The reflection of my project will be expounded based on the three (C.O.B. = Compiled, Operated and Beneficial) knowledge fields. By using this method I can detect my achievements and deficiencies.

### Compiled Knowledge

The Refugee City studio was initiated from a crystal clear vision, namely using local materials and environment to transform the current refugee camps in the Kurdistan Region.

Even though I have a Kurdish background, my knowledge on local materials and the Kurdistan environment was mediocre and required critical insight. Furthermore, my initial understanding of the settlement of a refugee camp was based on my Dutch experience.

In 1995 - my mother, sister en myself escaped the Iraqi regime due to our Kurdish Background. After our arrival in the Netherlands we were confined for thirteen months in three different refugee camps. The first two camps felt like a prison due to the strict rules, for instance it was prohibited to move outside the camp when desired or to cook inside our shelter. My personal experience created a "dark" perception of the refugee camp topic. However my judgment changed after the spread of the tyranny - ISIS - in the Syrian, Kurdish and Iraqi territory in 2014. My dark experience was suddenly much more convenient than the struggle that those thousands of people are / were having in the current refugee camps. However the knowledge gained from a distance through the mediums of the internet and TV is minimal. Therefor I decided to conduct my research partially on site and visit Kurdistan to learn more about the refugees, camps, environment and culture.

After the field research, the gained knowledge was enormous and uplifting. For this reason I had to organise all my data on desk with the support of a variety of literature. Unfortunately, I have been unable to find enough literature or projects on the usage of reed as a (structural) building material. Therefor I have used my knowledge through prototyping (testing). It seemed that reed is still an inferior unexplored field in architecture.

#### **Operated Knowledge**

The gained information in Kurdistan, through literature, my past experience, prototyping and tutoring has been towering and overwhelming. However, not all raised knowledge has been equally essential for the final design. For instance, I read several books concerning the usage of containers for housing, which is now totally irrelevant from my current track. On the contrary, I genuinely believe that during a project different experiments and ways should be considered before the denouement. My final design could not have been achieved without going through all the steps which I have been taking before. Contiguously, it would have helped my track if more information and tests were available concerning reed structures. As a substitution, I have used the knowledge of bamboo structures - using literature - to generate my experimental models and refine the design. With the help of a laser cutter and 3D printer exploration and analysis was made possible.

#### **Beneficial Knowledge**

My project has been mainly fueled by two major sources: The Kurdistan visit and prototyping. Recently I read that some houses in Asia and Mexico are currently built using reed and earth (Mud). These projects could have been of a great value for my project.

#### **Final Verdict**

#### What is the best element of my progress?

I believe that the experimental phase, by using (1:2) scale modes, has been of a great value. Mainly due to the direct return of knowledge of the connection points and close look of the actual materials. It allows to detect failures within the technique, which leads to enhancements.

#### What should I have done differently?

I should have put more emphasis on the reed during my field research, for example by visiting factories who produce reed sheets for gardening fence or insulation.

# Some of the Achievements

- + Knowledge on the settlement of Refugee Camps
- + Knowledge on Refugees
- + Knowledge on Kurdistan's environment, building materials
- Knowledge and Application ofReed + Earth as building material
- Insight on sustainable cities creation of the selfsufficient Refugee City

## **Deficiencies**

- Real world solutions of reed structures
- More in-depth focus on the notion of the city