

Development aid project design, visualization & realization



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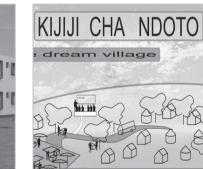
















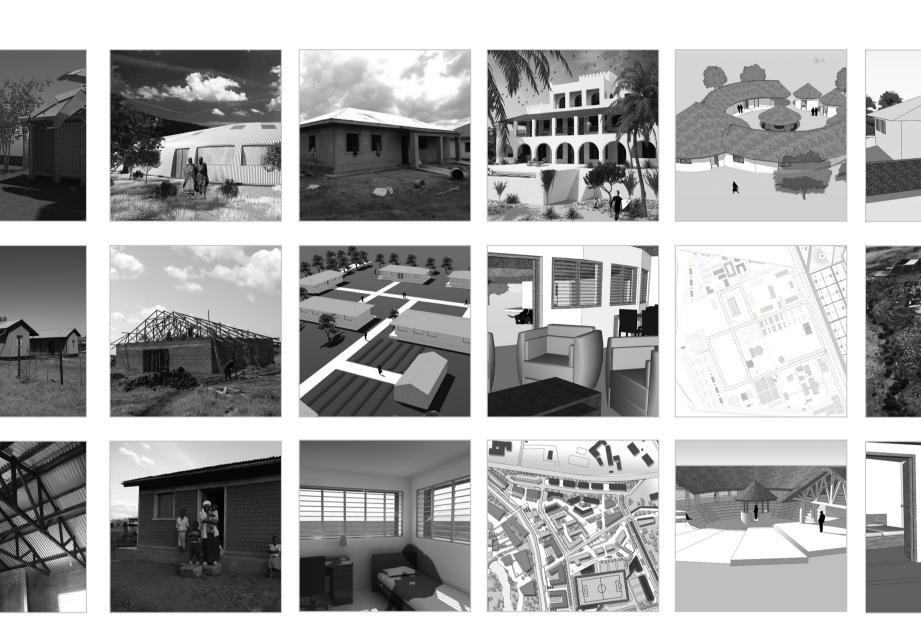














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#### Curriculum Vitae of Architect ir. M.W.M. Smits

#### Personal Details

Name: Michiel Smits (Michael Willem Maria)

Address: Herculesstraat 44

Place: Breda

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22-10-1983 Date of birth: Place of birth: Breda Marital status: Unmarried Personal registration num.: 139768336 Bank account num.: 8110868 Driver's license type:

Education

02/2009 - 07/2011: Master Architecture, Technical University, Delft

Degree attained

09/2006 - 02/2009: Bachelor Architecture, Avans College, Tilburg

Degree attained

09/2004 -09/2006: Bachelor Interior Design, AKV St.Joost, Breda

After following extra courses at both the Academy of Architecture & Urbanity and the Tilburg Architecture

BSc,I decided to change course and pursue a degree at the latter institute.

09/2000 - 09/2004: Technical school for Building Engineering, Baronie College, Breda. Realized my first development project in

Kenya as a graduation internship. Concerned the construction of a dam and water well, in cooperation with

the local population.

09/1996 - 09/2000: Secondary education, Nassau Scholengemeenschap, Breda

Professional Experience

01/2012 - Current PhD Architecture at Technical University (Delft)

10/2011 - Current Owner and Architect MWM Architecture (Breda)

Architecture specialises not only in designing and visualising projects, but also in supervised projects abroad.

We provide the blueprints, planning, calculations and we act (if requested) as project coordinator on site

10/2011 - Current Professor Architecture AVANS University of Applied Science (Tilburg, Den Bosch)

Professor of Architecture and also in the preliminary stages of the PhD route. This route will mainly

concentrate around a research into the importance of self-designed living-environments.

08/2011 - 10/2011 Junior Designer architectural firm Baudoin van Alphen (Breda). My duties consisted mainly of creating

drawings. I was responsible for the technical side of the designing process (surveying, detailing, etc.).

02/2010 - 07/2010 Professor Architecture and Urban Design Msc 1-2, Technical University of Krakow, Poland

For a period of 5 months, I worked as a teacher at the Technical University in Krakow. During that time, I gave

lectures, tutored students, evaluated projects and organized events and presentations.

I worked together with different professors and teachers to learn how to prepare lessons and how to work with

institutional frameworks and demands.

09/2008 - 12/2008: Intern architectural draughtsman/visualizer at architectural firm van den Heuvel (Breda)

For 6 months, I worked as an employee at architectural firm van den Heuvel. My tasks covered all aspects of t he building process. This includes deliberation with the client, setting up the first sketches and everything in between, up to completion. I was responsible for both technical aspects (surveying, detailing, etc.) as well as the creative, communicative side of the design process (3d models, visualizations, movie creation, etc.)

08/2008 - 12/2008: Architectural draughtsman at architectural firm van den Heuvel, 16 hours/week (reference)

Architectural draughtsman at architectural firm Baudoin van Alphen (reference) 05/2003 - 7/2003: For 2 months, I worked as an employee at architectural firm Baudoin van Alphen.

My tasks mainly consisted of drafting. I was the responsible party for the technical side. (surveying, detailing,

etc.)

03/2003 - 5/2003: Intern architectural draughtsman at architectural firm Baudoin van Alphen (reference)

#### Additional activities

#### Workshops, Events and Publications

04/2011 Blog and articles students & teachers Avans College, Tilburg website 04/2011 Publication project Oswiecim (Design project MSc1 TU Delft) 03/2011 Lecture at Avans College, Tilburg website 03/2011 Article teachers and students to Kenya website 12/2010 Article BN de Stem (on my graduation project and activities in Kenya) website Exposition and lecture Art Boom Festival Krakow 07/2010 06/2010 Publication article: "Responsibility and public space". website 10/2009 Group leader International workshop Oswiecim (two weeks fulltime). 07/2009 Group leader Design studio on the International Workshop Architecture, Barcelona 12/2008 Project presentation for Peter Hollands and executive board (Avans) 08/2006 Winning submission Flying ambition competition (St.Joost) 08/2008 Organization overview exposition on Peter Eisenman (Avans) 12/2005 Winning submission reception desk international design week Breda (St.Joost) 12/2004 Winning submission product design (St.Joost)

Africa

-/2004

04/2011 Host teachers and students Avans College (1 week) website

Tasks: Organizing and hosting the location visit of a group of students and their teachers during one week. The location for their graduation project is the same site where I have been designing projects since 2008. As such, I have

also been involved as a specialist in their graduation track.

03/2009 - current: Chairman Back2Africa Foundation (8 hours per month)

Media Kenya website

Tasks: The foundation has committed itself to assist other Dutch aid foundations who wish to develop locally. We form a think tank of various disciplines, who take up projects personally within the foundation. As chairman, I am responsible for guiding the (future) course of the foundation. That includes involving new partner organizations and

collaborators.

05/2004 - current: Architect Back2Africa Foundation (6 hours per week)

Tasks: Designing building projects and advising various parties/stakeholders in sustainable development. This involves coming to an agreement with the funding partner in Holland on the commitments of our foundation in a specific project. Subsequently, I develop a strategy and design brief with the local partner, and deliver the

pre-design and definitive design products.

Additional jobs

Note: I choose this selection of additional jobs to demonstrate how I once started as a dishwasher and ended up to become a sous-chef. I believe that my persistence and passion will get me very far, which is also evident in

my educational history and the development work I do in Africa.

11/2007 - 09/2008: Sous-chef restaurant "Hook aan de haven"

11/2007 - 09/2008: Sous-chef restaurant "Havana"

01/2006 - 05/2007: Independent cook restaurant "Het Kabinet"

01/2004 -04/ 2005: Manager cleaning firm "Klien"

Miscellaneous skills

Languages:

Dutch (native)
English (fluent)
German (adequate)

Computer skills:

Autocad (good) (adequate) Vectorworks Sketch-up (good) Photoshop (good) Indesign (good) Illustrator (good) Premiere (good) Ms Office Programs (good)







# WHAT MWM ARCHITECTURE REPRESENTS

Due to declining subsidies from the government for development foundations and organizations, the smaller foundations in the Netherlands are suffering. MWM Architecture can assist these struggling foundations, by creating designs and visualisations at a very low cost. By simple sketches or visualisations, most foundations find it easier to communicate their projects to their supporters and attract potential sponsors.

After 7 years of experience in Eastern and Western Africa, working with foundations as 'Back2Africa' and 'Elimu Mount Elgon', MWM Architecture has managed to specialize itself in designing and implementing development projects. The projects are initiated by the local residents themselves and are developed to support the social and cultural backgrounds of the people. The (construction) systems are created in such a manner that the local residents can easily apply them and adjust to their will. These people can therefore continue to build themselves and decide how and where. This method focuses on community, culture and collective choices.

MWM Architecture specialises not only in designing and visualising projects, but also in supervised projects abroad. We provide the blueprints, planning, calculations and we act (if requested) as project coordinator on site. Since the establishment of MWM Architecture the scale of the assignments, as has the complexity, has increased exponentially and we may call ourselves experts on advisory within the development area.



# **PROJECTS**









# COASTHOUSE MALINDI DISTRICT

Location: Malindi-District (South-East Kenya)

Date: 07-2012

Size: 1400m3 4 bedrooms 4 bathrooms 2 living rooms Study TV room Kitchen Double garage Workers House

#### DESCRIPTION

This house is an absolute first for MWM. We have had to wait a long while but finally the big day! Here, the first official commercial project of MWM, which was started June this year (2012). We could not have started better than with the design of a luxury beach villa in the country which I've come to love so much.

Since the acquisition, the family has always used the small bungalow that was already there. Since coastal tourism is experiencing a growth spurt, the family wishes to invest in a villa which can be rented out during the year. For their own use, they want to a keep private bathroom + sleeping area.

The design for the house is unconventional for the average Westerner, but on the coast of Kenya is a frequent phenomenon. The well-known Swahili-style architecture is characterized particularly by the evident Arabic influences. Due to the extremely warm coastal climate and always changing direction of the winds, the house opens itself towards the beach. Which makes itself closed to the street.

In addition, in the heart on the ground floor and first floor, spacious living rooms are located on which the rooms open up to. This creates an airy design, which especially during the hot afternoons and evenings can create a cooling factor. The ground floor opens up to the living room and kitchen and consequently to the great veranda overlooking the sea. Immediately thereafter the terrace with its pool which continues into infinity. We expect the build to take approximately a year, so we'll have to wait for the end-result. In July 2012, we will be flown in for the official start of construction!

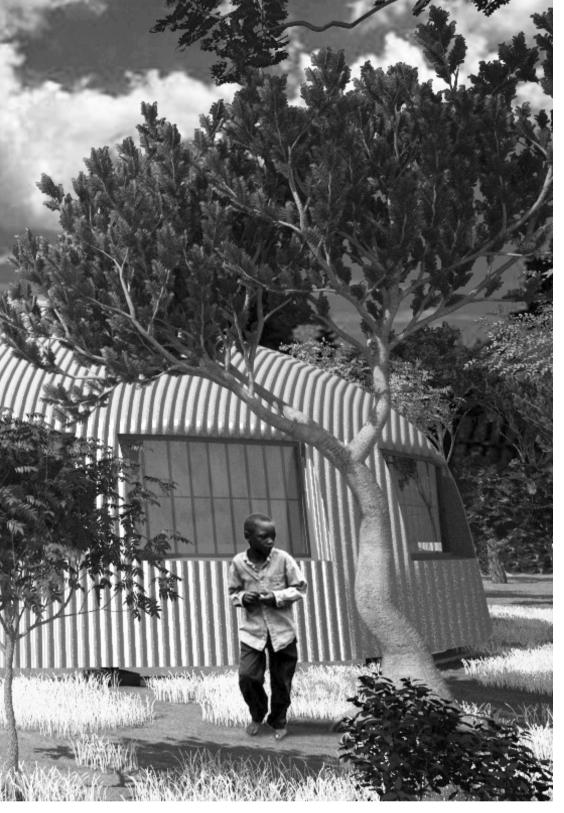












# MULTIPURPOSE HALL MOUNT ELGON

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards & Elimu Mount Elgon

Date: 08-2011

Size: 720m2

Multipurpose hall (500-600 children)

Canteen

Kitchen

2 Storage (kitchen

Theatre (stage)

Storage(theatre)

2 Changing rooms

#### DESCRIPTION

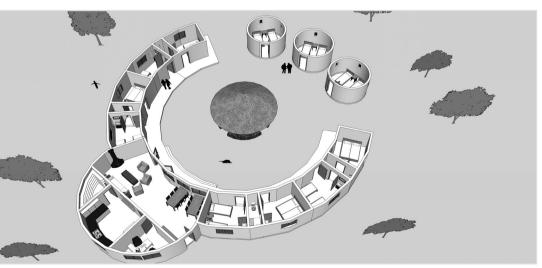
After 3 years of community work on Mount Elgon, MWM can slowly grow from floor plan organization to esthetical design. In this case the secondary school needs a multipurpose hall for their daily assembly, dining, examinations, theatre plays, workshops and even for doing homework (for the children that stay in the dormitories). Because the school is highly ranked in the region and one of the best of the nation, the school is growing every year. To make sure the multipurpose hall is suitable for school extensions a huge program was set up for the project (biggest project on the new development site of Mount Elgon). Because the project needs to be suitable for the future, MWM got the freedom to design a complete new entity for the masterplan. As a reference to the traditional roofs in Kenya we wanted to design a building consisting only of a roof. Inspired by the large roofing construction of the farm (light steel frames) the mabati (roofing sheets) that now everybody uses for their houses, we created this futuristic design. But when you walk inside the project the atmosphere completely changes. To prevent heat and noise (when it's raining) the whole inner dome is finished in thatch. This way the hall gets a warm home feeling and gains its proper acoustics.

Because the building is unique in the area, MWM was asked to also perform as a project coordinator. We are planning to start this project at the end of 2012 and will be finished around October 2013.

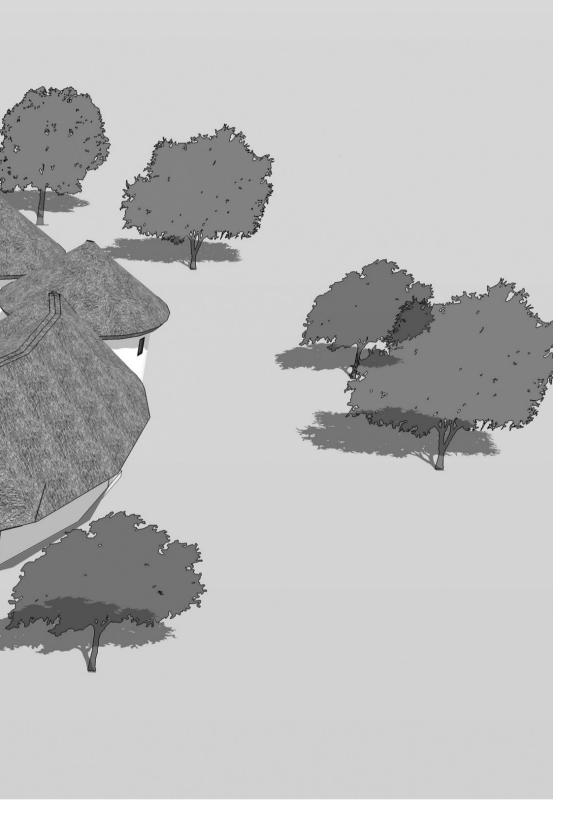














## GUESTHOUSE MOUNT ELGON

Location: Mount Elgon (western Kenya) Client: Mount Elgon Trust & Elimu Mount Elgon

Date: 08-2011

Size: 450m2

- Kitchen
- Office
- Storage
- Living area
- 8 Bedrooms
- 8 Camp pitches
- Sanitation
- Campfire

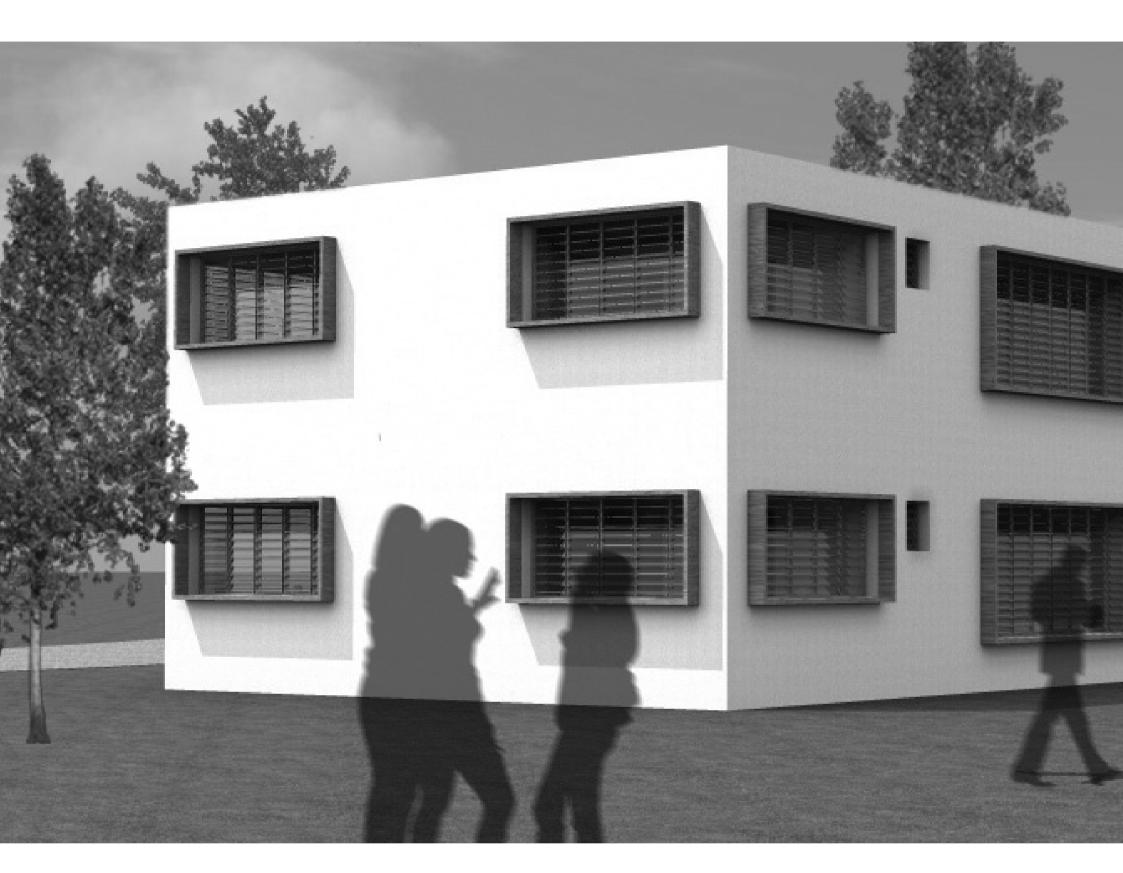
#### DESCRIPTION

As the amount of visitors to Mount Elgon is increasing, the need for a Guesthouse on location grows larger. More and more western students, teachers and volunteers are coming to Mount Elgon to support the projects and its local community. To give the visitors maximum exposure on the impact of their work, MWM decided to make room for the project in de masterplan of the new development. First propositioned was for the project to be situated in the heart of the masterplan but the initiators decided to move the project to the far back of the area. This way they overlook the whole site but have a nice calm view of the mountains from their windows. The ultimate goal of the project is to have it running and managed by locals. This way we are also supporting the local economy and community.

As also friends and families of the trust and project keepers should possibly be using the facility, the most important aspect was the level of finishing and esthetics. For this reason a corridor in the shape of a circle was made to refer to the traditional African case-cour (family structure). The project will be built in 3 phases (one wing each time) and as third phase the surrounding self-contained units. In the centre of the project again as the case-cour: the open living room. This small circular thatched structure with a large open fire makes for a cozy spot to meet after a busy day at the projects. In the raining season the indoor large living room can be used for the same purpose or if you feel like reading a book there are plenty of sitting corners.

This project will be started in October/November this year (2012) and will take approximately 7 months to finish. So hopefully during the fall of 2013 the first guests can start using the building!











# GUESTHOUS NYABONDO REHABILITATION CENTRE BONDO REGION

Location: Nyabondo (Western Kenya) Client: Bondo Kids Foundation

Date: 06-2012

Size: 600 m3 9 Bedrooms

9 Bathrooms + Sanitation

2 Living rooms 2 Kitchen

#### DESCRIPTION

The Bondo kids foundation, from Nyabondo, contacted MWM to support them in their efforts to develop a design for an apartment complex for their disabled children's centre. The complex revolves around helping physical disabled children in the western districts of Kenya (Bondo region). For years the current living quarters of the hospital staff were in horrible conditions. After analysis of the construction by MWM, we advised to immediately stop using the current quarters and rebuild them as soon as possible.

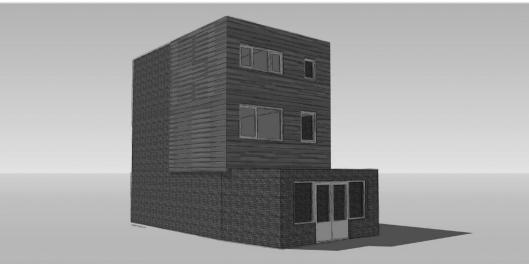
Based on the demands of the hospital staff (run by a catholic group) a design was made together with a local contractor. MWM made a design based on the experience and wishes of the staff of the Dutch contractor. After two sketch designs we were able to create a design with an extremely dense and functional program which breathes a whole new modern identity. In July 2012 these two designs were evaluated together (in Bondo). The African proposal was too big to suit the current budget but had the best ideas on current and future usage of the building. The design of MWM was lacking in size (original plan of local partner was to make 18 bedrooms). Because doctors are resting in the building after long days, the bedrooms and living rooms should be more specious, for comfort.

Based on the experiences of the current visit MWM will formulate a new design that will be presented by the end of August 2012. By the end of this year we will start construction and are currently planning to finish the project by April 2013.













# REDESIGN HOUSE FAMILY **VAN MEER**

Location: Etten Leur (The Netherlands)

Client: Fam. Van Meer

Date: 06-2012

Size: 200 m3 5 Bedrooms

2 Bathrooms + Sanitation



With the declining housing market, most families in the Netherlands struggle to find an affordable and suitable house for their family. For this reason most families have to create inventive solutions to make their current habitation suitable for their needs. For this project, the family made clear that they were looking for the most pragmatic and suitable layout of floor plans.

Because the house is so small and already had one extension done, there wasn't much space for redesigning. After testing different layouts, we finally got to the extremely dense but pragmatic design which was approved by the family. The project basically means that the whole back roof and façade needs to come down and will be swopped for 'the wooden block'. The reason that this material was chosen, is because the much larger corner houses have their corners finished in the same materials. Because the design and type of extension is an absolute first for the neighbourhood (150 same serie-houses), the design is still awaiting approval. We estimate, construction will start in the fall of 2012 and will be finished by spring 2013.













# HOUSE FOR CHILDREN WITH A DISABILITY MOUNT ELGON

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards & Elimu Mount Elgon

Date: 12-2010

Size: 250m2 2 Dormitories Kitchen

Room for caretakers

Veranda Sanitation

#### DESCRIPTION

After the successful orphanage project, our partner, Elimu Mount Elgon foundation, decided to realize a similar project for children with a disability. The design is just a few months old, but the project is already almost finished. The project consists of a large common room, which opens to the veranda. Both dormitories (boys & girls separate) open directly onto the living area and both have their own toilets and showers.

It was especially important that the house had a simple design with wide doors so that the children with physical disabilities would be able to maneuver easily. Limited by a very tight budget, bunk beds were necessary. By creating a proper layout, this should not be a problem for the children.

There is a high necessity for this house in the region. A topic often left un-discussed, are the unacceptable living-conditions for children with disabilities in rural areas in Africa. Often, they are not accepted or rejected by the family. With the arrival of a class for children with disabilities, the first step was made to help these children. It appears that parents are often unable to care for their children. With the help of this house we hope to offer parents an alternative, close to their homes. Because these children are living next to the orphanage they will grow up together and hopefully grow a new attitude towards disabled children in the future.













# ORTHOPAEDIC WORKSHOP MOUNT ELGON HOSPITAL

Location: Mt. Elgon (Kenya) Client: Mt. Elgon Trust

Date: 02-2012

Size: 100 m2 1 exercise room

2 examination rooms

1 waiting room

1 office (open desk space)

1 workshop (for making artificial limbs)

1 sewing desk

1 worktop

1 large storage

1 sewing desk

1 worktop

1 large storage



## **DESCRIPTION**

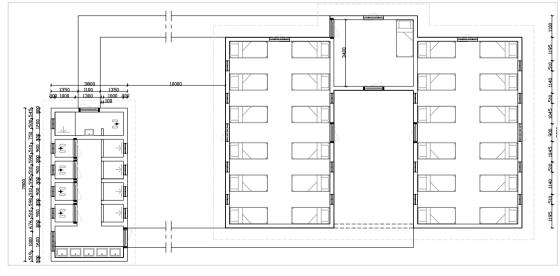
The hospital on Mount Elgon has been expanding on its services every year, by adding facilities to the main structure. Last year MWM helped coordinate the construction of the x-ray building and was asked, after a successful completion, to design an orthopaedic workshop.

One side of the building is used for examination of the patients, workout and registration. The other side is used for making the artificial limbs and in case of emergency; function as a second workout room. The construction of the project started in January 2012 and is planned to be completed in August that same year.











# BOYS DORMITORY MOUNT ELGON

Location: Mount Elgon (Kenya) Client: Mount Elgon Trust

Date: 04-2012

Size: 190 m2

- 2 Dorms (24 children per room)
- 1 Bedroom caretaker
- 1 Large sanitation unit (4 toilets & 4 showers) + sinks
- 1 Sanitation unit caretaker (separate)

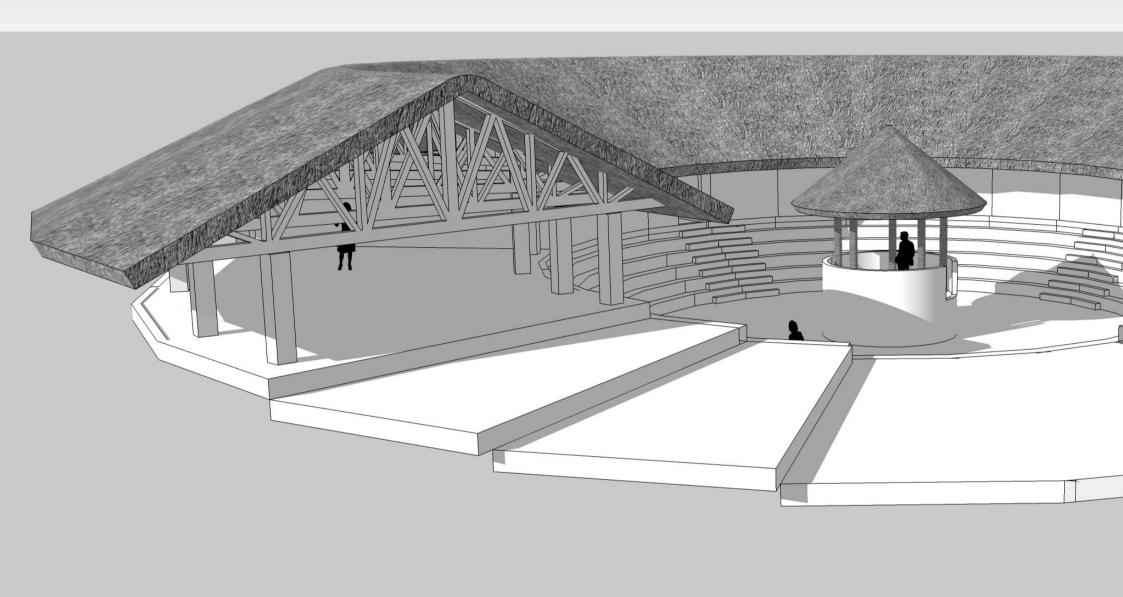


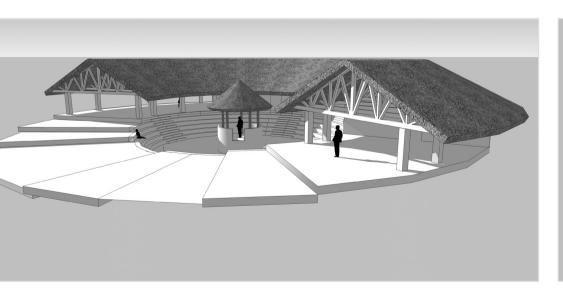
#### DESCRIPTION

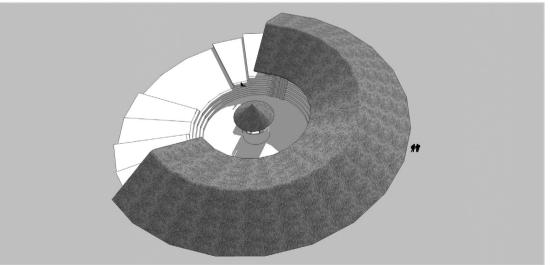
After the completion of the girls dormitory last year and the positive effect on their academic results, the urgent request came to construct a boys dormitory. Where the girls have smaller, more private spaces, the boys have large sleeping dorms. Although there is a small general space between the two dorms, most of the activities will take place outside.

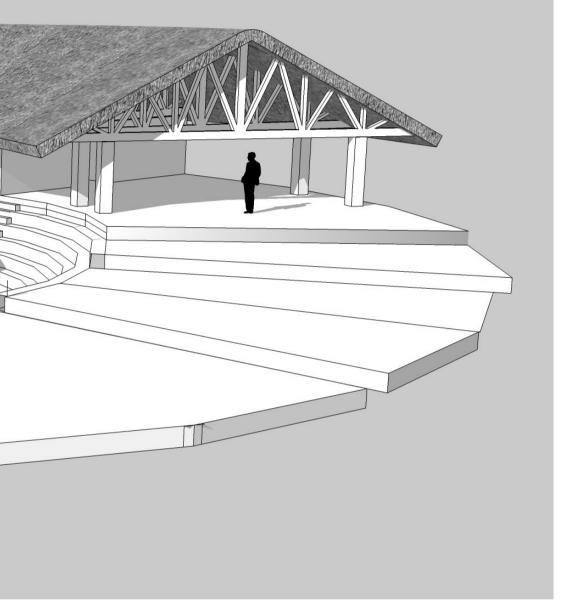
Normally, dorms in Kenya are universal for boys and girls. But for Mount Elgon, MWM wanted to give both structures the same identity but with a different atmosphere. Where the girls have smaller units with their own names and a more home-like layout, the boys have a more independent atmosphere. The project was designed in January 2012, and is planned to be completed by September that year.











# COMMUNITY CENTRE MOUNT ELGON

Location: Mount Elgon (western Kenya) Client: Residents (habitat project) Mount Elgon

Date: 09-2011

Size: 650m2
General meeting centre 450m2
Meeting area 120m2
Office 25m2
Storage 20m2
Library 30m2

#### DESCRIPTION

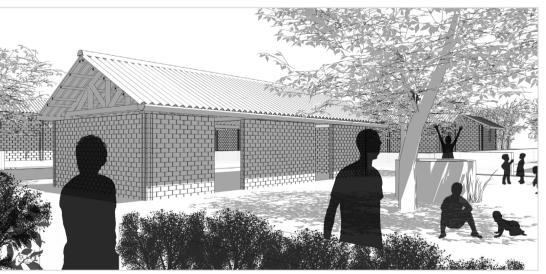
Due to the realization of 95 homes on Mount Elgon, a small population of 600 people find new shelter. This plan, which was developed by the owners and Habitat For Humanity, has created a radical break with the local building traditions and cultural heritage. No longer are the residential communities organized by the chief and the village council, but will the members of this project have a contract and guards instead. This will cause a lot of difficulties, in particular considering the local traditions. To make sure that their cultural heritage is not forgotten we wanted to design a building that needs traditional maintenance every 2 years so the children of the project are obliged to work together. By doing so creating social cohesion and community bond.

For the residents to be able to gather, to host celebrations and to commune, a multifunctional building was necessary. MWM performed an extensive research on the community and its culture in 2010. Although this first sketch design looks very static, the design is based on a modular system (local way of making trusses) that residents can build. The spaces under the roof can be arranged at their discretion and can be divided for different functions. So if they have a community meeting this is the place where they can gather. But also when the community has a wedding or other celebration the building will have a small kitchen and storage to provide all necessities.

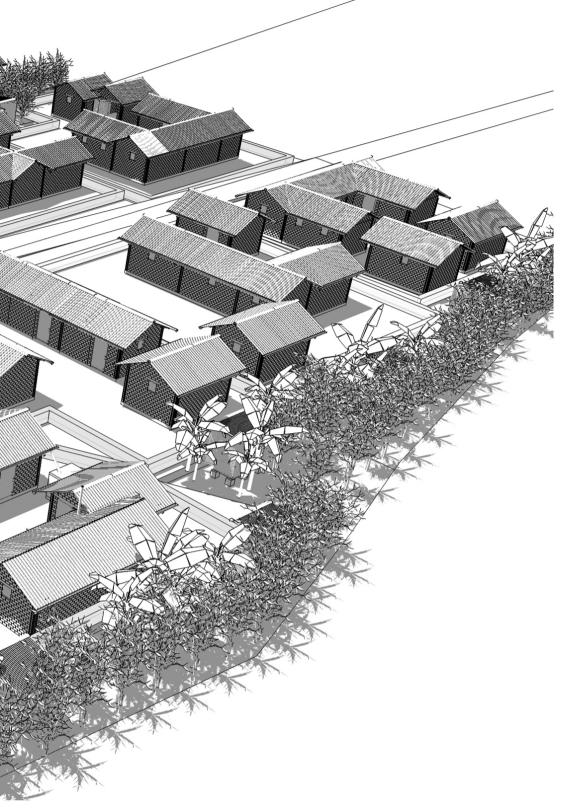
This project is planned to start at the end of 2013 and will be built during the monthly communal labor meetings of the community.











# GRADUATION TECHNICAL UNIVERSITY DELFT: BUILDING TOWARDS COMMUNITY

Who: Ir. Michiel Smits Studio: Explorelab 11

Location: Mount Elgon (western Kenya)
Client: Mount Elgon Orchards & Back2africa

Date: 07-2011

Size: 18 Acres 7 communities 100 households 1000/1500 inhabitants

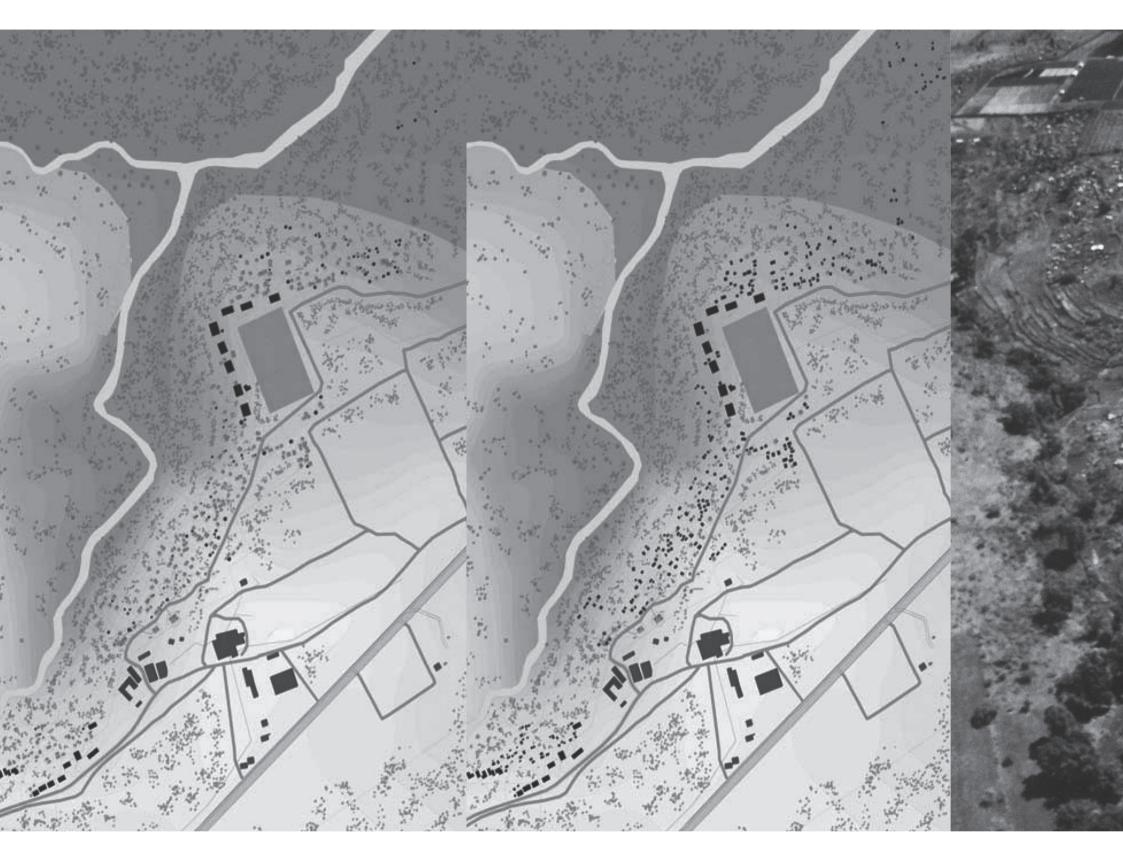


Due to my involvement on Mount Elgon the past 2.5 years I decided to conduct an inquiry into the problem of the current projects. During 5 years, locally operating organizations in collaboration with the owners, realised several projects. After I became involved as a consultant, I noticed that most projects were being realised without contributions from the local inhabitants, neither were they adapted to the local building traditions. This is partly due to the fact that the inhabitants of the region remain dependent on externally initiated projects. This keeps the population dependent on the west and this does not yield a sustainable solution, particularly in the longer term.

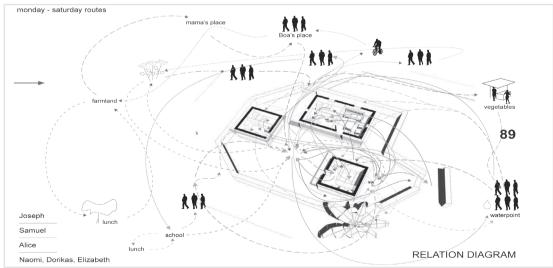
By conducting a research locally for half a year and by talking with residents and developers, I had a solid foundation for my thesis. The conclusions, in particular the development guidelines set out herein, were integrated into this new habitat. The main objective of this project was, for the people themselves to develop the projects and for the organizations to merely have a supervisory role in this process. The research was later used by MWM to base its assumptions for designs on and still plays a vital role!













# SQUATER IDEN-TIFICATION, ANALYSIS, REG-ISTRATION +REHOUSING MOUNT ELGON

Who: Ir. Michiel Smits Studio: Explorelab 11

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards

Date: 07-2011

Size: 25 hectares 300 households 2000/2500 inhabitants

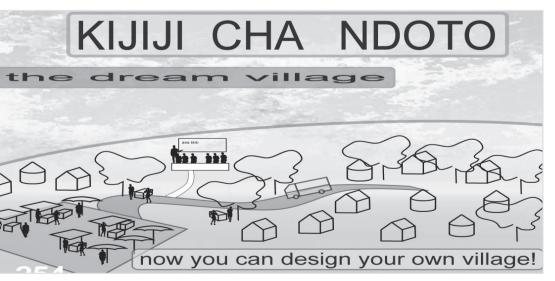


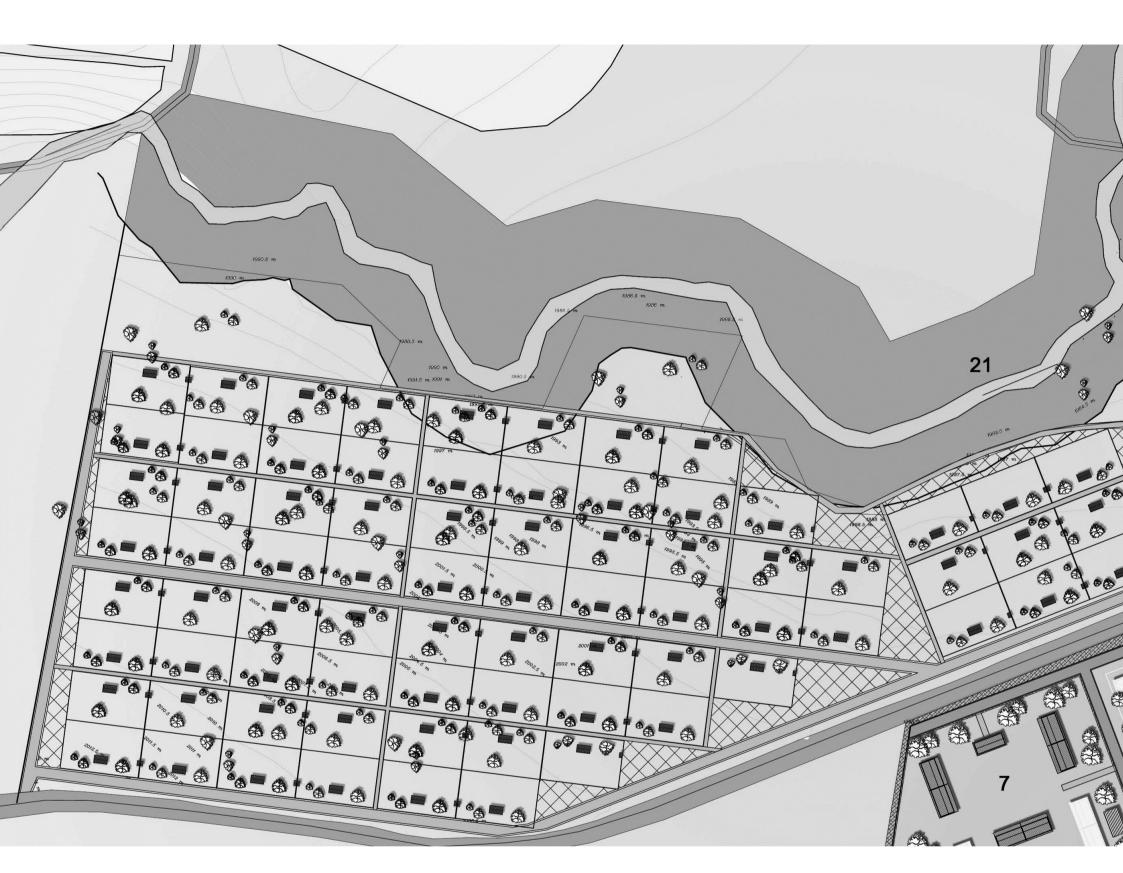
rived to take the research into action, and was one of the main reason why and how MWM was born. The farm needed an expert on the community to identify the scale of the problem (amount of families, size and more important their general wellbeing). The houses inside the squatters needed to be numbered. All the household members needed to be registered and also the physical structures they owned. After this had been done, an overview of the most critical cases needed to be made to select the first 80 people to be offered a new house in the habitat project. The masterplan MWM designed was completed

to be made to select the first 80 people to be offered a new house in the habitat project. The masterplan MWM designed was completed and all the houses were built. It was time to start building a community. MWM helped the community setting up their own rules & regulations, HOC (home owner committee) election procedures, communal labour, selecting a chairman, establish waste disposal sites, water units and many other things. Now after a year of hard work the first official large community meeting was organized and was a major success. In October 2012 the community will officially present themselves to local government officials as a new village.

After graduating and the presented research to the farm the need ar-

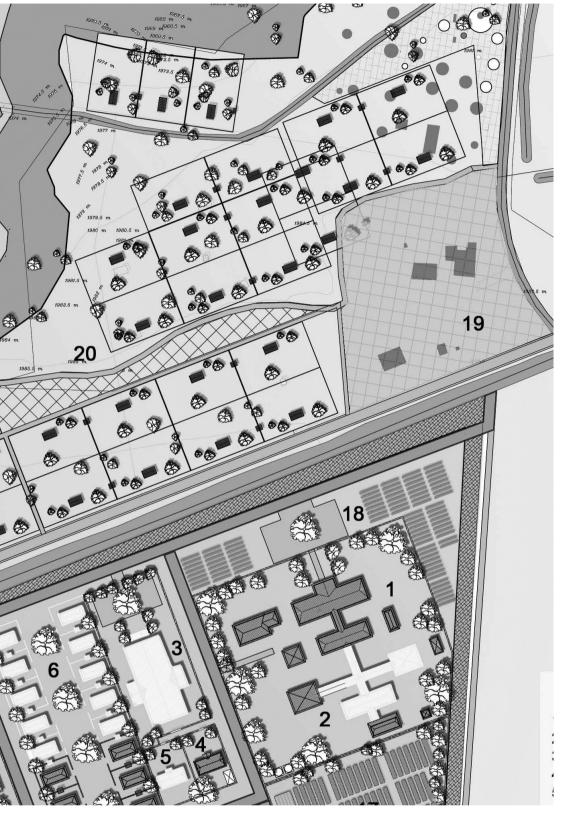












# MASTERPLAN RESIDENTIAL AREA MOUNT ELGON

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards & Habitat for Humanity

Date: 10-2010

Size: 17 Acres 1 Community 120 Households 1000/1500 Inhabitants

#### DESCRIPTION

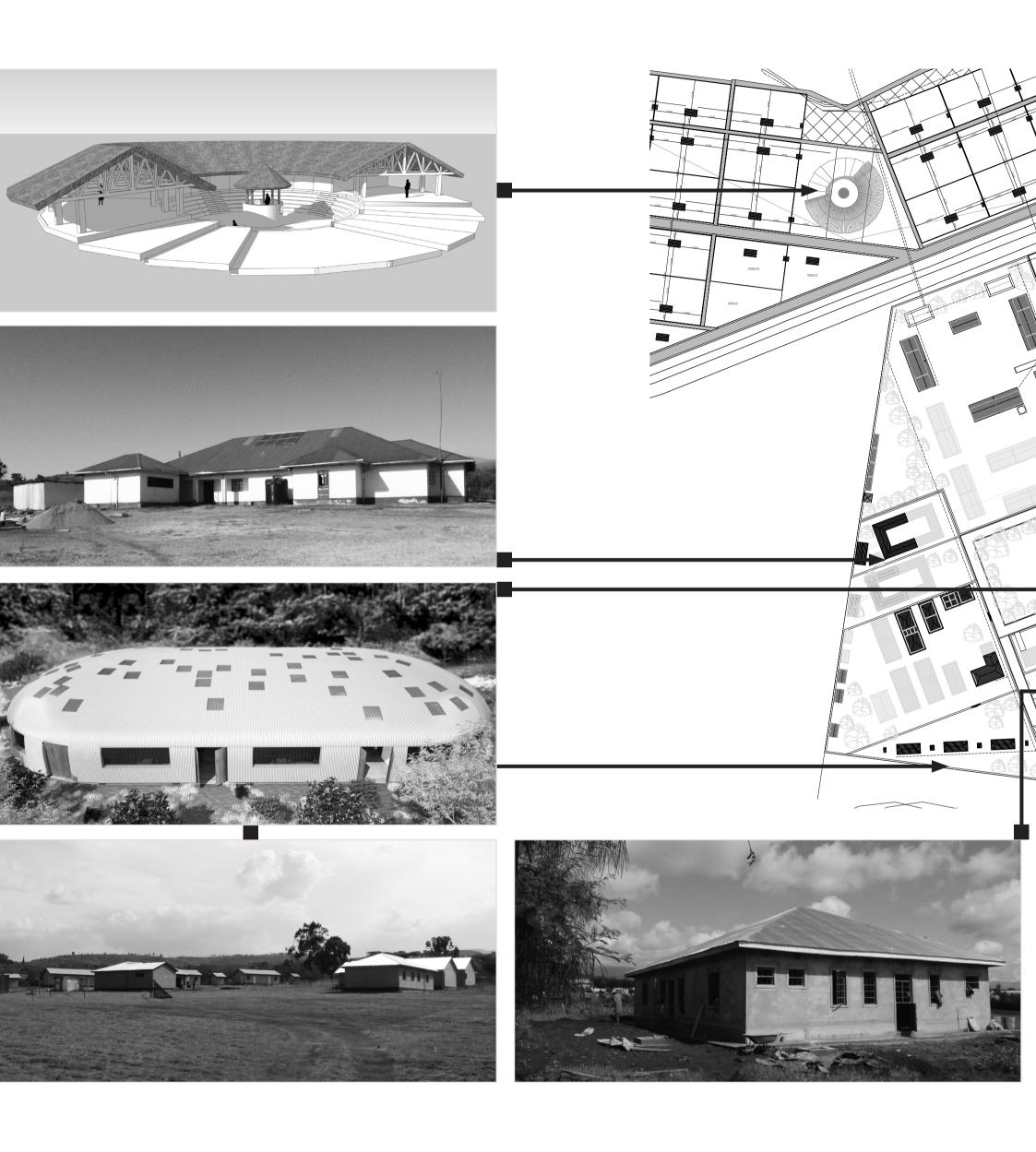
The owners of Mount Elgon Orchards were seriously concerned about a good outcome of the village-project which they initiated with Habitat for Humanity. This event was the catalyst for an application to MWM for assistance.

The request from Kenya was a perfect opportunity to graduate within a research and design project on Mount Elgon. The biggest problem of the project was that a contract was signed, for 120 homes within 2 years, which would be provided by Habitat for Humanity. They were now 10 months into the project, and had only completed two dwellings, which were already close to collapsing.

I started by creating a new urban design, the sketch made by Habitat had a confusing and uneconomical design. The owners (farm) had a clear idea about what they expected of the plan and what had to be adjusted. After the design was corrected, I focused on the project planning, costing, organization, engineering and the different house typologies that would be realized. In the end, the production of the houses had increased to 10-15 per month and the costs had been reduced with 25%. On departure, 30 houses were completed (3 months time) and now the whole masterplan is completed. As a crown on the project I decided to design a community centre in the middle of the community.









# MASTERPLAN MOUNT ELGON

Location: Mount Elgon (Kenya)

Client: Mount Elgon Trust & Elimu Mount Elgon

Date: 10-2009

Size: 15 Acres

Hospital

High School (300-500 students)

Boarding school girls (first phase 48 children, second phase 100

children

Boarding school boys (first phase 48 children, second phase 100

children)

Technical school (first phase 500 students, second phase 750

students, third phase 1000 students)

Teachers Houses (12 double houses)

Church

Housing priests

Housing nuns

Orphanage

House for children with a disability

Guest house

Trees Nursery

Police

Beekeeping

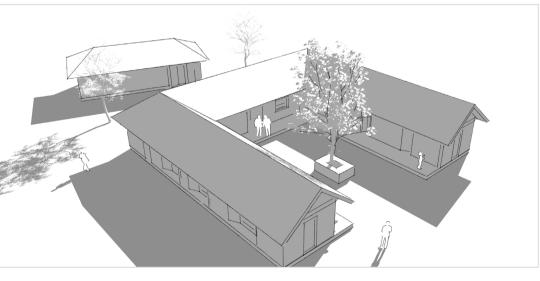


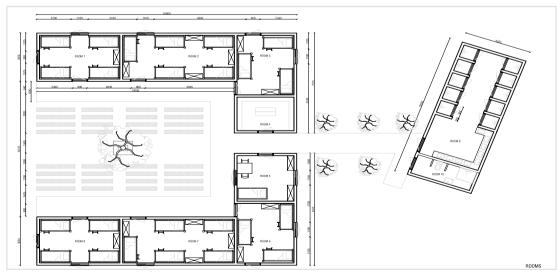
Mount Elgon Trust & Elimu Mount Elgon asked MWM to travel to Mount Elgon in the fall of 2011, with the purpose of measuring the grounds and creating a sketch. The plan was to build approximately 15 projects in the next 5 years, on this relatively small area. To be able to prevent problems arising at an early stage, a masterplan was designed including the infrastructure for future projects.

A month ago the final version was finished with the development up to 2020. This is also the deadline for this masterplan and its project to be completed. MWM is responsible for 70% of the projects on this area. First project and also the heart of this masterplan is the large and luxurious orphanage.











# GIRLS DORMITORY MOUNT ELGON

Location: Mount Elgon (western Kenya)
Client: Mount Elgon Trust & Elimu Mount Elgon

Date: 08-2010

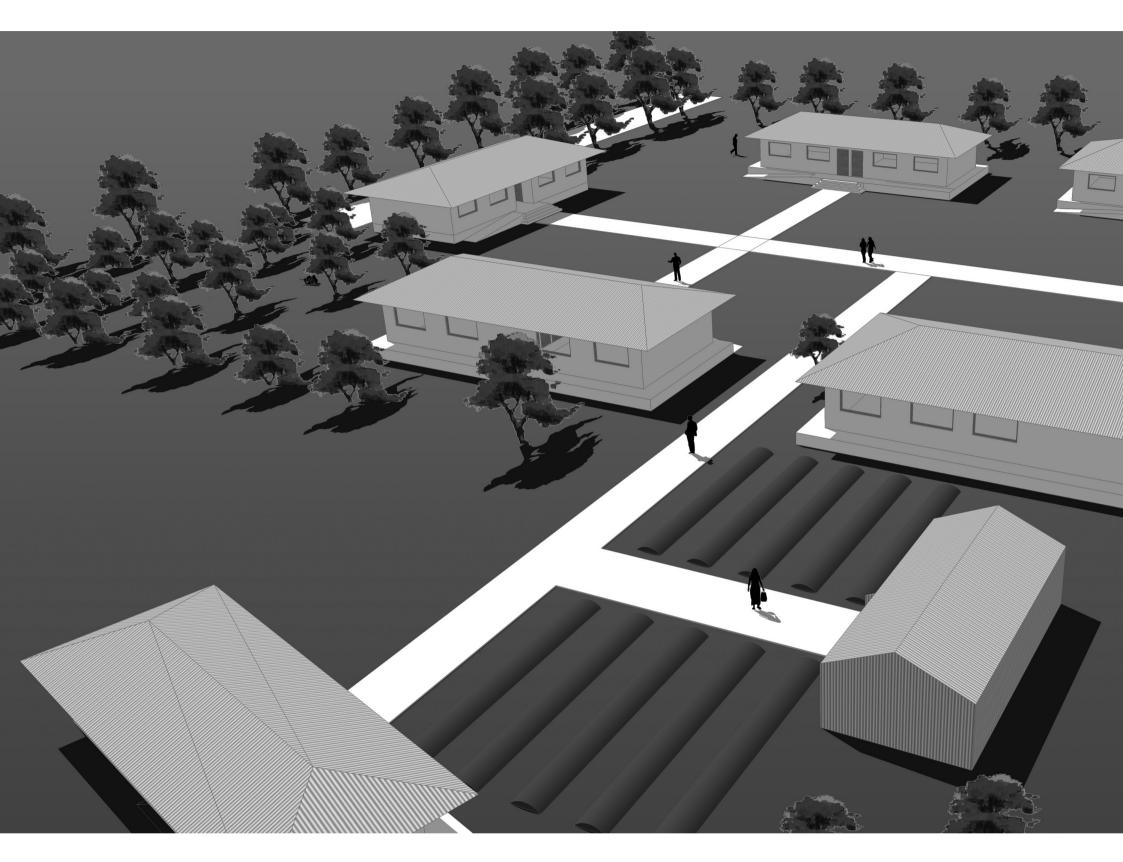
- Size: 350m2 50 Girls
- 4 Dormitories
- Housing supervisor
- Storage + solar energy collectors
- Sanitation building + sanitation supervisor



## **DESCRIPTION**

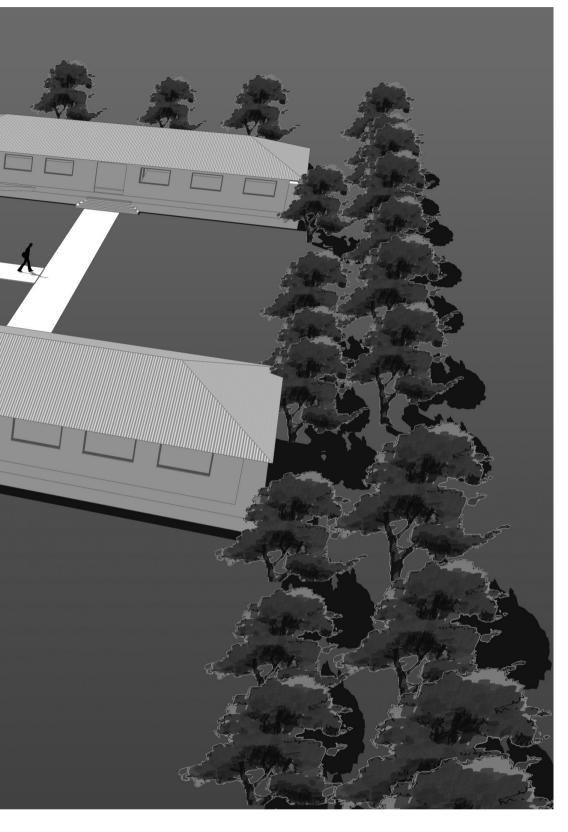
Commissioned by the Mount Elgon Trust and Elimu Mount Elgon, MWM has been requested to design two boarding schools (boys & girls). Both buildings will be built in two phases. The commute every day from home to school and back, comes with great risks. Especially for the girls, so they'll receive the first shelter. This first phase will provide 50 girls with a safe haven on weekdays. On the weekends they can go home with the school-bus. The girls dormitory was completed in the spring of 2011 as desired, including solar panels and the sanitation building.











## VOCATIONAL TRAINING CENTRE MOUNT ELGON

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards & Elimu Mount Elgon

Date: 12-2010

Size: 1500m2 2 Double theory classrooms 2 Double training rooms Staff Building (offices teachers) Shed for cattle Sanitation building

#### **DESCRIPTION**

At the beginning of 2010 MWM received the request for the design of a technical school at Mount Elgon. This complex will be placed at the back-end of the terrain, to prevent the nuisance caused by noise and odour (livestock and vegetable gardens). The complex will consist of a main building (staff room, storage and two offices), in addition to two theory rooms and two practice rooms, toilets and a barn (for animals). Here too, the construction will be done in phases, so that in the course of the year, when more space is needed, a subsequent stage can be built.

The project commenced in the spring of 2011 and was finished early 2012. Due to the fact that the number of students is much higher than was assumed initially, the project was repositioned in the masterplan. This creates more space for future expansions. It will be possible to double the number of rooms, and due to the standardisation in the building system, this will not pose any difficulties. When completed, it will be the largest school in this remote region and will provide opportunities for children from both Kenya and Uganda. The kids will be able to be trained as: carpenter, welder, agricultural, seamstress, etc.

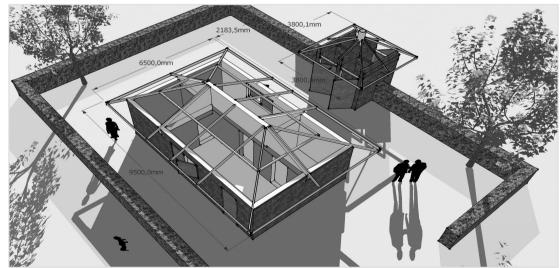
This year also dormitories and extensions will be designed and build in the upcoming years













### TEACHER HOUSES MOUNT ELGON

Location: Mount Elgon (western Kenya)

Client: Mount Elgon Orchards

Date: 07-2010

Size: 500m2 6 double houses 80 m2 Bedroom Living room Kitchen

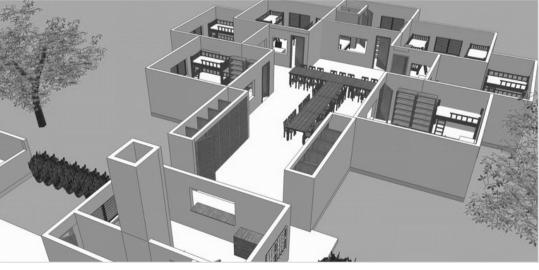


#### **DESCRIPTION**

For the owners of Mount Elgon Orchards it has been very difficult to attract skilled personnel in this remote area. Although the school has now been transferred to the government, there is still a great lack of teachers. The owners asked Back2Africa to submit a design for a more luxurious type of teachers houses, to attract more teachers. The master plan already held space for twelve double houses. As a pilot, in the spring of 2010 the first six homes, with sanitation units, were successfully built and are currently already inhabited by the teachers of the Andersen Elementary School. Next year, another six will be built for the doctors and nurses of the hospital.











#### ORPHANAGE MOUNT ELGON

Location: Mount Elgon (Kenya)

Client: Mount Elgon Trust & Elimu Mount Elgon

Date: 2-2009

#### Program:

- A dormitory for 16 girls
- A dormitory for 16 boys
- Dining room for 32 children
- Living Room
- Linen Room
- Storage
- Kitchen
- Six toilets
- Six showers
- Vegetable gardens
- Playground
- Study Areas

#### DESCRIPTION

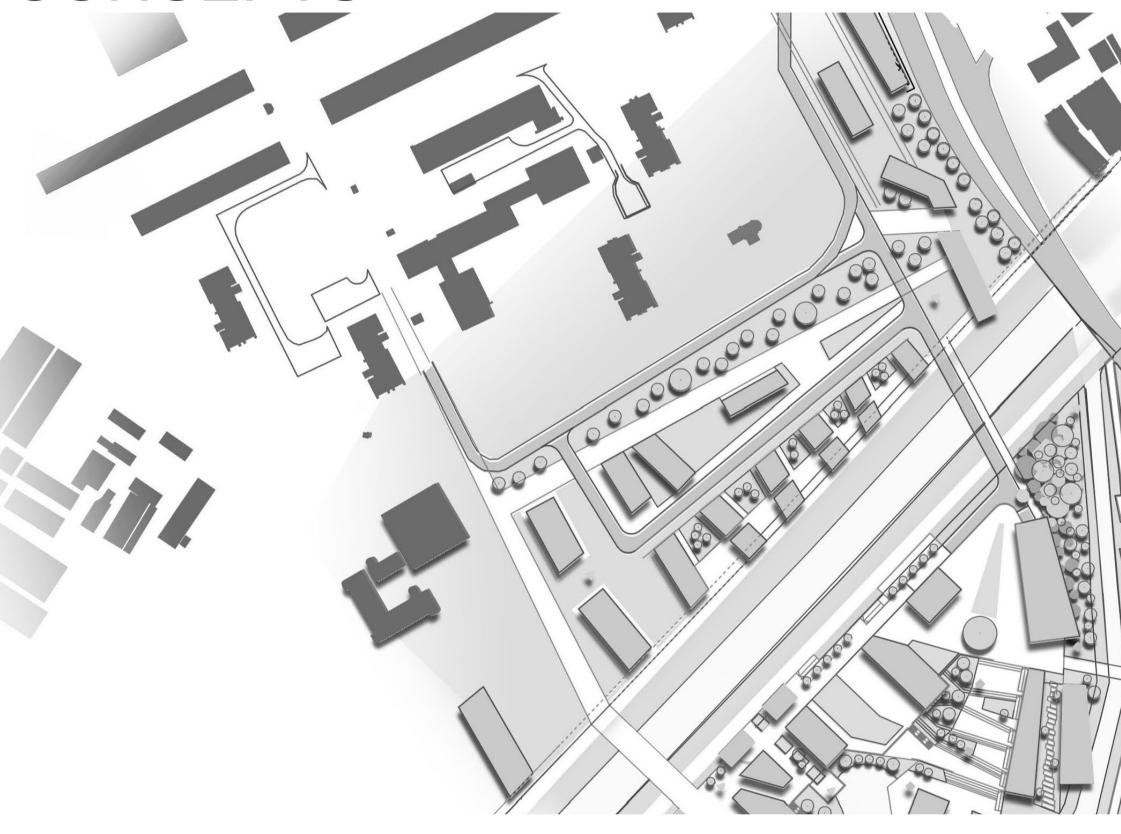
The current situation shows that there is an urgent need for shelter for 32 orphans on Mount Elgon. Traditionally such children are places with their family, but unfortunately there are exceptions. The state and size of the house might not be sufficient, or the lack of food inhibits a family expansion. Why make people live in poverty, if the community can provide? The goal is, to let the children enjoy a similar upbringing as the children in the village. Since most children in the area, attend the same school, a bond will hopefully form. This assist in the feeling of belonging to a family.

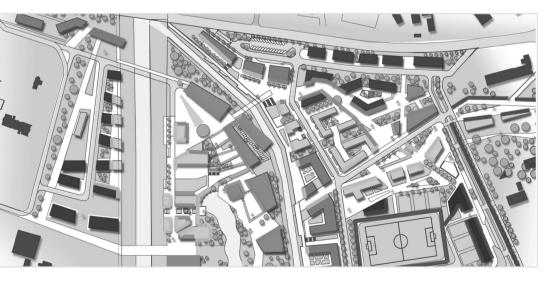
Elimu Mount Elgon had requested the following basics; The intention is to collect the water centrally, for uses as drinking water, animals, washing and watering the vegetable gardens. Due to extreme heat during the day and cold during the night in Kenya, climate aspects should be considered within the design also the current building culture must not be excluded. The building must be able to resist tropical storms and heavy rainfall. In addition, the building will need a good cross-ventilation to ventilate the warm air. In addition, the maintenance costs as low as possible and the project should be easy to build. This is mainly achieved by using local materials and method of construction. Total construction cost are 200 euros per square meter. The current budget of 50,000 euro would result in 250 square feet of building area. The money has been collected, so therefore the project can quickly start. This project serves as an introduction between Back2Africa and Elimu Mount Elgon. From this collaboration will form the basis for the village that will be completed in 2012. The project was ultimately completed, with some modifications, in the autumn of 2009. Through this project I proved my ability to both partner foundations. Since then I have realised 10 projects on Mount Elgon and much more to follow.



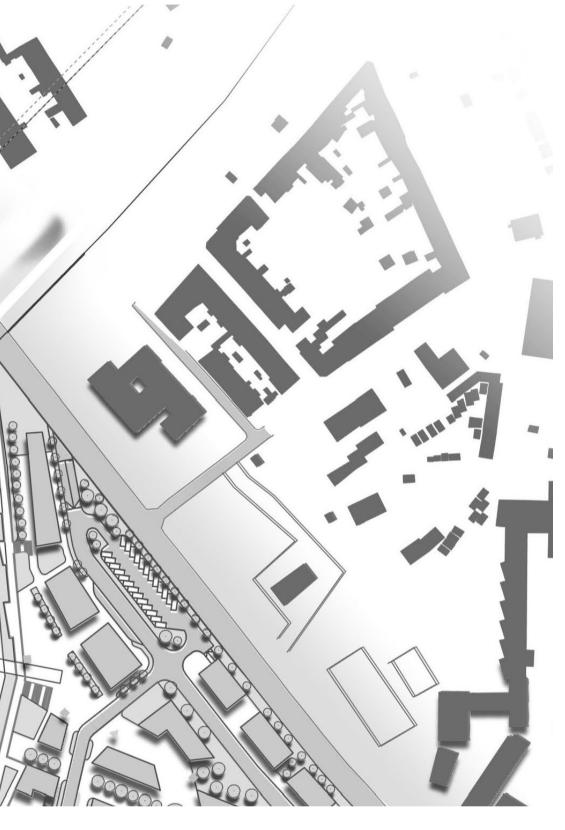


#### CONCEPTS









#### NEW DISTRICT CENTRE KRAKOW IR. M. SMITS

Location: Krakow (Poland)

Client: International Technical University of Krakow & Town Board

Studio: MSc2 Urban Design

Date: 02-2010 Grade: 9+

Size: Homes Shops Offices Recreation Parks

#### **DESCRIPTION**

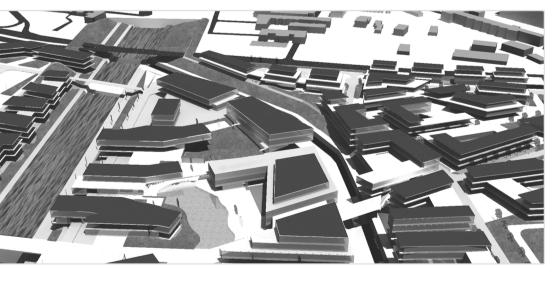
Because Krakow regularly floodes, especially in the spring, the municipality decided to build a canal so that at high water the water can run faster. Because this channels right through two residential areas of Krakow, the municipality wished for the canal to have more functions. In particular, water sports, restaurants, etc.

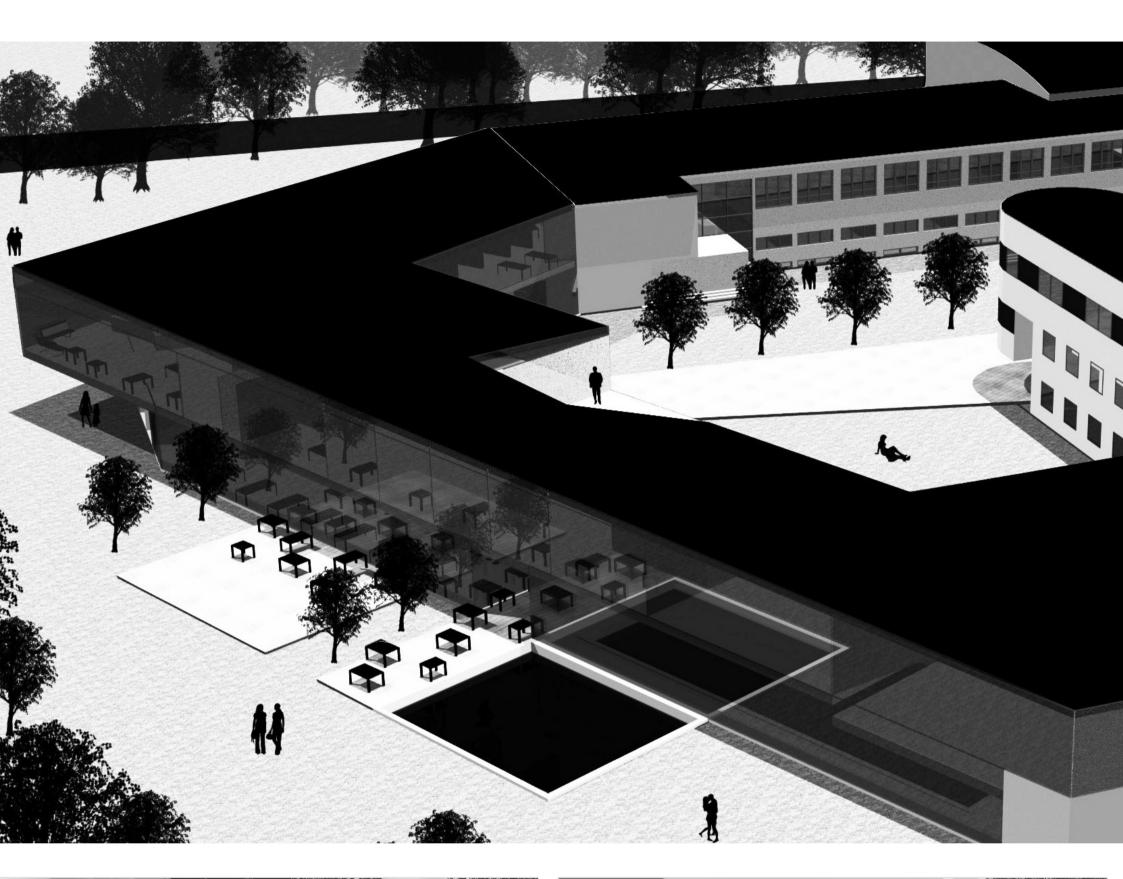
From the analyzes and interviews it became increasingly clear that the life in Krakow suffers under the pressure of tourism in the city. The residents indicated that they would appreciate something which was just for them. We decided that a cultural centre for the residents should be composed, including libraries, parks, shops, etc. This had to be realised without losing the identity and the peaceful character of the area

We set the limits for not higher than 2-3 floors. Only in the centre of the new district we created 4 floors high. The orientation of the infrastructure is the cultural heart. In addition, the channel has bike paths and hiking trails that can run over at high water. In dryer seasons the channel is a place for canoeing, fishing or just a stroll along the new cultural heart.

With this project I was able to show, for the first time, that I am not only an architect but also an urban designer and planner. Something which comes in very handy, in particular for my work in Africa.

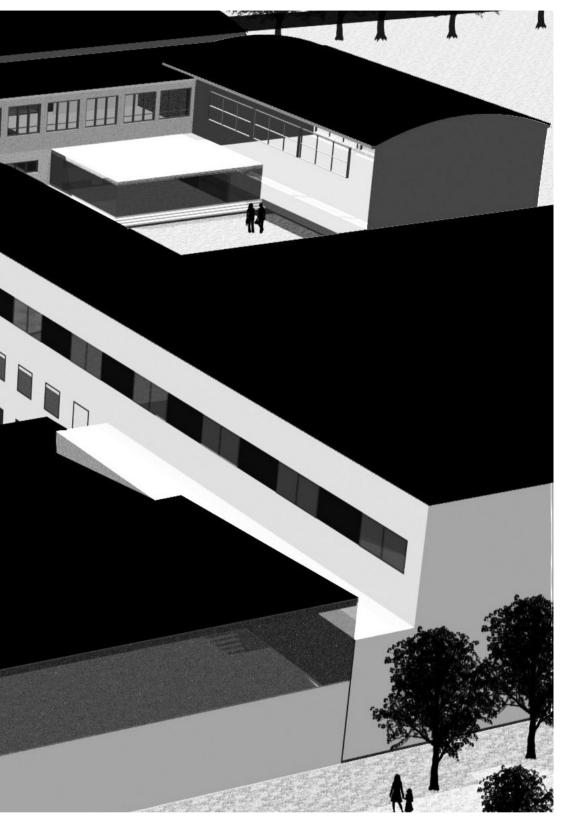












## ACTIVATION BY CONNECTION: UNIVERSITY SPORTS CENTRE KRAKOW

Location: Krakow (Poland)

Client: International Technical University of Cracow

Date: 03-2010

Size: 1000m2
Study rooms 144m2
Spa 216 m2
Library 288 m2
Sports Canteen 86,4 m2
Dance Rooms 72 m2
Orchestra Area 28,8 m2
Student Clubs 36 m2
Workshops 43,2 m2
Offices 28,8 m2
Registration Office 21,6 m2













#### **PUBLICATION:** COMMON RESPONSIBILITY AND PUBLIC SPACE IR. M. SMITS

Client: Technical University Krakow

Date: 06-2010

Title of book: Czasopismo Techniczne

Page: 391 ISSN: 1897 - 6271





#### **DESCRIPTION**

During the six months that I taught at the university of Krakow, there was a contest for writing an article. The top two items would eventually be published in a book in which usually only PhD students and professors were to publish. It was the first time that something like this, in such a book, was done within the university. Eventually I was able to win over 60 other candidates and thus my first published article was a fact.











# TEACHING INTERNATIONAL TECHNICAL UNIVERSITY KRAKOW IR. M. SMITS

Location: Krakow (Poland)

Employer: International Technical University of Krakow

Studio: MSc1-2 Urban/Architectural Design

Date: 02-2010/08-2010



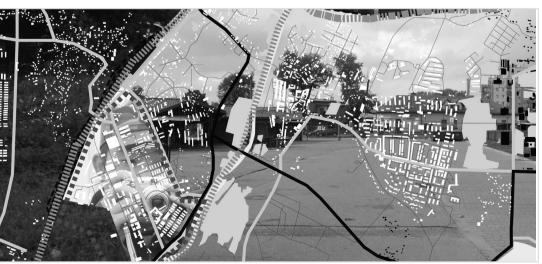
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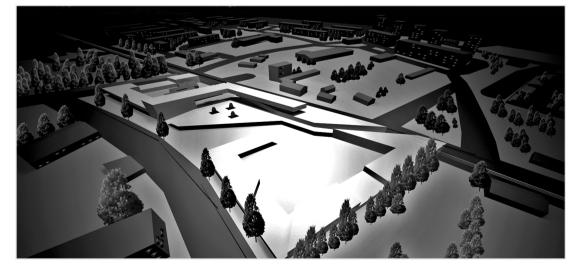
Following my coaching of a group of students at Auschwitz I was asked by the professors to come teach at the university. During six months I taught a group of 25 students. Here, I formulated the tasks per week, supervised and reviewed the designs in addition to a weekly lecture.

Eventually we ended the semester with the 'Artboomfestival' in Krakow. Here I and my students gave presentations. Below are the relevant letters of recommendation.













#### MSC1: BORDER CONDITIONS AUSCHWITZ IR. M. SMITS

Location: Oswiecim (Auschwitz, Poland) Studio: MSc 1 Border Conditions

Date: 09-2009/01-2010

Program:
Marketplace
Apartments
Library
Shops
Offices
Economic Research

**Event Square** 

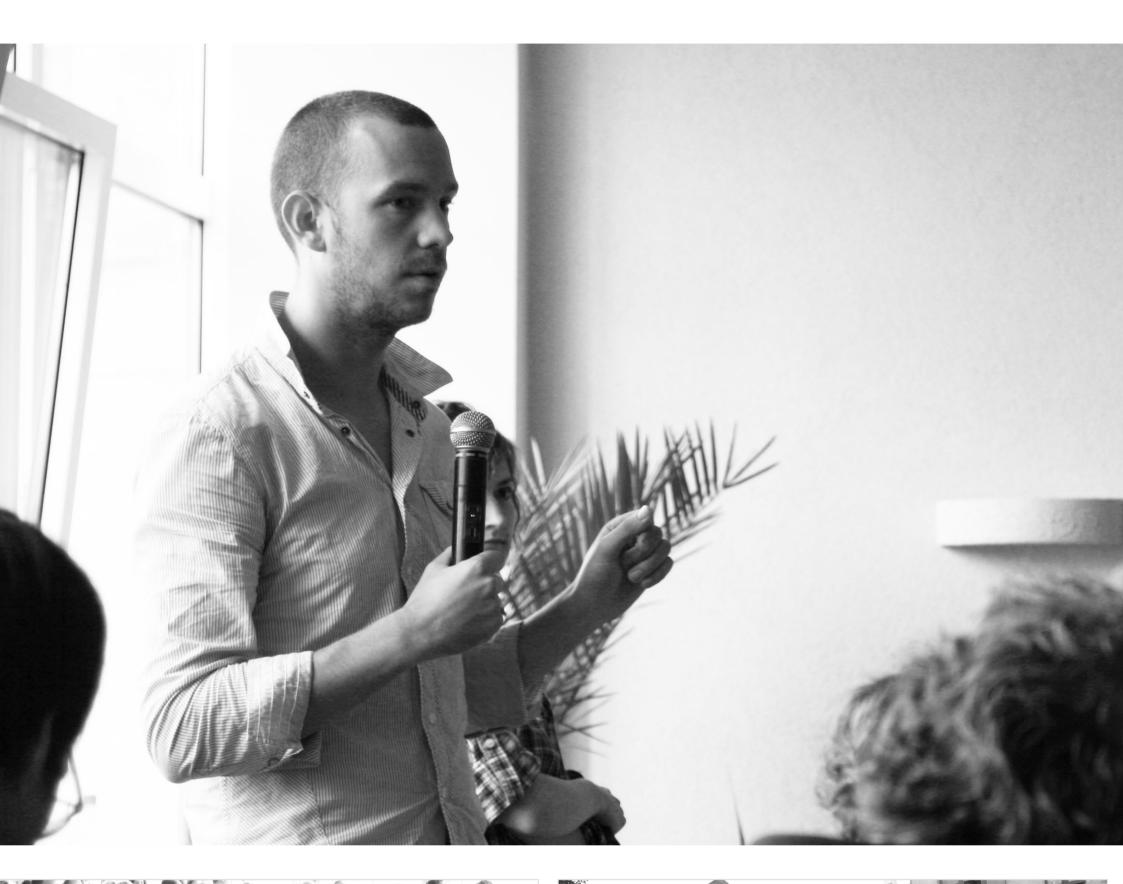
#### DESCRIPTION

In the analysis of the first few weeks we looked for conditions and problems within the urban historic context of Oswiecim. We found a lot of negative history mainly caused by the war, which still holds the people and the architecture of this town in its power. Every square meter in Oswiecim has a story and every intervention means wiping out an important piece of history. In our view it was essential to find a project area that had no history, since we had to design an economic research centre.

The biggest problem in town, is the fragmented nature of the urban layout of the city, which was also caused by the war. In particular, the area southeast of the centre, this area lies between two forces, namely those of the centre and the huge complex of IG Farben. Also the high buildings, which date from communism, cause a visual obstruction of the environment. For the inhabitants of the neighbourhood, these condominiums are a constant reminder of the communists and this combined with the negative association with the war creates a depressed environment in which they live.

Strangely, we found in comparison to the rest of the city, a high density of public functions in this area. In our opinion, this gives the area a unique opportunity and high potential that should be better utilized. But before we began the design we had to get a notion of the socio-cultural context of the environment. Thanks to the many interviews on the street, we learned that the biggest problem currently is the high unemployment in the town. High unemployment is a bit odd for a city that annually has more than a million visitors. The big problem is that these visitors, only visit the concentration camps. The camps are owned by the state and the city earns nothing. There are few people who can get a job as an interpreter or something similar. This gave us more than enough reason for the design of a economic centre. After all, the migration from the smaller cities is an increasing problem, like high unemployment.











## INTERNATIONAL WORKSHOP AUSCHWITZ IR. M. SMITS

Location: Oswiecim (Auschwitz, Poland)

Participating countries: Germany, Netherlands, Poland and France

Date: 10-2009

#### DESCRIPTION



To introduce our MSc1 trajectory, the TU Delft was invited to participate in the international workshop in Oswiecim, which was organized by International University Krakow. I was asked to be group leader, which I accepted readily. The study focused on the definition of different boundaries in Oswiecim and how these could be used for a design project or how some limits could be blurred. The workshop ended with a presentation for the city of Oswiecim. Here we let the congregation see that with very few resources one could create solutions that could give a lot more quality to everyday life in the city.

Ultimately, our project received quite a lot of praise because it precisely met the current context and values, also we produced simple solutions which could be executed immediately. Ultimately, this research and my design assignment was chosen as the only entry of the foreign MSc1 route for publication. This was publicised in the autumn of 2011. In addition, the professors involved, asked me to come to their university to teach









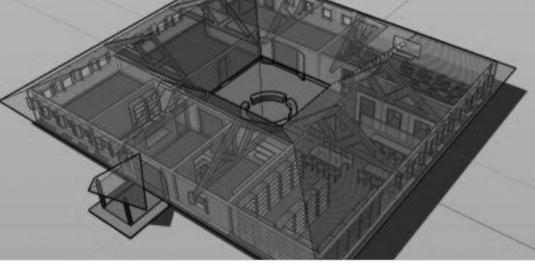


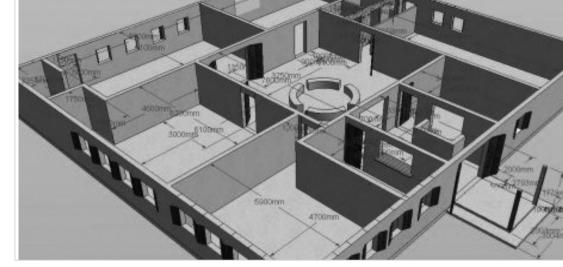
## INTERNATIONAL WORKSHOP BARCELONA + PUBLICATION













#### MULTI-FUNCTIONAL VILLAGE CENTRE MOUNT ELGON

Location: Tornu, Volta region (east Ghana)

Client: Midogo Foundation

Date: 01-2007

Size: 400m2
Office
Library
Computer room
Wood workshop
Metal workshop
Indoor playground
Day-care centre
Sewing workshop
Registration office
Central cooking place



#### **DESCRIPTION**

The midogo foundation contacted MWM because they wanted to design and construct a rural multifunctional village centre in Tornu. This area forgotten by gouvernement and investors needed a place where locals could start some small business. But more important wanted the Midogo to offer additional trainings for the jobless people of the Tornu village.

As an additional feature MWM wanted to young and old to come together in the centre to meet. The concept was to create a new common feature.



