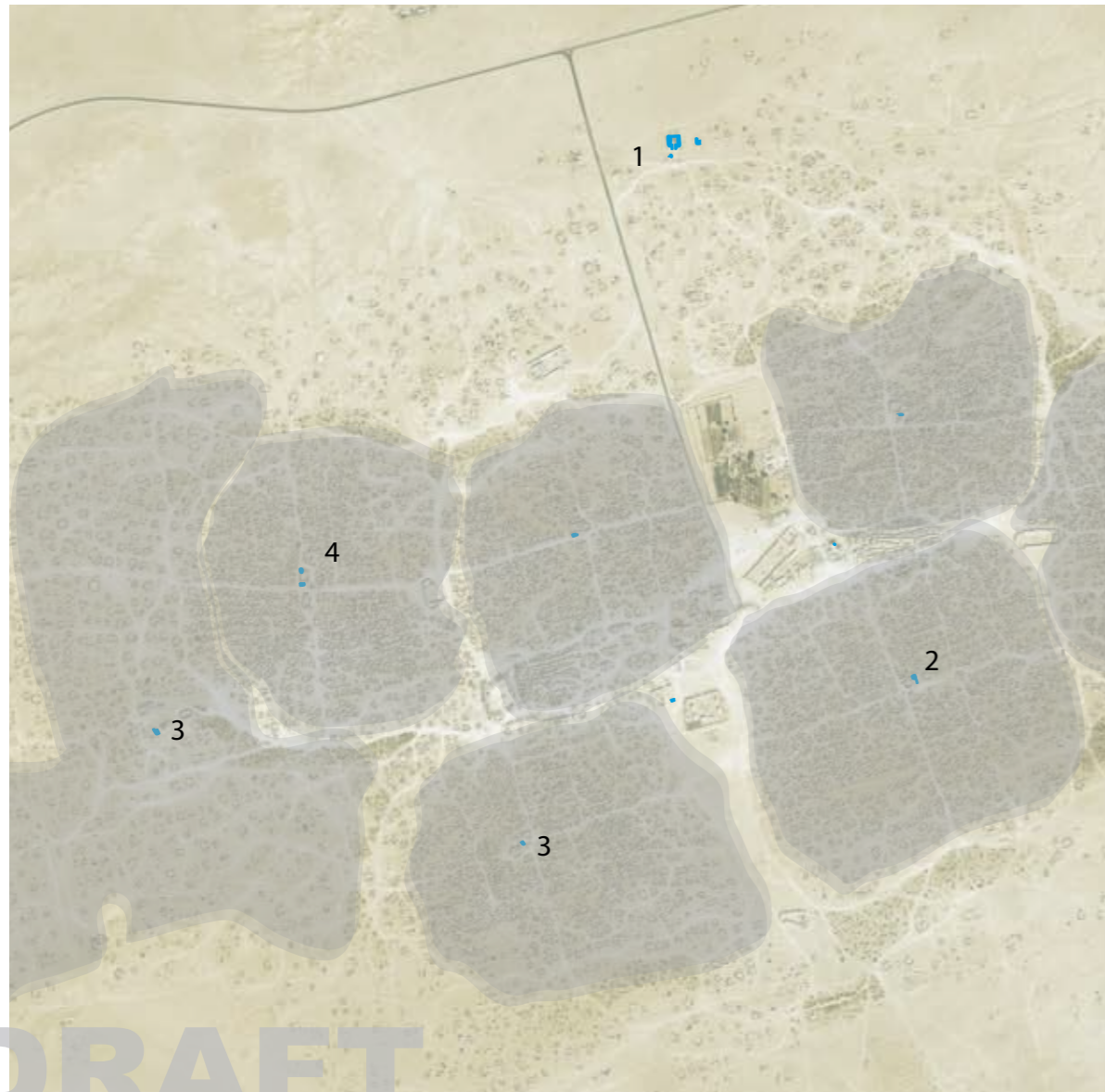
HOSPITALS AND DISPENSARIES IN SMARA

Like in El Aajoun Smara follows the same structure:

Each Daira has an own Dispensario, or small hospital, were first medical assistency, nutritions control and other services, like medicin distribution find place.

On a regional scale we find the Regional Hospital, here the patients are being treated and registered into an archive to have a better control over they treatment.

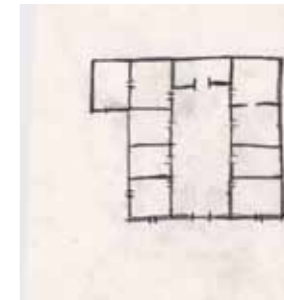
The Regional hospital counts with X-Rays, Pharmacy, Psychology departement, healing rooms Fisioterapy among others..., if the case is from higher gravidance the patients are translated into the Nacional Hospital in Rabouni or in harder cases unutil Tindouf were Saharawis have receive all medical care supported by the Algerian government.



REGIONAL HOSPITAL



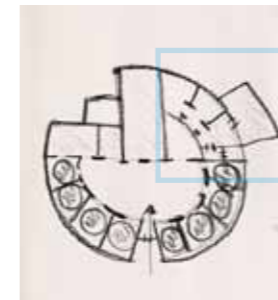
1



DISPENSARIO TYP 1

2

DISPENSARIO TYP 2



3



DISPENSARIO TYP 3

4

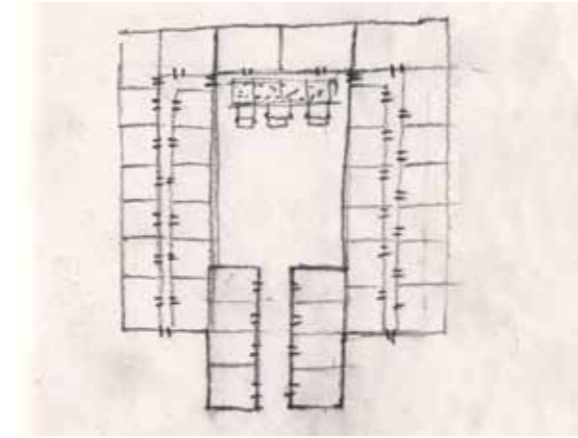


Regional Hospital Smara

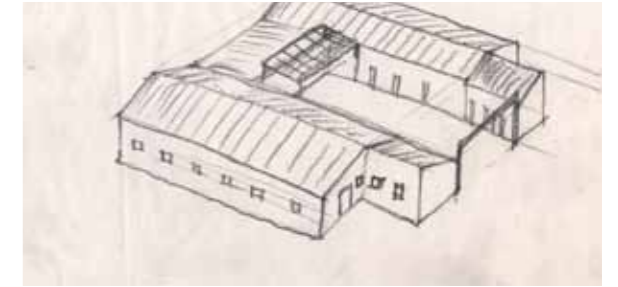
Personal: One Director, trained in Nursesing, Pharmacy, one Doctor, one Rotary specialist several Nurses

Diseases:
two types of diseases:
Cronical and non cronical,
Under the cronical we have, Diabetes, Hypertension, Asma, Epilepsy, Celiacus (cannot eat Gluten)
Non cronical:
Feber, Diarrea, Amigdalitis, Cepholica, Arthrosis, and Knees pain.

Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18



Groundplan



Axonometry



Section



Hospital Room



Ambulance UNHCR



Ambulance



Pharmacy

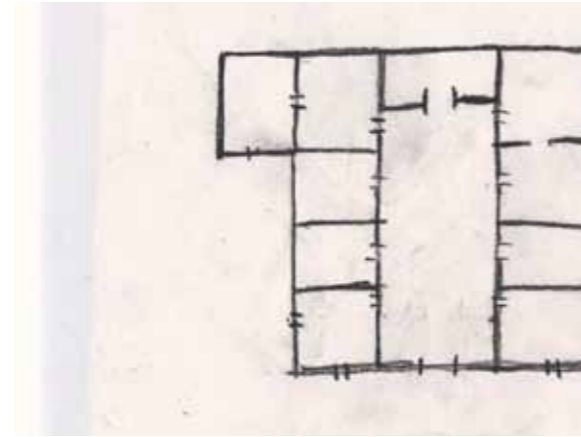


DISPENSARIO SMARA

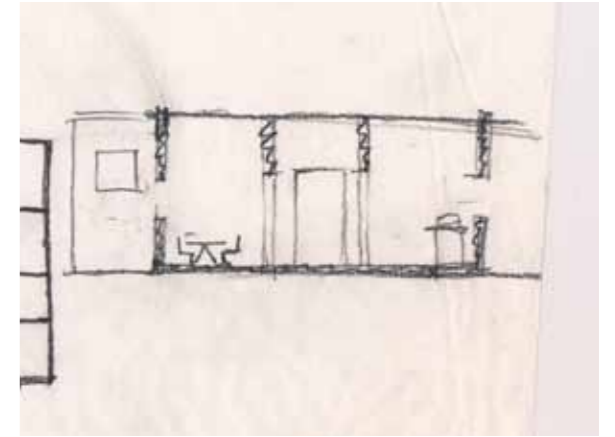
Location:
on each Daira one.
Personal: One dispensario director, trained in Nursesing, Pharmacy, and sometimes even a Doctor
1 or two Nurses
Diseases:

Schedule: from Saturday until Thursday, Fridays off.
Sommer: from 8 - 12 and from 17 - 19
Winter: from 9 - 13 and from 16 - 18
Total a Day 6 Hours

Functions:
First Medical Aid, Pharma supply, nutritions control, Maternity



Groundplan



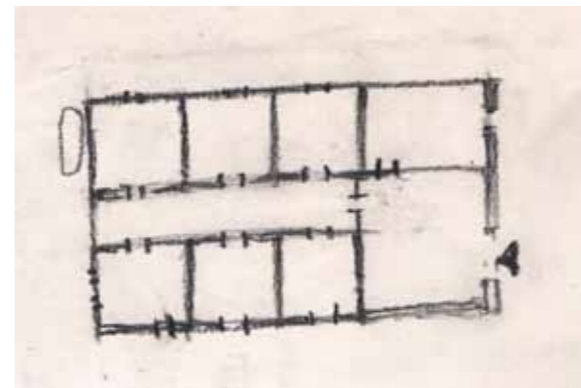
Section



Daira's Comunal Center



Typology 1



Daira's Comunal Center

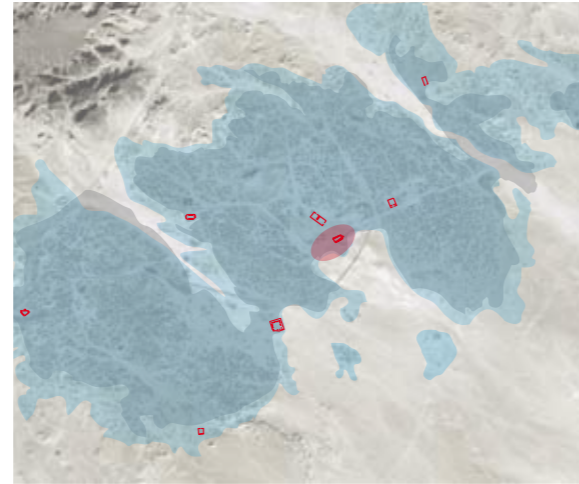


Typology 2

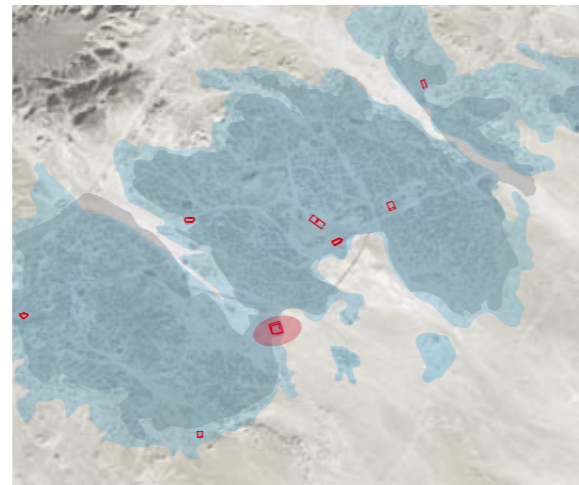


IMPACT OF SCHOOLS IN THE URBAN DEVELOPMENT IN EL AAIÚN

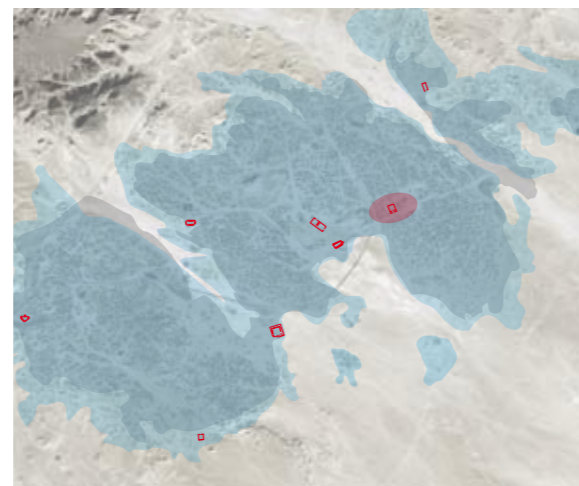
Educational Zoning by creating an axis



Development around the School



Comercial Densification and School extension



2003



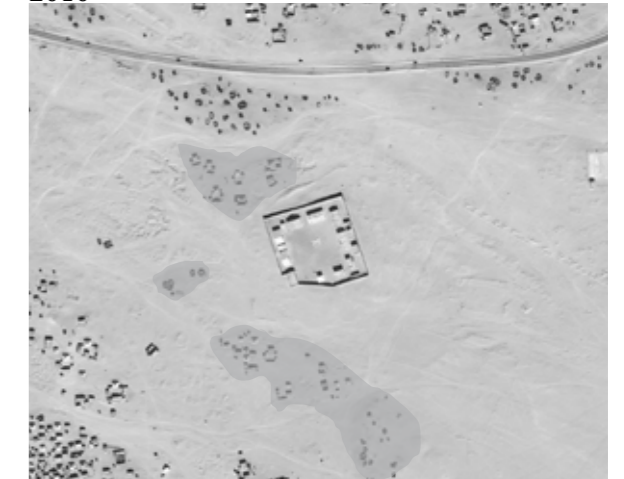
2010



2003



2010



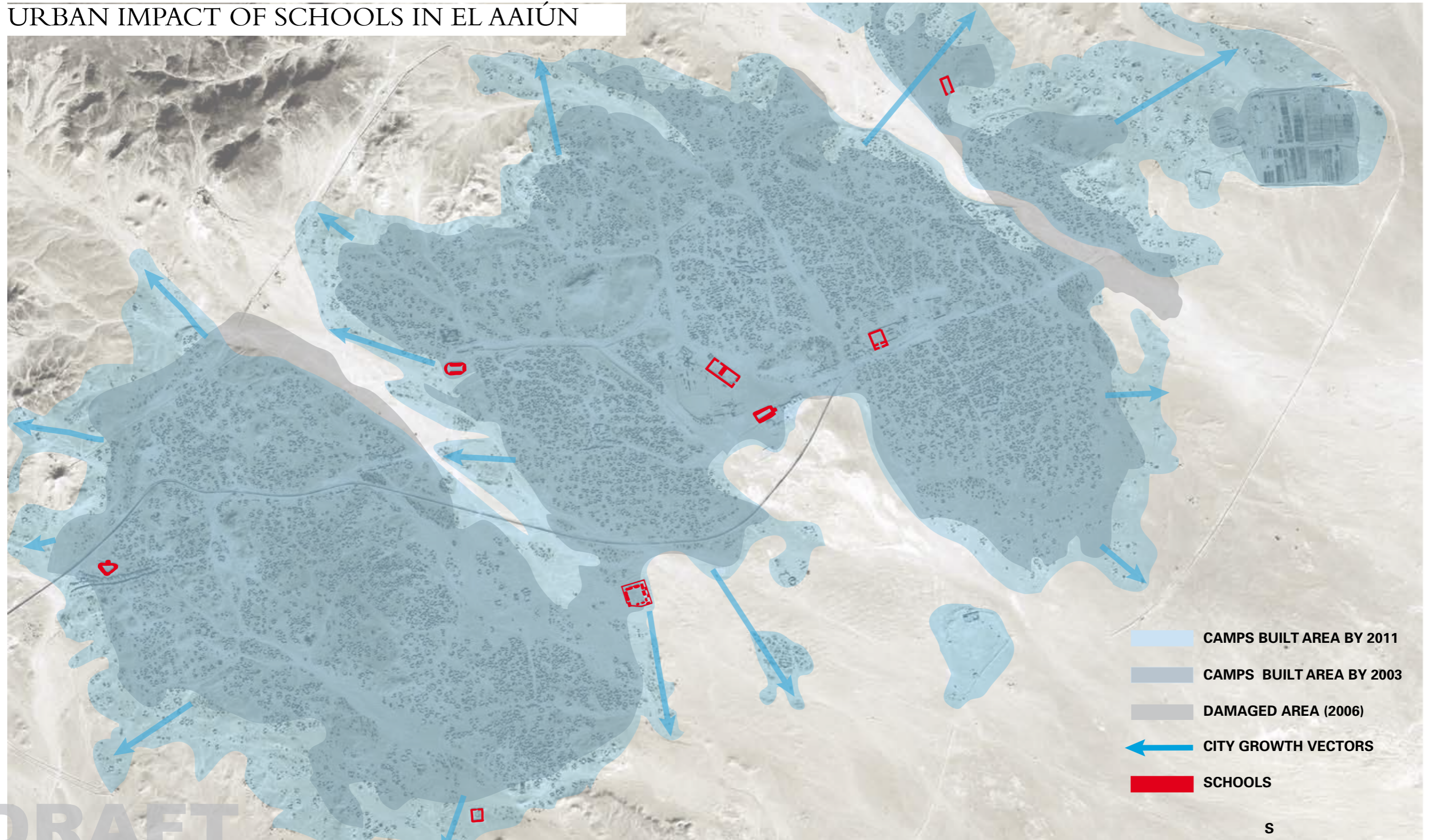
2003



2010



URBAN IMPACT OF SCHOOLS IN EL AAIÚN

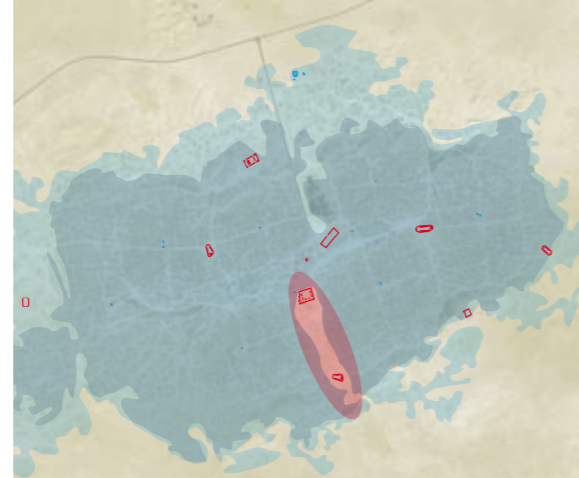


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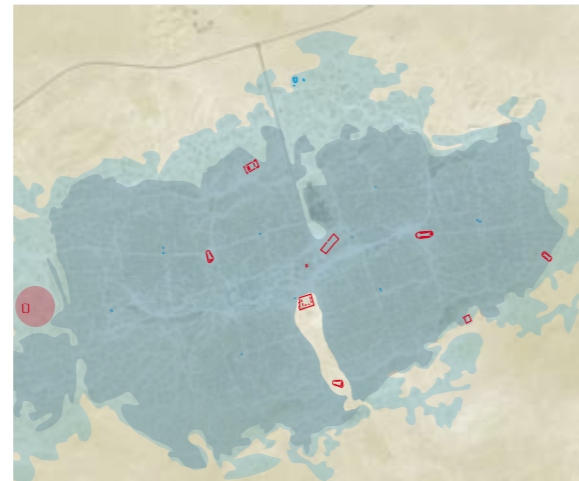
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IMPACT OF SCHOOLS ON THE URBAN DEVELOPMENT IN SMARA

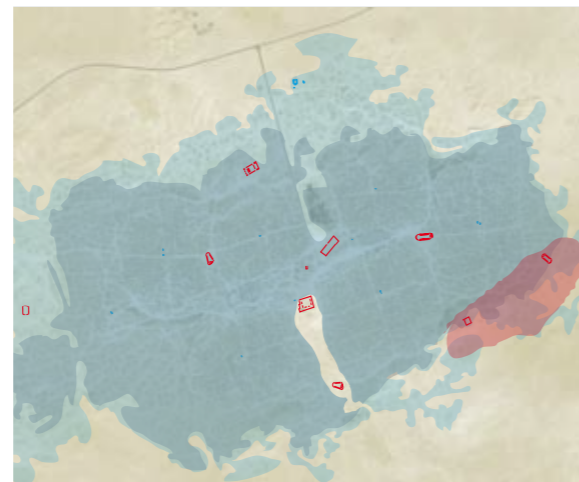
Empty Stripe Between Schools



School as Magnetic Attractor



Development Belt along periphery caused by two schools



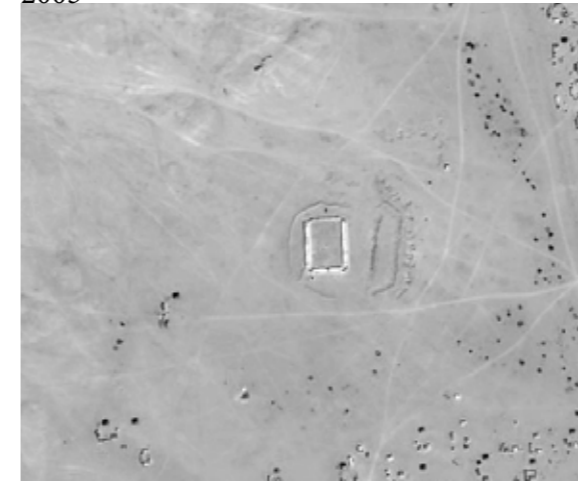
2005



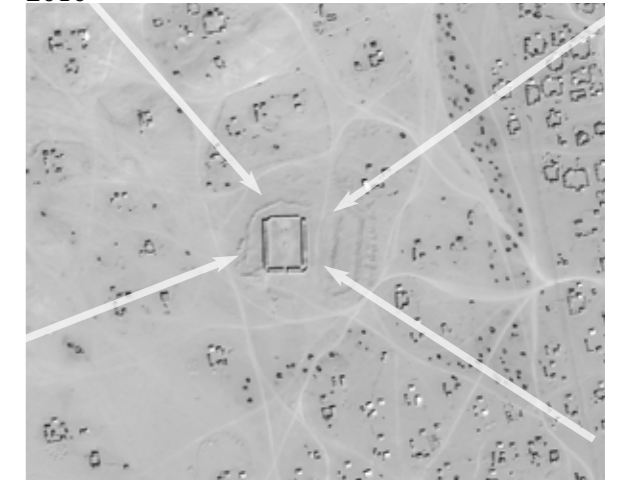
2010



2005



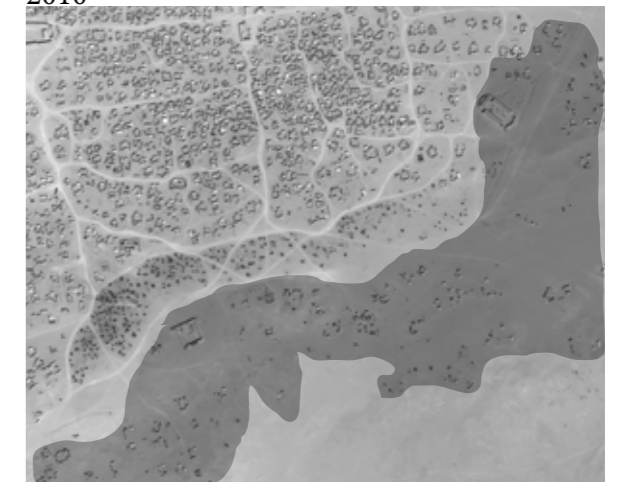
2010



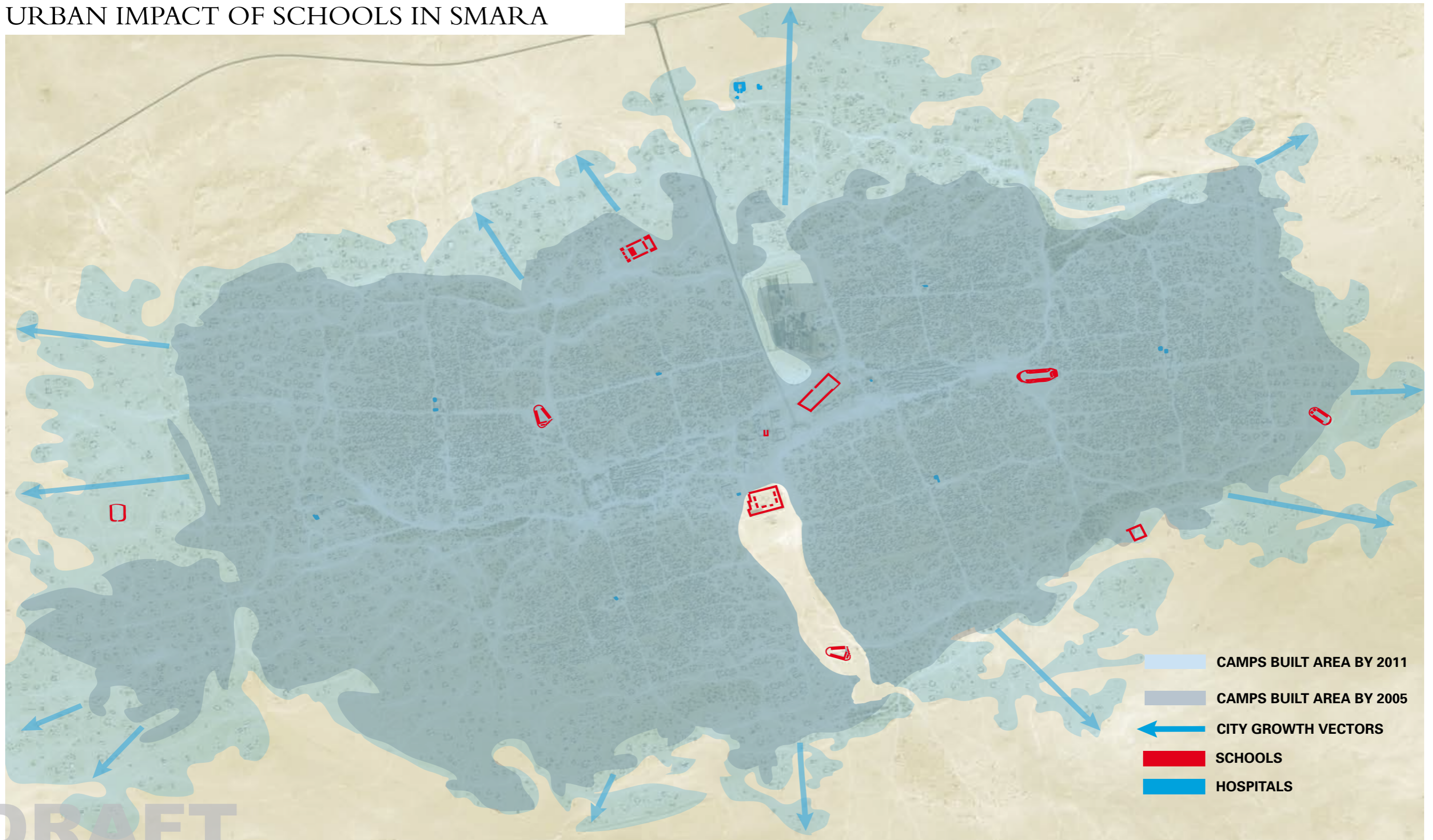
2005



2010



URBAN IMPACT OF SCHOOLS IN SMARA



DRAFT

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ONE SCHOOL ONE CAMP

27. February a School-Camp

The 27. February camp, was founded as a school in 1976 by women, the priorities of the saharawi population were fundamentally focused on health and education as basis to hold the community together, and ensure a prosper development.

At the beginning the 27. February School, hosted only Women and children from all the four camps for the period of capacitation, once this period was accomplished, women and children returned to their home-camps.

Today the school has growth into a camp, beeing the only one of it's kind in the entire region with 24 hr. electricity.

This fact accelerates the development process attracting increasingly new population.



Historic picture taken in the national archive in Rabouni



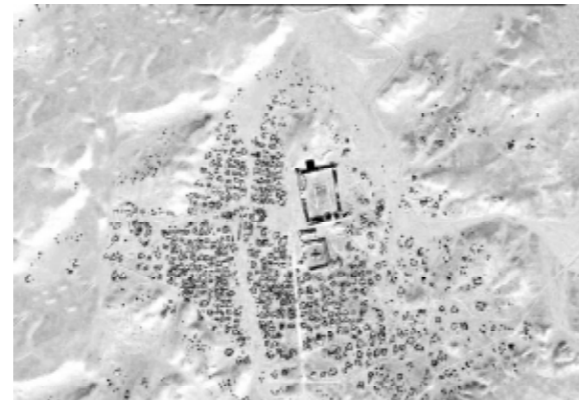
Entrance of the 27. February School 2011

Relative location to other camps



the school is centered in the middle of the camps

2004



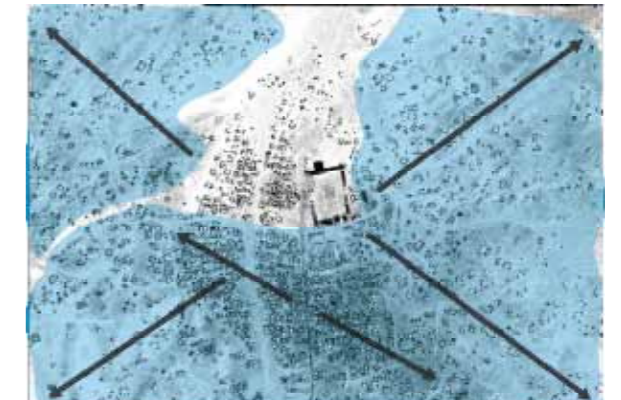
Magnetic attraction of urban development around the school

2006



Urban Growth

2010



Evidence of expansion in the urban growth around the school. High densification left and right from the main street axis



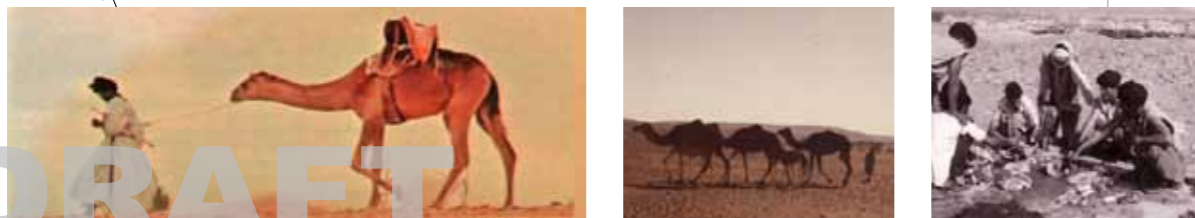
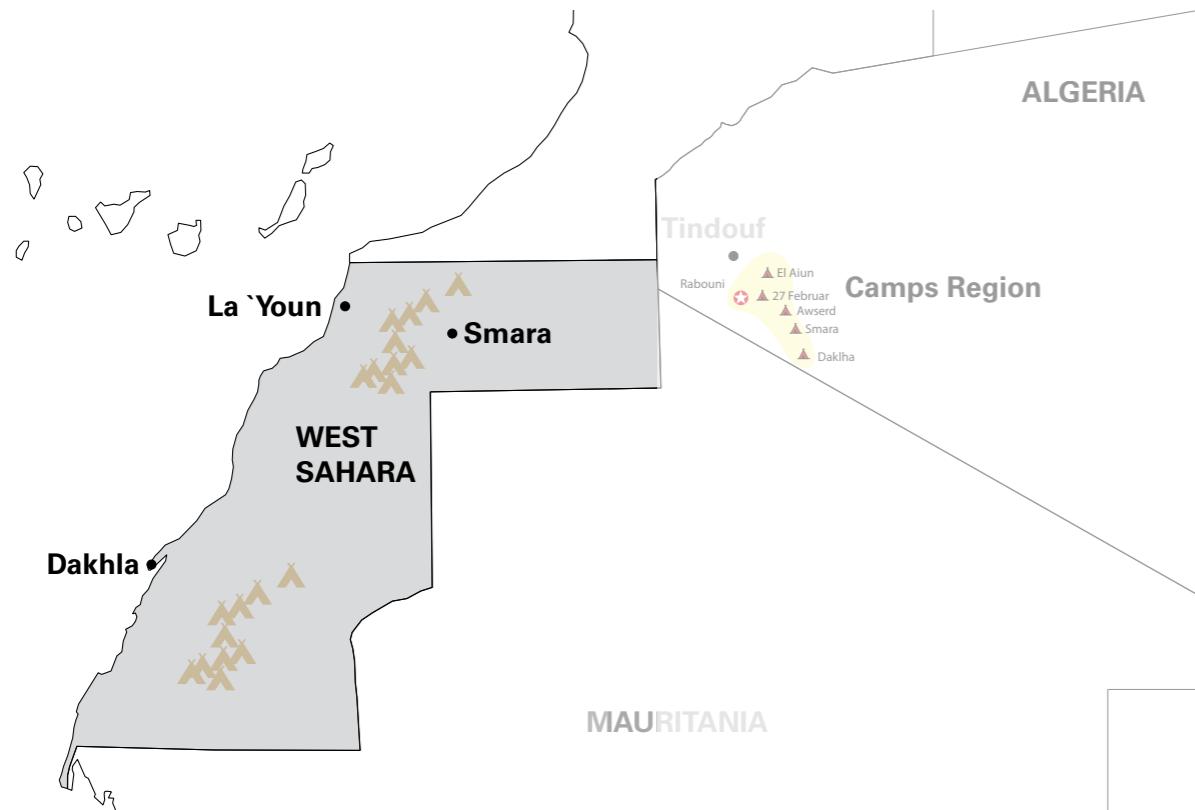
CAMP AS CATALYST FOR HEALTH & EDUCATION

From Nomadism into sedentarism

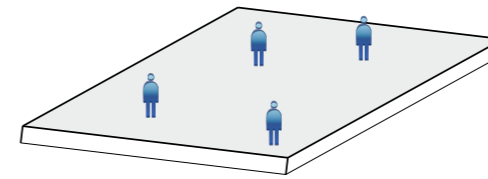
According to an official census registered on 1970, The total population 76'425, is largely Muslim Nomad (aprox. 45'000), the other 31'000 were concentrated in the cities El Aaiún and Villa Cisneros, most of them were spanish soldiers and just a few Saharawis lived in the cities.

Schools were amongst the first structures to be built in the camps. Education wasn't only a symbol of self-sufficiency and autonomy for the Polisario, education was also a means of „socializing“ the Nomadic population to their newly enforced sedentarization and it's exactly here with this socialization that public campaigns regarding health and hygiene started, where health and education come together, in order to avoid epidemics and built up solid society.

Polisario focused on eradicating social hierarchies remained from the tribal system, seeking for a new nation composed by a strong sense of collectivity and equality. Children and adults benefited from the literacy programs, and after building the primary schools, the need for secondary schools, hospitals and other infrastructures emerged starting like this the whole development process of infrastructure and services in the camps.

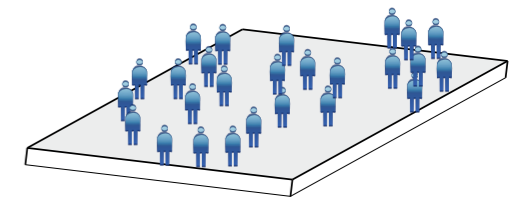


0,3 Hab. / 1km²

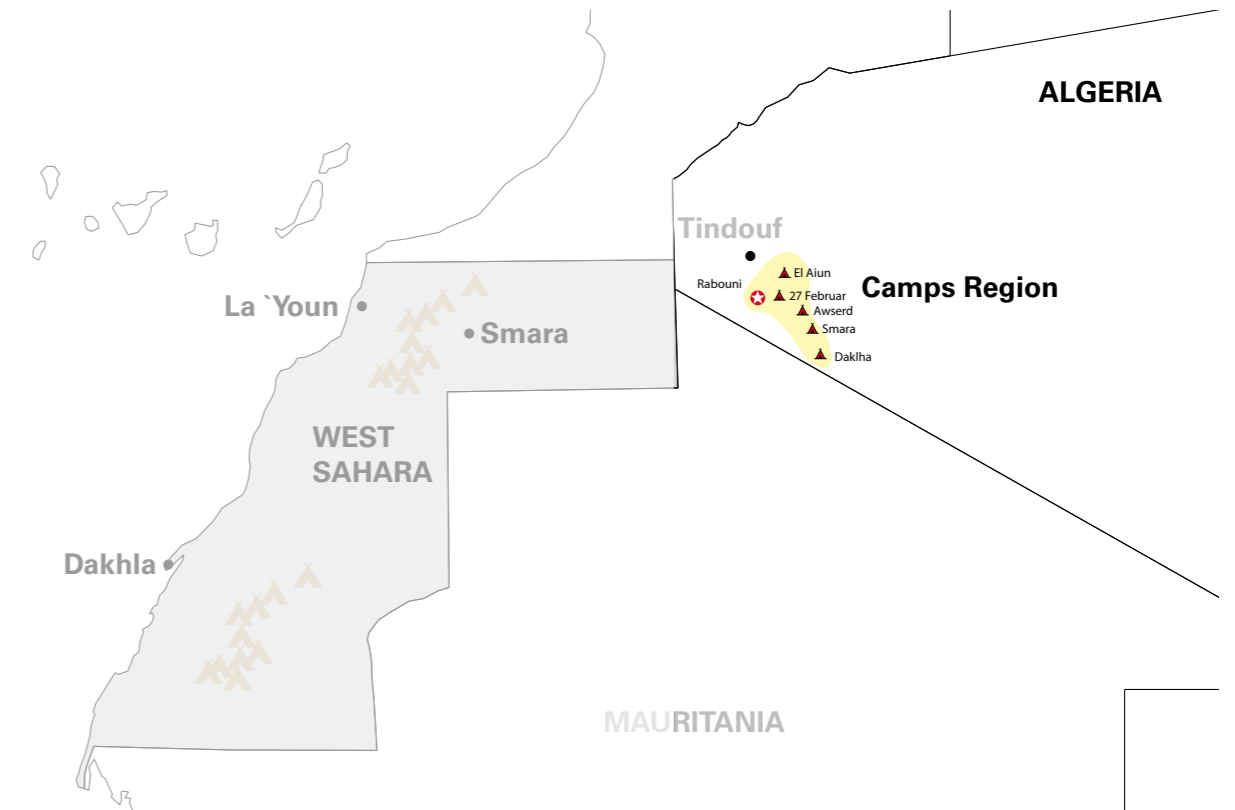


Density of saharawi population in the spanish sahara

3'000 Hab. / 1km²



Density of saharawi population in the refugee camps



CAMPS TEACHINGS & THE RETURN

The camps, over 30 years of learn period

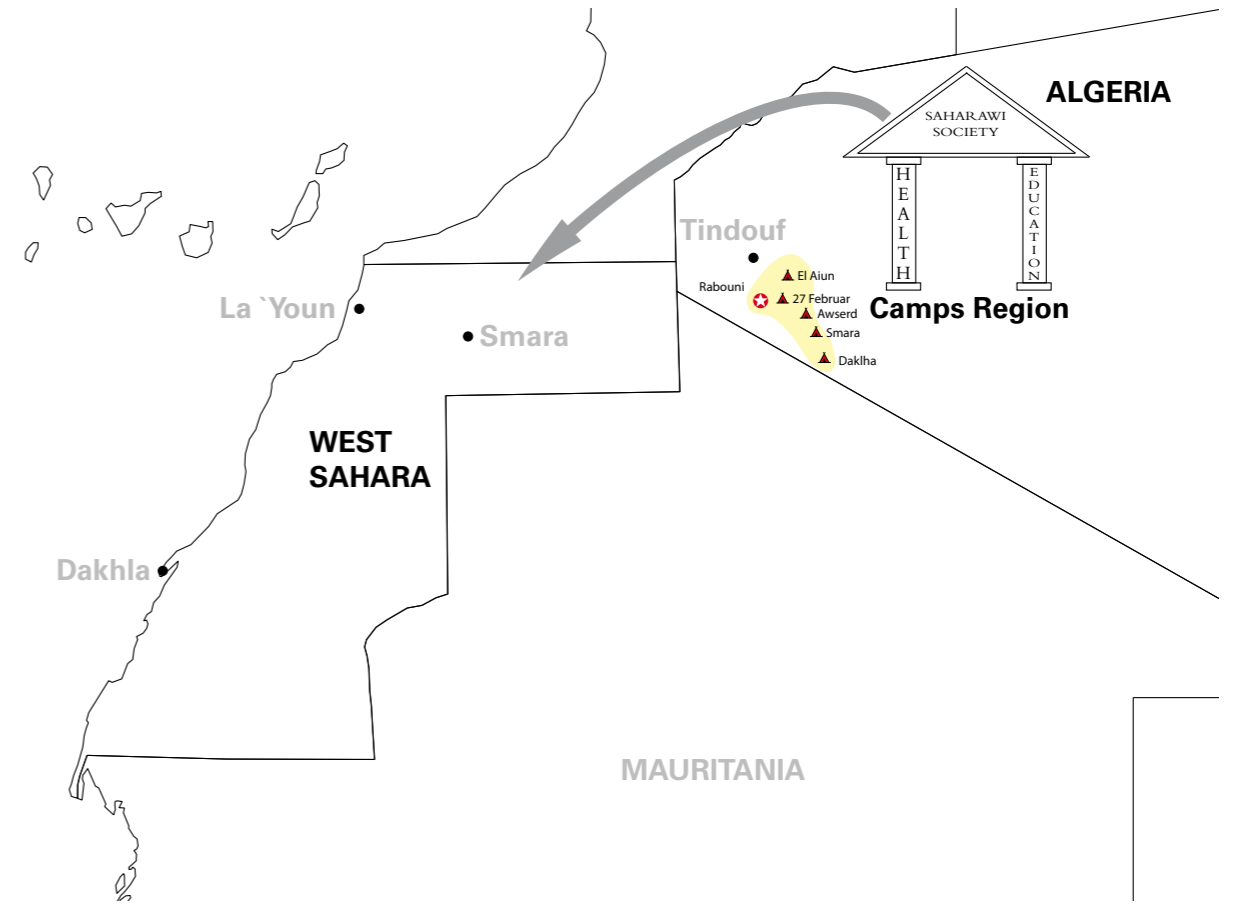
Through Education, international help, and access to information the saharawi people have improved sustancially their life conditions specially in terms of health and Education archiving almost a total coverage of the service over the population, a strong sense of colectivity and equality has been raised.

To the main question about which type of strategy there's planned for the future return is usually answered in a very optimistic way.

The new Saharawi society has been built on two very strong Pillars Education and Health.

Most of the Saharawi agree with the fact that this Structure should continue how is has been happening so far.

Nonetheless new challenges open for a future return.



Consequences at the return

Social Inequalities will meaby emerge, between those who have incomes to those who are supported only by the state. From the other hand, one of the reasons for the succesfull Polisario administration is how dense camps are populated, and how this enables to control over the population, which would not occur anymore after the return There's surely a lot of progress and advance that has occured in the last years from exil, but the return into a city life, an offer and demand society, is one of many challenges that the Polisario and the Saharawi society need to confront.