Site planning and Shelter Camp Restructure Project

ZA’ATARI REFUGEE CAMP – MAFRAQ
APRIL 2015 – APRIL 2016
Introduction
Zaatari Camp was opened in July 2012. A high influx of refugees passed through Zaatari with varying duration of stay causing challenges to shelter allocation and camp structure.
There are different types of shelter provided in the camp, i.e. tents and mobile caravans.

Method of pitching tents, distributions and recovery of shelter was not fully systemized from the beginning of the camp establishment.

Shelter recovery started July 2014 by tracking of refugees leaving the camp.

Different source of shelter distributions and limited recording/verification.

Attempt to implement the camp initial master plan and make it visible on the ground.

Refugees tend to change their location within the camp very frequently and have large household plot with many shelters.
“Camp restructure is an attempt to best utilize the camp space in line with minimum standards and preserve social cohesion to the maximum extent possible.”
Population of Zaatari camp stabilized since opening of Azraq camp. Currently, the camp is home to some 80,000 refugees HH residing in 12 districts.

New shelter design was introduced in January 2015: prefab includes concrete flooring, built-in wash and cooking facilities as in the below layout:
Methodology

- Needs Assessment and assistance of households through home visits and consultations with refugees.
- Relocation of HH when needed to reflect the camp masterplan skeleton.
- Roll out of address system in the camp and linked to UNHCR file #. An attempt to implement the camp initial master plan and make it visible on the ground.
- Produce as-built plan for the camp: final and accurate layout to be used as camp masterplan.
- Identify full camp capacity and empty plots
- HH will be linked to infrastructure networks, i.e. waste water, water supply, electricity and construction of service roads.
Shelter Images
Shelter Images
### Assessment Questions

<table>
<thead>
<tr>
<th>District</th>
<th>Block</th>
<th>REACH Address</th>
<th>Household Area (m²)</th>
<th>Is this HH inhabited?</th>
<th>Is this HH a compound or single family?</th>
<th>Number of families living in this HH</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Private facilities in this HH</th>
<th>Type of shelter (observed)</th>
<th>Number of Caravans (observed)</th>
<th>Caravans: fixed, mobile or both</th>
<th>Number of tents (observed)</th>
<th>Does this HH have an extension/porch?</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Main material of extension/porch</th>
<th>Registration number: manual</th>
<th>Name of head of household</th>
<th>Total number of persons with physical disabilities in this HH</th>
<th>Total number of pregnant women this HH</th>
<th>Age of individuals (years)</th>
<th>Gender of individual</th>
</tr>
</thead>
</table>
Pathways of 6m are left between every column of HH to provide access to services and respond to emergencies.

**Household Plot:**

Each HH will have approx. 10x10m plot size to fit their caravans, tents, and installations.
Addressing system

After restructuring and relocation: each HH will have an address number printed that shows district #, block #, and HH #, and street names will be painted on caravan elevations as per the below image:
NRC Responsibilities

- Implementing all the activities which ensure accessibility and security for each Household.
- Represent accurate as-built master plan for the whole Zaatari Camp and its features optimistically.
- Implementing the address system in the camp, including demarcating HH numbers and street names.
NRC Team Duties

1. Households Allocation and Relocation
   ◦ Implementing relocation plans, activities, messages, resolving any related issues on the site; which ensure accessibility and security for each Household.
   ◦ Demarcating prefabricated caravans and its classifications onsite to allocation activities

2. Surveying
   ◦ Measuring the distance and angles in order to create the As-built maps after relocation activities

3. Address Planning
   ◦ Identifying the address for each household and handing over the final drawings on a specific sequence for address implementation team.
   ◦ Drawing the final As-built layouts for each blocks as is approved.
4. Address Implementation

- Installing the address of each HH in the field.
- Demarking the names of each street as provided in the masterplan.
1. Allocation and Relocation Team

1. Recommendation List
   - Family Size
   - Number of Caravans
   - Disability Priority

2. Preliminary Plan
   - recommended House-Hold plots
   - Irregular House-Hold locations with preliminary suggestions for new locations
   - Preliminary service roads (as pre work for infrastructure phase)

3. Messaging
   - Supported by community service team

4. Relocation
   - On-site
   - Minimum damages
   - Standards and Regulations
“To guarantee a well sewer service, privacy, and safety for each House-Hold (with minimum damages), in parallel with the project regulations, and demarcate a prefab caravan/s”
5. Updated Maps

- CAD plans for each block, shows the new locations for Prefab, relocated Caravans, and new service roads.
- Daily relocated and allocated caravans’ progress
- Prepare tables show the Allocated and Returned Caravans’ types (A or B), House-Hold full information, and any back-up notes.
2. Surveying Team

→ make exact coordinates, measurements and determine all the household boundaries, and provide data relevant to the shape, location, and dimension of each district, its features, and house-holds on-site ←
1. Find Master Bench-marks
   - Based on Handel GPS and existing landmarks

2. Allocating the Global BMs in the camp
   - Using Palestinian Grid
   - Accuracy less than 1m
3. Specific NRC Surveying Network

- Dividing new benchmarks
- Connect them for a geometric network cover the district
- Accurate produced master plan

4. Surveying As-built Map

- For every caravan and major features in the each block (Easting, Northing)
- Code all the points for the observed features in site
- In coordination with relocation and Address planning teams
The surveying as-built map with codes for all the points for the observed features in site.

CA: caravan
N,S: North & South
FE: Fence
Ba: Bathroom
K: Kitchen
H: Hospital
3. Address Planning Team

1. Conduct Final As-built Maps
   - Create draft manual drawings
   - UN registration number for each Household
   - Represent the maps as CAD as-built layout

2. HH Plots Remarking
   - Specifying the status for each HH/plot (vacant, available, unoccupied)
   - Includes UN registration number/s

3. Address Identification for each household
   - On a sequence order
   - In English and Arabic
   - For Implementation Team

Ex: D09  B04  H15

- District Number
- Block Number
- Household Number
Drawing the final As-built layouts process for each blocks –
Addressing and planning team
Available Plots for future and sustainable urban expansion
4. "Data Extraction"

- CAD drawings to Excel sheets
Zaatari as-built HH boundary on master plan in progress/ CAD

November 2015

January 2016
4. Address Implementation Team

1. Address Installation

- Installing the address of each HH
- Using a special pre-designed plates and specific paints
- Check the UN registration number and all attached data for each HH
2. Street Addressing

- provided streets maps from UNHCR
- On-Site check for any change
- typing the names of each street
3. Final check-up

- on site
- for the whole district
- Work submission
## Project Challenges & Site Management

<table>
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<tr>
<th>Challenge</th>
<th>Details</th>
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</table>
| Community accepting and understanding the project actions and activities  | • NRC CRT Massaging Support  
• Coordination with UNHCR field focal points and IRD CMs on site, by community gathering in each district.                                                                                                           |
| Trust problem                                                             | • On-site CRT Support  
• Overall site work – by time                                                                                                                                                                            |
| Uncontrolled Caravans movements by individuals                            | • Coordination with UNHCR field focal points and IRD CMs on site, by community gathering in each district.  
• Addressing System.  
• Linking HH to infrastructure networks                                                                                                   |
| Base Data and references were not updates to the site                     | • Multi resource information and data-base in compressing with site                                                                                                                                     |
| The project covers the whole Zaatari Camp (12 Districts = 5.22 km² = more than 14,000 HH) | • Scheduled work plan – and teams cooperation work  
• Systemize work and development                                                                                                               |
Project Achievements
1- Project Progress Documentation
Restructuring Zaatari Camp Project Time progress – master plan from monthly report / till April 2016
2- Restructuring Project On-site

• Accessibility for each Household
• Improved Households layout to have a healthy and safe environment for each family
• All HH have a reachable address for refugees and visitors
• All the main and secondary streets have a clear and visible name
• Proper arrangements of shelters and a ‘final’ layout plan of the camp to accommodate the Syrian refugees’ population growth.
Before and after Restructuring Project - District 10
Beneficiaries’ Feedback & Project Evaluation
1. General Feed Back

- Accessible
- Privacy
- Reachable
- Services (Water)
- Organized
- Emergency

- No Maintenance
- Bad Weather
- Losses & Damages
- More Privacy Need
- No Financial substitute
Pursuit NRC to providing a better service to the beneficiaries and in order to reflecting their opinions and their needs on our processes and to avoid falling in the same errors, CRT selected 50 random H.H and conducted 50 assessments to getting beneficiaries feedback about how was NRC team performance during the restructuring process in **District 08**.

And in April 2016 NRC team selected another 50 random H.H and conducted 50 assessments to getting beneficiaries feedback about how was NRC team performance during the restructuring process in **District 10**.

Beneficiaries were asked four main questions as follows:
1. DO YOU CONSIDER PUTTING AN ADDRESS SIGNS ON YOUR CARAVAN USEFUL FOR YOU?

**BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 08 / JULY 2015**

- Yes: 43
- No: 7

**BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 10 / MAY 2016**

- Yes: 42
- No: 8
2. In your opinion, do you think that the NRC team has improved and reorganized the streets in your district?
3. WERE YOU AFFECTED POSITIVELY OR NEGATIVELY FROM RELOCATING YOUR CARAVAN / TENT? PLEASE EXPLAIN?

BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 08 / JULY 2015

- Satisfied: 22
- Not Satisfied: 23
- Did Not Affect: 5

BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 10 / MAY 2016

- Satisfied: 29
- Not Satisfied: 4
- Did Not Affect: 17
4. ARE YOU SATISFIED FROM THE PERFORMANCE OF NRC TEAM DURING RESTRUCTURING PROCESS IN YOUR DISTRICT? PLEASE EXPLAIN?

BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 08 / JULY 2015

Satisfied: 43
Not Satisfied: 7
Did Not Affect: 0

BENEFICIARIES FEED BACK DIAGRAMS – DISTRICT 10 / MAY 2016

Satisfied: 45
Not Satisfied: 2
Did Not Affect: 3
3. Project Evaluation & Monitoring

NUMBER OF MOVED CARAVANS INDIVIDUALLY AFTER RELOCATION / 50 RANDOM BENEFICIARIES ASSESSMENT FROM D10

- Moved: 2
- Did Not Moved: 48

SUCCESS RATE/ 50 RANDOM BENEFICIARIES ASSESSMENT FROM D10

- Positive: 82.25
- Negative: 17.75
## Conclusions

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of HHs visited</td>
<td>14096</td>
</tr>
<tr>
<td>Number of relocated shelters</td>
<td>3275</td>
</tr>
<tr>
<td>Number of HHs upgraded with a new shelter</td>
<td>1450</td>
</tr>
<tr>
<td>Number of HHs that require a new shelter</td>
<td>837</td>
</tr>
<tr>
<td>Number of HHs assisted with an address number</td>
<td>14917</td>
</tr>
<tr>
<td>Number of occupied plots</td>
<td>12480</td>
</tr>
<tr>
<td>Number of unoccupied plots</td>
<td>1201</td>
</tr>
<tr>
<td>Number of vacant plots</td>
<td>1236</td>
</tr>
<tr>
<td>Number of streets within the ring road</td>
<td>152</td>
</tr>
<tr>
<td>Number of blocks in all districts</td>
<td>193</td>
</tr>
</tbody>
</table>
THANK YOU