

Re-Connecting with water. Creating spatial solutions for water collection and storage in rural areas of Morocco, which suffer from water scarcity and loss of social and environmental cohesion

Reflection

This document intends to represent the reflection, limitations and lessons learned throughout the process of the graduation project: Re-Connecting with water, Creating spatial solutions for water collection and storage in rural areas of Morocco which suffer from water scarcity and loss of social and environmental cohesion.

Relationship between research and design

The goal of the project is to give alternatives to the inhabitants of rural settlements of Morocco, where the government is not capable to provide aid to create sufficient living conditions. For this the first step needed to be a deep research on the current water and socio-economic issues of the country as well as to gain understanding of the climatic changes affecting Morocco. After this research phase the project evolved by two processes, research and design that worked hand in hand. By this, testing, alterations and reconsiderations were possible throughout every step.

The analysis has been done by reviewing research literature, map and numerical data, interviews, which all created a base for the further development and orientation of the project. With the information gained from the analysis acted as the base of the design and the elements chosen. While working on the project, the design altered the research and the information from the research modified the design, this way the two processes integrated.

Limitations of the project

Throughout the project the most difficult area was the analysis. Issues occurred from the fact that the official language of Morocco is French and many of the data on the country only exists in French. During the site visit this language barrier presented itself as well and during many interviews, translation was needed.

Apart from the language issue, the country does not provide a public database and a large amount of information that would be needed for research purposes, it is not documented or not available. This issue is present with maps as most of the maps are only available in image form and with insufficient quality.

This lack of information was especially an issue on the rural areas and in the case of the chosen site, Adassil. To overcome this issue the interviews were aiding the process.

Relationship between the graduation project and Flowscapes Studio

This graduation project is part of the Flowscapes Studio of the MSc Landscape Architecture where several research and design approaches are offered to fulfil a thesis project. The main goal of the Flowscapes Studio is to create living environments where the different natural and man-made flows work together and aid each other. The graduation project functions and works on different flows as well to create a system that provides better living quality for people.

Chosen research methodology and approach

To complete the graduation project a mixture of methodologies and approaches were selected and combined to fit the goals. The Framework for Sustainable Water Management has five criteria to create a complete guide. It focuses on the philosophical, social, political and cultural aspects of water management, aims for guidelines to evaluate on actions as environmental management, sustainable development, and social participation. This framework was combined with Place Making and the Whole School Approach to create quality living places that suit the community and could be able to blend into the cultural and traditional norms of the area. The Maximization Approach aided the design process to create systems that work together and for each other in different topics.

Social, professional and scientific relevance of the outcomes

Water scarcity is a growing issue in several areas of the world and many people suffer from it. Research, elaboration and options for possible and feasible solutions are needed on this topic. The graduation project provides a wide range of water management interventions that with different combinations can fulfil the freshwater needs of different communities. Flexible systems can be implemented in locations with different endowments and communities are empowered to decide on the developments they need with professional help.

Ethical issues and dilemmas occurred during the processes

Working on the rural area of Morocco, social segregation and inequity is leading focus of the graduation project. The local authorities do not want outsiders entering the settlements or taking pictures. Although the graduation project intended to gain deep understanding of these communities and their traditions, lives and needs, the outcome of the thesis is an alternative to increase the living qualities of the community from an outsider. Therefore, it was important throughout the project to create flexible and alterable solutions that the communities could shape to their own norms.

Along with flexibility the education and awareness are key in the project. The inhabitants need to be fully aware of the proposed system, use and respect it as if their engagement in the project is missing, the project could fail.

Potentials for further research

Due to time, data and possible visitation limitations the graduation project does not touch every landscape architecture related issues in the rural areas of Morocco. Further research would be needed to understand the dynamics of these communities and the consequences of the realization of such a development as the one the graduation project offers.