

Camps of NW Syria and Winter Floods

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ABSTRACT

In light of the great number of displaced people in the camps of northwest Syria, and the sudden disasters that occur in these camps -such as floods resulting from heavy rains and strong winds in winter- it seems that the future of the displaced people is uncertain and great challenges are facing them to complete their life cycle ordinary and in living conditions that ensure their protection, safety and preserve their dignity. The necessity of highlighting this problem came in this paper by examining; the history of the disaster and the most important causes of it; the methods and strategies of humanitarian fieldwork response and; the diversity of interventions to it in the region to avoid this disaster and mitigate its danger to the affected population in the future. The problem investigates three case studies through the analysis of experts' opinions working in the field of emergency response to repeated displacement situations in the region. The need for analytical study including community participation regarding the annual winter flood disaster that the region has experienced and is still going through, concludes with discussing the inducted results, suggesting recommendations, and suggesting future work to apply.

KEYWORDS

Northwest Syria; Flood; Disaster; Response; Disaster Risk Reduction.

INTRODUCTION

The Syrian crisis has caused the destruction of housing, loss of life and physical damage, which forced the Syrians to be displaced internally in an effort to escape death, which claimed the lives of 312,000 - 470,000 individuals until 2017 and led to a large demographic dispersal in the region (STEBBINS & EL KHALIL, 2017). The continuation of this crisis will exacerbate the problem and deteriorate the results, and this is evident today in the displacement camps (Figure 1).

And this is what was confirmed by Filippo Grandi, UNHCR High Commissioner “Syria is the biggest humanitarian and refugee crisis of our time, a continuing cause of suffering for millions which should be garnering a groundswell of support around the world” (UNHCR, 2018).

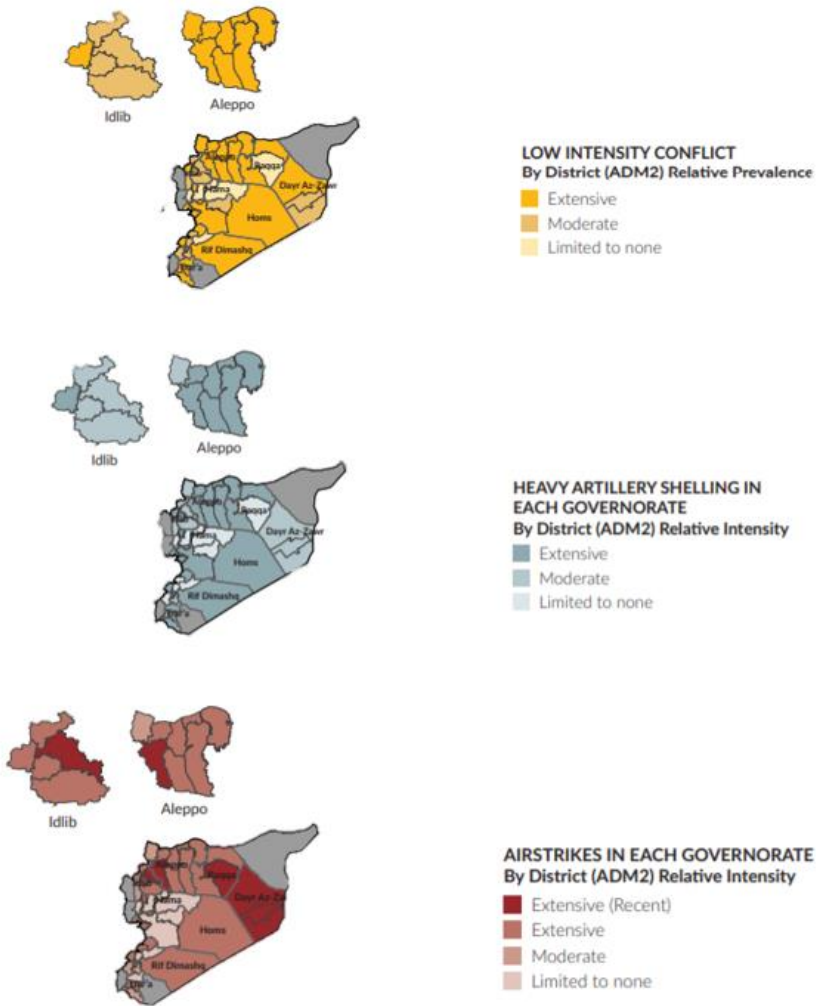


Figure 1: *Incidence of Conflict, 2011–2017*(STEBBINS & EL KHALIL, 2017)

Displacement camps were established in Syria to accommodate displaced people from the Syrian crisis. Some of them live in official camps and others in informal and random camps or collective shelters. Humanitarian support and assistance targeting these camps are coordinated by Shelter Cluster and Camp Coordination and Camp Management (CCCM) Cluster, but the

response does not cover the entire gap due to occasional difficulty of access, the constantly increasing number of displaced people and the continuation of disasters that increase the size of the gap and need such as fires in the camps and heavy winter rains that cause floods and torrents leading to constant damage of tents and infrastructure ([WIKIPEDIA, 2021](#)).

CONTEXT

More than 10 years after the beginning of the Syrian crisis, which included the destruction of infrastructure, displacement, asylum, deaths, etc., it can be said that this crisis has reached a state of despair throughout Syria. Moreover, the winter season and harsh weather conditions increase the suffering of the displaced in the camps and the aid provided by humanitarian organizations does not cover the need and the gap in the region due to continuation of increase in the number of displaced people and their instability ([RELIEFWEB, 2020](#)).

In NW Syria, 407 internally displaced people sites were recently exposed to heavy rains and strong winds, in which 141,729 internally displaced people reside who suffered from the flood and the sinking of tents ([RELIEFWEB, 2021A](#)).

The recent floods occurred between January 13-14 2021, which made the camp residents search for any safe haven during this disaster such as schools, mosques and nearby camps. But it is worth noting that this was not the first time that this disaster occurred in these camps, as it is a repetitive series of the same disaster that occurred previously in November 2016, December 2018, March 2019 and in June 2020, which usually leaves negative impact, such as death, destroying tents, putting sewage facilities out of service and damaged infrastructure ([RELIEFWEB, 2021A](#)).

PURPOSE AND STRUCTURE OF THE REPORT

This report purposes to conduct a study and analysis of the annual recurring flood disaster in the northwest Syrian camps by highlighting the most important causes of the disaster, and the methods and strategies of humanitarian fieldwork in the region to avoid this disaster and mitigate its danger to the affected population. Moreover, the article studies and analyses the views and suggestions of the affected population to form a deep and comprehensive understanding of the history of the disaster, the needs of

residents of the region and the general situation, to develop a plan and strategy to mitigate the impact of this disaster and its avoidance in the Idleb camps.

The research consists of eight parts:

- **Introduction:** It includes the introduction, the context, the purpose and structure of the report, figures, maps, in addition an inspection of the history of the disaster by reviewing the international reports of the humanitarian response in the region to understand the timeline of the development of the disaster, the factors that affected it, and the diversity of response types to it to understand the reality that can help in solving future problems.
- **Project Definitions:** Deals with the problem limits, the aim of the project, and the methodology and data collection used in the study.
- **Case Studies:** Studying three case studies through the analysis of the opinions of experts working in the field of emergency response regarding repeated displacement situations in the region and the need resulting from the annual winter flood disaster that the region has experienced -and is still going through-, their experience in construction, shelter and infrastructure repair projects in the Syrian context in general and Idleb camps in particular.
- **Community Participation:** Analytical study for the community participation through analysis and discussion of the residents' opinions and suggestions for solutions from their point of view by interviewing them individually in the targeted camps' gatherings.
- **Results and Discussion:** Discuss the inducted results of the study, according to three main axes: observation, experts' feedback and community feedback.
- **Conclusion and Future Work:** This study will culminate in recommendations, future work and proposals that must be taken into account in the future response.

FLOOD DISASTER

Definitions

Recently, the frequent use of terms related to disasters and natural disasters and their management and reduction of their risks have been observed - especially on (social) media- after the recent disasters and wars in the world. But it can be noted that the general and specialized literature shows that these terms have different definitions from one researcher to another according to

their scientific meaning, so it is necessary to emphasize the concepts used in this study and their scientific meaning.

Natural hazards are: “generally considered to be processes of the potential destruction of natural origin, which may lead to losses in human lives, injuries, economic or social damages, and/or to the environmental degradation” (VILÍMEK & SPILKOVÁ, 2009).

Disaster is: “A serious disruption of the functioning of a community or a society involving widespread human, material, economic or environmental loss and impacts, which exceeds the ability of the affected community or society to cope using its own resources” (SAHA ET AL., 2009).

Flood is: “A body of water that inundates normally dry land resulting in water remaining on the surface for some time. Observes that floods occur when peak discharges exceed channel capacity which may be brought about naturally by heavy rainfall” (IGUDALADAN & SAULAWA, 2021).

Flash flooding is: “An unprecedented situation that occurs in hilly regions and sloping lands where torrential heavy precipitation, thunderstorm, or cloud burst commonly occurred without any prior warning. This sometimes causes huge loss of lives and damage to properties” (RANJAN, 2017).

Flood disaster is: “A sudden, calamitous flood event that seriously disrupts the normal functioning of a community or society and causes human, material, and or environmental issues that exceed the community’s or society’s ability to cope using its own resources” (IGUDALADAN & SAULAWA, 2021).

Disaster management is: “To conserve the lives of people and their property during the natural disaster or man-made disaster” (DEBBARMA & DEEN, 2020).

Disaster risk reduction is: “The concept and practice of reducing disaster risks through systematic efforts to analyse and reduce the causal factors of disasters. Reducing exposure to hazards, lessening vulnerability of people and property, wise management of land and the environment, and improving preparedness for adverse events are all examples of disaster risk reduction” (UNISDR, 2012).

The response is: “Actions taken directly before, during or immediately after a disaster in order to save lives, reduce health impacts, ensure public safety and meet the basic subsistence needs of the people affected” (UNDRR, 2017).

Literature Review

Flood disaster spreads in many and wide areas in the world and differs from each other in their severity, type and dimensions. In the period between 2010-2019, more than 673 million people were affected by floods, with floods accounting for 46% of the total natural disasters. The number of floods increases annually, with an average of 128 floods per year, in contrast to the number of people affected, which decreased recently ([HAGON ET AL., 2021](#)). Views on the flood and its effects differ among stakeholders. It means loss of life, destruction, starvation, destruction of property, infrastructure, and sewage systems for the general public and may be considered by some as a disturbance in the normal course of their lives.

As for governments and officials, floods are considered a factor in delaying their development planning for the state or city, with the addition of economic, relief and other burdens. When studying the flood, two different concepts of the phenomenon are observed; the first is the emergence of large excess water from rainwater and/or rivers in a particular place, and the second is that this water will not cause a disaster if it is managed quickly and easily. The dimensions of the flood differ from one country to another, for example, the flood the annual Nile River is considered as a source of life and an important reason for irrigating crops in Egypt, but this same phenomenon causes a disaster in Sudan, and other similar natural phenomena cause disasters in other places such as India. The main factors causing floods can be summed up in heavy rains accompanied by storms, river channels and changes in their carrying capacity, absence of early warning systems, poor design and implementation of sewage systems, climate change, poor planning, and management, etc. ([RANJAN, 2017](#)).

Flooding, whether it is the result of heavy rain or the flood of a river, is a natural phenomenon, and its conditions and dimensions are known through previous experiences, so it should not cause shock and emergency response solutions should not be dealt with when it occurs, but rather it should be prevented from reaching a disaster situation, through the correct use of lands, preparing for it in advance and adopting a scientific approach to disaster risk reduction.

HUMANITARIAN RESPONSE TO THE FLOOD DISASTER

Floods are considered as one of the natural phenomena that humans cannot prevent, but by improving response strategies and developing a method to mitigate their impact, humans can prevent them from reaching a state of disaster (GHOSH, 2014).

Noteworthy is that the measures to respond to the flood disaster are limited in some countries to provide urgent response and adequate relief to the affected communities at the time of the disaster. However, these measures must be planned in advance, determine the size of the required response and distribute roles to more than one party of stakeholders (such as the government, organizations, and field teams) with deep coordination between them. In India, for example, as it is frequently exposed to flood disasters, the response varies according to the different intensity of the flood. Between 1954-2004, 22 flood management agencies were formed, but the implementation of the recommendations made by these formed committees/working groups remained slow (RANJAN, 2017).

The state of Assam in India suffers from a natural flood disaster as a result of heavy rains associated with strong monsoons. This disaster affects the rural areas of the state, whose population mainly depends on agriculture, which makes the disaster harm the state's economy by damaging agricultural crops, private property and infrastructure. After the flood disaster in 1954, short-term and long-term procedures were announced by the government, such as improving sewage systems, constructing dams, directing rivers and dividing flood areas. However, after redressing the disaster by implementing short-term measures, the long-term measures that protect the state from the recurrence of the disaster and/or contribute to mitigating its severity. Until 2020, only short-term measures are dealt with when the disaster recurs (DEBBARMA & DEEN, 2020).

In order to determine the response and precautionary measures for heavy rains causing floods in Peru, "The Peruvian National Red Cross Society" implemented the EPA Action Plan, which deals with heavy rains causing floods during the period between December and April. This program will determine spatial and temporal scales of the disaster before it occurs by studying the forecasts of the "Multi-Sectoral Commission for the Study of the National El Niño" and the forecasts of meteorology and hydrology, and thus will give stakeholders time to intervene before the disaster.

The EPA program will determine the risks in five consecutive days according to the weekly, monthly and seasonal forecasts of precipitation, which helped in drawing historical impact maps through which high-priority areas are identified in order to intervene and implement precautionary measures. This experience is considered one of the best practices in support of the "Sendai Framework" in the management of disasters caused by rain and floods (KRUCZKIEWICZ ET AL., 2021).

PROJECT DEFINITIONS

PROBLEM LIMITS

The camps targeted in this study are located in northwest Syria, northwest of Idlib, and north of Aleppo, which was established during the Syrian war in 2011. Some of them are still classified to this day as unofficial camps.

These camps have witnessed a significant escalation in displacement cases since the end of April 2019, as they today host more than 2.8 million internally displaced people (REACH, 2020).

The study will address the winter flood disaster resulting from heavy rains, winds, and storms in these camps, as data was collected from experts in the area and camp residents, including designs and construction plans. (Figure 2, Figure 3, Figure 4)



Figure 2: Idlib and Aleppo governorates map

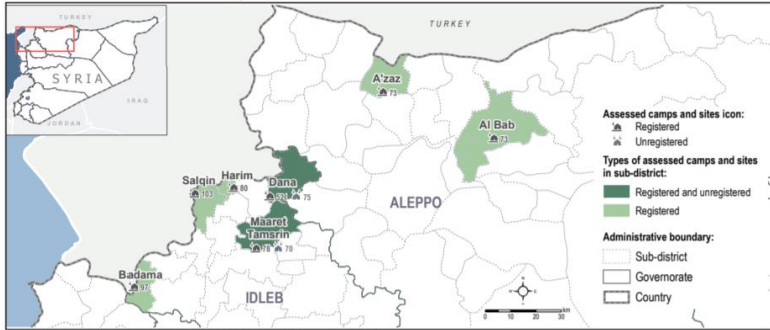


Figure 3: Locations of IDP Camps and Sites (REACH, 2020)

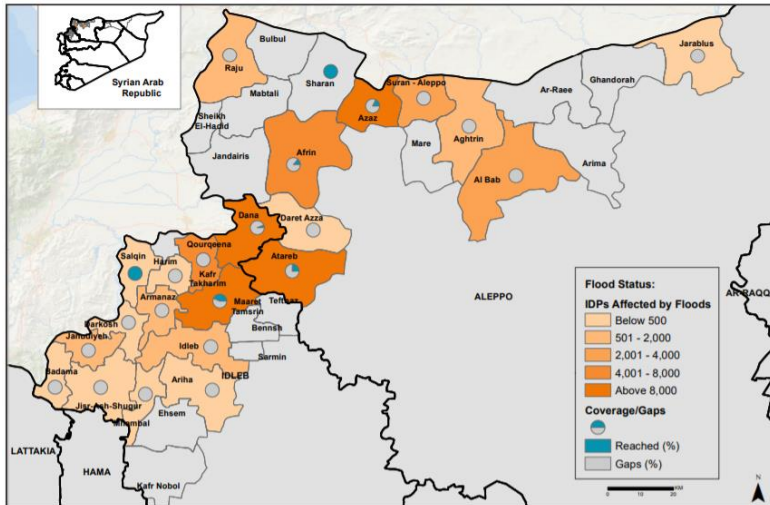


Figure 4: Flood Affected Locations of IDP Camps and Sites and Emergency Response (RELIEFWEB, 2021B)

AIM OF THE PROJECT

Upper Target: Improving living conditions for IDPs who are living in NW Camps in Syria.

The project aims to reach alternative solutions or strategies to implement, which ensures to provide the most important infrastructure and shelter needs in the region, as well as ensuring continuous access to the facilities or life-saving services, which ultimately aims to provide the service required for the

beneficiary to live and his family in a decent life considering this difficult living conditions, through:

Finding a solution to the problem of floods resulting from heavy rains and tents being torn every winter of every year due to winds and storms.

Propose alternative solutions based on the experiences of experts and the participation of the residents of the targeted camps, which are compatible with the Syrian context, the Syrian culture and the sensitivity of Syrian society.

Contribute to reducing deaths due to high temperatures and polluted water as a result of housing in unhealthy living conditions.

METHODOLOGY AND DATA COLLECTION

The research uses an Inductive Analytical Methodology. Data were collected based mainly on international reports, other research related to the subject, expert interviews for the three cases studied and interviews with the targeted community for the social survey. Data cleaning and analysis have been applied to reach conclusions and recommendations based on discussion and studied observation.

Regarding Community Participation, the methodology of data collection includes conducting individual interviews with 384 residents in Idleb camps on 1 - 5 June 2021, with a 95% confidence level and a 5% margin of error. The data collector verified that all questions were obvious and answered by the respondent.

CASE STUDIES

ATAA HUMANITARIAN RELIEF ASSOCIATION – EXPERT A – NIZAR BUSTANI

About ATAA Humanitarian Relief Association Projects

Ataa started its humanitarian response to the Syrians in northern Idleb in 2013, where it constructed temporary camps in the Atma area in 2013, established and managed 12 camps according to SPHERE standards in establishing camps to be a model for organized camps (dimensions and planning - facilities - infrastructure camp), so Ataa got extensive administrative experience in organizing and training residents to manage their camps. In 2014, Ataa shifted from construction camps to construction some housing for the most vulnerable families to be an alternative to tents and it was free with the provision of facilities and basic needs (BUSTANI, 2021).

Successes, Challenges, and Improvement

While discussing ATAA's successes, the CCCM & SNFI Program Coordinator Nizar Bustani said that they started with the construction and camp development projects because they believed that people should not stay in a tent after all these years.

In 2014, they started with the idea of 100 housing units in the Atma camps, where the design and implementation were very simple (18 m^2). But in 2015, they developed the design to a one-story housing units with two rooms, a bathroom and a kitchen and constructed the first ATAA housing complex through building 520 housing units with 35 m^2 within the Atma camps as well, with the provision and repair of the infrastructure completely, and the construction of service buildings and facilities such as mosque, administration unite, school, clinic, police station, gardens, internal market, and external market, and the total budget of this project was \$1,560,000 (Figure 5).

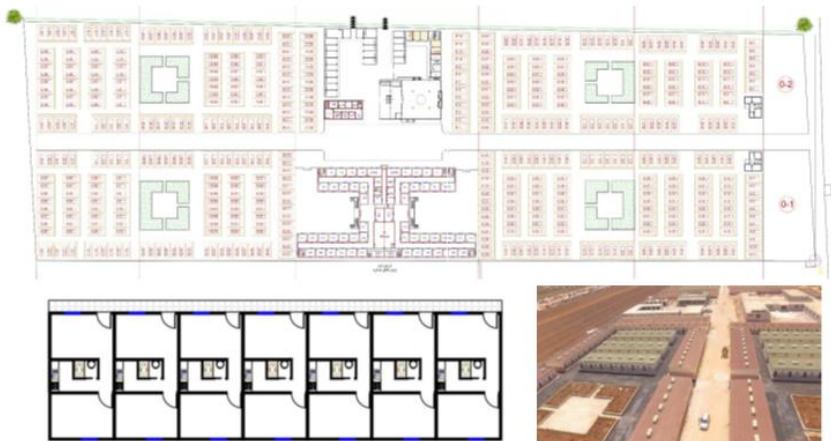


Figure 5: *First ATAA housing complex (BUSTANI, 2021)*

In 2016, the second ATAA housing complex in Atma had started consisting of 748 apartments in 65 multi-story buildings with 38 m^2 and a total budget of \$3,141,000 (Figure 6).

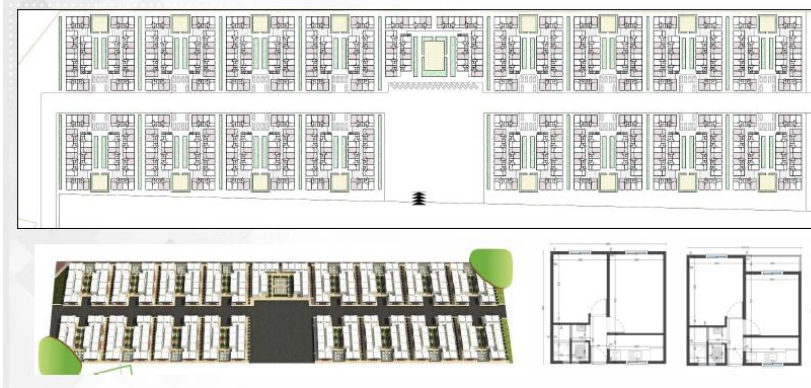


Figure 6: *Second ATAA housing complex (BUSTANI, 2021)*

In the third ATAA housing complex in Jarablus, which began the implementation in 2019 in coordination with AFAD, the budget was \$2,420,000. The project divided into two phases; phase A includes the construction of two types of residential buildings, 138 apartment with a total area of 37 m^2 for each unit in the first type and 60 apartment with a total area of 60 m^2 for each unit in the second type. Phase B includes the construction of two types of residential buildings too; the first one is 12 residential building with 12 apartment's with total area for each building 271 m^2 and different areas for each apartment to suit the number of family members and the second type is 5 residential building with 18 apartments with total area for each building 307 m^2 and different areas for each apartment. In addition to the mosque with 470 m^2 , a school with 615 m^2 , a clinic centre with 248 m^2 , 17 shops with 562 m^2 and the residential management building with 18 m^2 (Figure 7).



Figure 7: *First ATAA housing complex (BUSTANI, 2021)*

Finally, in 2020 they developed and started the construction of the fourth ATAA housing complex in Atma with low-cost units \$350,000. This design developed by the ATAA shelter team reduced the cost and minimizes the duration of implementation as a recent response to the huge numbers of IDPs in the last period (Figure 8).

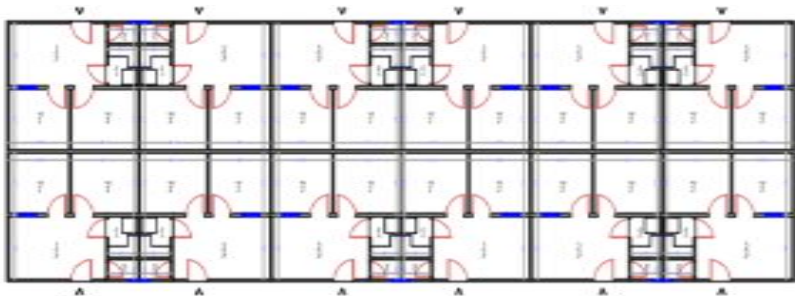


Figure 8: *Fourth ATAA housing complex (BUSTANI, 2021)*

Nizar Bustani focused in this part on the fact that since the implementation of these projects, there have been no accidents related to protection or floods in the project's locations. Although these projects are not encouraged and popular, they succeeded in these projects since 2015. But what helped them in this success was that the finance was through donations from individual donors and not through donor organizations, which allowed them to be

flexible in design and implementation. The success of these projects lies in the fact that they preserve human dignity, providing privacy and security. The grade of beneficiaries' satisfaction is very high due to the actual need after long years, as well as that the design is very compatible with the culture and sensitivity of the community, where they encourage the beneficiaries to live and increase their income by working in the markets that have been established within the projects areas or even working outside it.

He also summarized the challenges in three points. Firstly, the housing land property HLP, where the displaced settled in privately owned lands in large numbers and some of the owners are not in the area, so they faced difficulties in obtaining approvals. Accordingly, they developed and implemented a due diligence strategy to avoid this challenge and then they signed an agreement or memorandum of understanding between the owner of the land and the responsible authority in the region and the organization to avoid any future problems. This challenge was also avoided through donations, where the land is purchased and becomes an endowment for the organization. In both cases, the process was legally established as much as possible through local authorities and documented contracts. There are proofs of legal identity and available documentation (e.g. tabu, court decision, power of attorney, sale contract). Secondly, the selection of beneficiaries due to the large number of displaced people in the area, the frequent displacement movements and the great need, this challenge is avoided through coordination between organizations and clusters. Thirdly, the problems of sanitation and infrastructure in the camps in NW Syria, where there is great pressure on them and they are not equipped for this number of users, which has led to their deterioration., each organization can contribute to the solution, but the problem cannot be solved individually, so coordination between organizations pushes the region a step towards development.

With regard to the strategies of improvement, Nizar Bustani mentioned that their development in designing projects from a tent to a room, to a residential unit with a small area, to multi-story buildings, to the design of housing units whose size and design are matches with the number of family members and the cultural sensitivity of the community, contributed significantly to improving the quality of work and gaining the trust of the beneficiaries, and led to their participation in the technical working group for establishing the Guideline to build residential units with the group. They also developed planning and design strategies related to graveling and the tent isolation projects, where they started their projects by isolating the tents inside the

camps without roads maintenance. But the result did not meet their expectations on the ground, so they moved to repair and maintenance of the roads and then isolate the tents. Therefore, coordination and cooperation between organizations working in the region contribute to providing a full service to the displaced beneficiaries, such as the implementation of multi-sectoral projects (WASH, Shelter, Early Recovery). In addition to their seeking constant development of projects planning, design, and work mechanisms, they rely on the Syrian code, the Guideline from the Technical Working Group, SPHERE Standards, and UNHCR Standards in their projects, in addition to their reliance on needs assessments they carry out before projects and assessments of other organizations that are published or shared with them.

Discussion

The expert from ATAA stated that in one of their projects they targeted the displaced widows and their children only, but the rest of the projects have been developed as a result of previous social experiences and the avoidance of the residents' feelings of isolation to avoid the so-called "ghetto society impact" so that these projects are more connected to the surrounding society and influenced by the fabric of Syrian society. The method of housing based on community diversity and the creation of a suitable environment for all groups of society within certain ratios governed by access to the largest and most vulnerable segment of society, with the emphasis on the social diversity that includes the beneficiaries of different regions, cultures, and backgrounds, scientifically, professionally and economically to build a community has the character of the fabric Syrian community before the crisis, which leads to a balanced society and able to integrate with the surrounding environment.

ATAA, like many other active organizations in northwest Syria, is responding to the winter flood disaster in the camps and they have also developed a rapid response mechanism RRM of their own. But this response is not sufficient, because it should be before the disaster and not after it to avoid damage and loss of life, I also see that the gap and need in the region needs high cooperation and coordination between organizations and donors, because individual work will not work in this case, and this is what the SCHF OCHA is seeking, as it allocated about 10 million dollars to repair the infrastructure in the camps in 2021, which is a highly appreciated step that pushes the region

towards development, but the camp residents need a radical solution to get them out of the tent after about 10 years of displacement.

Concerning the demographic change issue, Nizar Bustani do not agree with this idea, even if there is a demographic change, he think that it has already occurred during the previous 10 years, and the most important here is people's mental health, and it cannot be denied the fact that the displaced were forced to move and live in cities other than their cities, therefore, all parties must stand by them and support them.

The interviewed expert suggested several strategies to reduce the risk of a flood disaster for the affected population, such as infrastructure repair, maintenance and reorganization, transferring people from the sites where the disaster recurs, and closing the camps located in the mouths of rivers and torrents and transferring their residents to other sites, where this solution was implemented in Atma, but the solution was not reached in the Ma'arrat Tamasrin camps gatherings, work on replacing tents into housing units in a technical and hierarchical manner to preserves the dignity of the IDPs.

I see that responding to people's needs resulting from the Syrian crisis, in general, is taking a large part of the humanitarian response in the world, and sudden disasters such as floods in camps have increased the burden on humanitarian workers, as they do not stop thinking about strategies, solutions, and services that can raise the living conditions of the displaced people. On the other hand, their limited capabilities do not enable them to implement everything that is planned, and accordingly, this gap and its size must be highlighted and the response volume that covers only a small part of the gap must be clarified, to work on effective strategies that provide a full service and unconditional benefit to the displaced to ensure their protection, safety, and preservation of their dignity.

MOLHAM VOLUNTEERING TEAM PROJECTS – EXPERT B – BARAA BABULI

About Molham Volunteering Team

Molham Volunteering Team is an independent non-profit organization founded in 2012 by a group of Syrian students and is registered in Canada, Germany, Jordan, France, Sweden, Turkey, and Norway. Today, the team includes 180 volunteers from different parts of the world ([MOLHAM TEAM, N. D.](#)).

"With every storm, every winter, and every tragedy that the camp residents suffer, there are many voices asking, "Why don't you build homes?" and

“Why don’t you try to start with permanent solutions?” Despite the difficulty and cost of implementing these solutions, but they are the only way to end the suffering remains. After years of its orbits and mitigating its results by instantaneous methods. Throughout the years of our relief work, the scene of the tents was unbelievably sad, and we were drowning thinking for hours and days, individually and in groups, to find an alternative that would spare the families unbearable hardships. This is a family whose things have been destroyed because of the rain, and all her children were sick, and another lost her tent due to a storm, and other stories that are repeated without losing their miserable character" (BUSTANI, 2021).

Successes, Challenges, and Improvement

The shelter department manager Al Baraa Babuli in the team summed up their **successes** with providing protection, provide privacy, Provide partial stability for families in their projects. By targeting the residents of random camps who are threatened with permanent relocation according to the circumstances surrounding them and considering the needs of families during the planning, design, and implementation of projects, they cancelled the idea of sharing housing and service facilities among more than one family, and they provided a housing unit with its own facilities for each family. In my opinion, this strategy in action is consistent with the principle of improving the living conditions of the displaced in the camps and protecting them from the harsh climatic conditions and their effects.

He also added the most important challenges they face in their work is a large number of displaced people in the region, as they see that individual efforts are insufficient and seek to joint work with other organizations active in the region, which may accelerate development in this field, in addition to the unwillingness of some beneficiaries of the rural population to live in closed apartments in multi-story buildings, so they had to find an expansion of the apartments’ spaces in proportion to the population’s culture and social sensitivity.

The improvement strategies of the Shelter Department in Molham volunteering team had two directions, the first being the development of spaces and design, where their construction projects started with Project (1000 housing units), as they started by constructing 50 housing units with an area of 16 square meters, then they developed the space to 24 m^2 , then 32 m^2 , until they reached today a space of 58 m^2 for the family, including facilities

to suit the families’ needs properly and guarantee them a decent life, which will be explained as follows:

A. 1000 Housing Units Project: (Table 1, Figure 9, Figure 10, Figure 11).

Table 1: The models that have been worked within the 1000 Housing Units Project (BABULI, 2021)

#	Space (m ²)	Number of rooms	Ceiling type
1	16	1	Shader insulator rain
2	24	1+(bathroom-toilet-kitchen)	Shader insulator rain
3	32	2+(bathroom-toilet-kitchen)	Shader insulator rain
4	32	2+(bathroom-toilet-kitchen)	Prefabricated reinforced concrete ceiling with a thickness of 1.5 cm
5	58	2+(bathroom-toilet-kitchen)	Reinforced concrete ceiling with a thickness of 15 cm

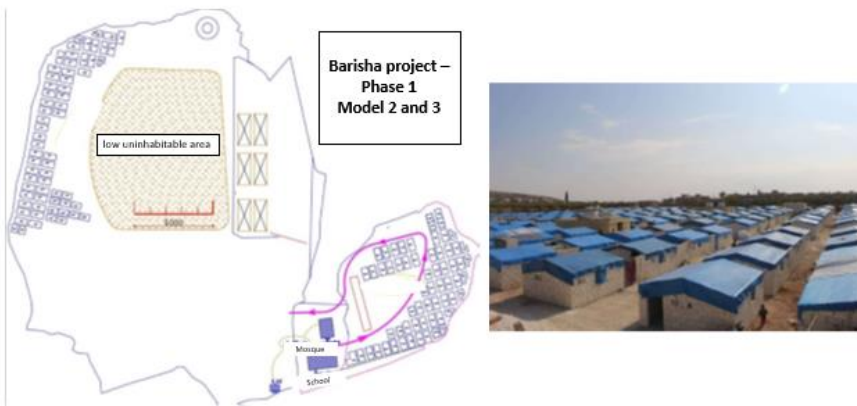


Figure 9: Barisha project - Phase 1 - Model 2 and 3 that have been worked within the 1000 Housing Units Project (BABULI, 2021)

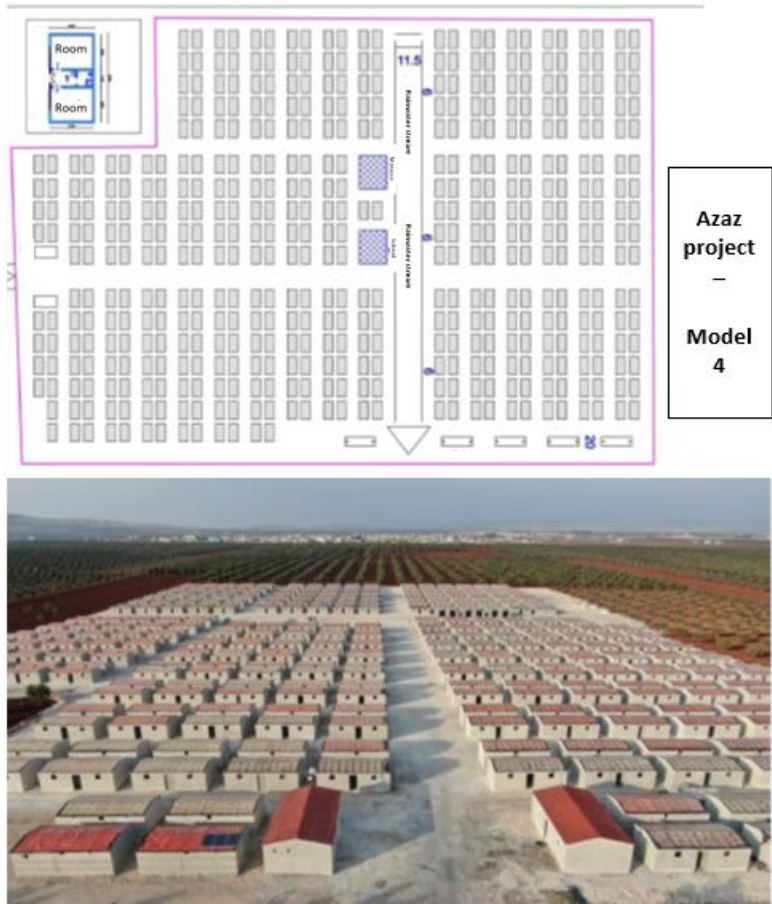


Figure 10: Azaz project - Model 4 that have been worked within the 1000 Housing Units Project (BABULI, 2021)

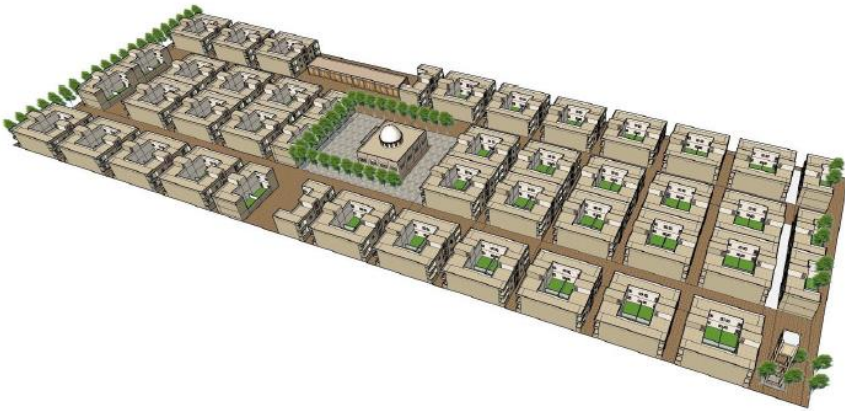


Figure 11: Azaz project - Model 5 that have been worked within the 1000 Housing Units Project (BABULI, 2021)

B. Molham Village Project: (Table 2), (Figure 12, Figure13,). The project is an integrated village that contains apartments, a health center, a mosque, a cultural center, a children's garden and a commercial market.

Table 2: The building models that have been worked within the Molham Village Project (BABULI, 2021)

#	Number of floors	Number of apartments per floor	The total number of apartments in the building
1	3	6	18
2	4	6	24
3	3	4	12

The second direction of improvement strategies was in the WASH sector, as Al Baraa Babuli mentioned, where they started their projects in remote locations that lack sewage systems, which affected the project budget and implementation, as they had not planned for it previously. Now, after many experiences in the field, they changed the planning mechanism and included the budget for the infrastructure of the housing unit within the total budget. Working perfectly may be difficult to achieve from the beginning, but identifying and analysing mistakes and developing solutions to them makes the work achieve better results for the beneficiary and the organization, and this is what the team does by developing their work strategies to meet their projects as much of the needs of the displaced who benefit from their projects.

Discussion

Legally, and to solve the property problems, the Molham volunteering team followed two methods in the implementation of construction projects, the first method is the purchase of the project land by the wealthy of the targeted village and donated it to the displaced and the ownership of apartments for the displaced, the second method is the purchase of the project land by individual donors and made it an endowment for the team's work and after construction the team signs usufruct or rent contracts with a symbolic value such as 1 Turkish lira annually, and the contract includes terms that guarantee the right of both parties. After the implementation is completed and the housing units are handed over to the displaced, an administrative committee is formed by the team to manage the camp/village/site to avoid problems related to selling, renting, and any other problems (BABULI, 2021). It is worth noting that what helped the team implement this type of project is their dealings with individual donors who do not place conditions and restrictions on their implementation.

Their projects are implemented based on the Shelter Cluster Guideline, along with the design criteria they developed according to the Syrian Building Code with slight variations according to the culture of each region. Also, the blocks and buildings that they create are based on a strong foundation, last for long periods, and provide safety standards for the land and the beneficiary (BABULI, 2021).

As for the demographic change, we cannot say that the tent and the housing units will affect the demographic change, the displaced person will return to his home and city after the war. These blocks can be used later in other

projects as shelters for orphans and others, as they inevitably belong to the implemented organization.

The work experience of the Molham Volunteering Team in the Shelter field is considered one of the earliest experiences in the field of construction in the Syrian context, and attention must be drawn to it to benefit from it in terms of dealing with donors, managing resources, communicating with the affected population and planning projects according to their needs.

QATAR CHARITY PROJECTS – EXPERT C – AMRO KATKHADA

About QATAR CHARITY

Qatar Charity has responded to the needs arising from the Syrian crisis since 2011 through its field office in Turkey and its multiple cooperation and partnerships with local and international organizations operating in the region, and until 2015 it has spent approximately \$88,148,974 implementing projects in various sectors in Syria, including Shelter, and WASH (QATAR CHARITY, 2016).

Successes, Challenges, and Improvement

- C. Amro Katkhada was the expert I interviewed from Qatar Charity, and despite the various projects in the Shelter department that he manages, he mentioned that the most important project implemented in this sector, which he considers his greatest **success** in this field, is the project to build a modular village in Idlib to house the displaced, where the village contains 400 housing units, a mosque, a medical point, a two-story school, shops, an administration building, water well, and a sewage system. This success is due to the presence of an empowered work team, a good supplier, good project management, in addition to the design and implementation of the project well in terms of space and backsets, etc. (Figure 14, Figure 15).



Figure 14: *The modular village plan (AMRO KATKHADA, 2021)*

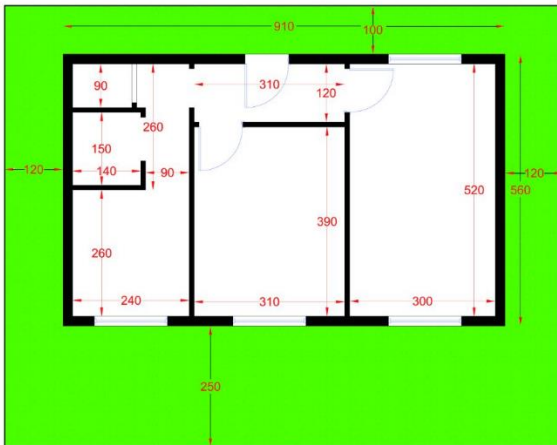


Figure 15: *The Housing unit plan in the modular village (AMRO KATKHADA, 2021)*

He also mentioned another success of his previous work in the Shelter sector, which is the rehabilitation of unfinished residential homes through the repair of doors, windows, walls, ceilings, and sewage networks. What reinforced the

success of this project, in his opinion, is that it is based on great real need and targeting entire housing complexes.

He also summarized the challenges he faces in his work by managing projects remotely, which reduces the quality of work sometimes, the unwillingness of some displaced people residing in the tents to move to the housing units, beneficiaries selling tents after receiving them because of working based on an unreal and inaccurate need assessment, which added activity to their projects, which is installing the tent and isolating its floor, and then handing it over to the beneficiary. It is also worth noting that this problem prompted OCHA to agree to alternative solutions such as construction and others because although tents are cheaper, the continuity of their annual distribution leads to a waste of resources.

Amro Katkhada divided the improvement of work strategies into two parts, the first is to use resources correctly, as he believes that in responding to the displacement movement in northwest Syria, there is no better solution than the other, but each solution must be used at its time, as tents must be used in emergency response to emergency displacement situations or sudden disasters, and then providing families with an alternative shelter to preserve their dignity. Due to the difficulty of finding donors for construction projects, they resorted to other solutions such as prefab containers and Refugee Housing Units (RHUs), but they were very expensive. And recently, after the intervention of many organizations in this field and achieving tangible success and positive impact, it was approved to add construction project activity to the Result Framework in the Cluster.

In the second part, he talked about the legal field and HLP housing land property problems, "Despite all the problems, we know from the experience of the Palestinian camps in Syria that they are capable of development and the integration of their residents into societies."

Therefore, a working mechanism has been developed that reserve the rights of the beneficiary and the landowner, which is due diligence, whereby the neighbours, the local council, and organizations working in the area are asked about the land and its ownership, then negotiations with the owner to reach approval and a signed agreement. As for the beneficiaries, a housing document, a rental contract, or a sponsorship contract with the organization, is signed with them and then assigning management for each residential community to be responsible for managing the beneficiaries and transferring

housing from one family to another in the event of departure to avoid problems of sale and rent.

In this type of project, I think that assigning management supervising the residential complexes is positive, and it is, as mentioned previously, that it preserves the rights of the residents, the owner of the land and the organization, in addition to protecting the site from a security point of view, but on the other hand, I cannot ignore that this community will not feel independent as long as monitored from the party that provided the service to him, and because the end of the Syrian crisis is not yet known, it may continue for years, and this will increase the financial burden in terms of administrative salaries and logistical expenses, so I think that assigning management for a limited period is very important for coordination between residents and ensuring their safety and guaranteeing their rights, but after a period not exceeding a year, I think that the gradual withdrawal will be better, and the population will feel more independent. It will also give them self-motivation to protect this community because it has become their community temporarily and for an unknown end.

Also, in one of Qatar Charity's projects, they built two residential blocks of 4 floors, but they bought the land before implementation and it became the property of the organization, so they never faced legal problems. But in my point of view, it is not always possible for organizations to resort to similar solutions. In the end, they are non-profit organizations that depend on donations, so adding the cost of purchasing land to the budget of the projects will be very expensive, and it will put an extra burden on them that they cannot bear.

Discussion

At the beginning of the response, Qatar Charity was targeting the beneficiaries according to the criteria of weakness that are specified in their projects proposals, but now OCHA has issued standards for Dignified Shelter and Qatar Charity works according to it, but the interviewed expert believes that targeting entire camps and transferring their residents to residential complexes will contribute to development all the way to closing the camps completely. As for me, I cannot agree with the idea of closing the camps completely, because as it is known that the Syrian crisis is not over yet, so we must expect new waves of displacement at any time, and this highlights the importance of maintaining some camps and shelters in safe areas from the flood to respond urgently to such cases and seek to transfer the displaced who have been there

for a period of time to residential settlements that are built to protect them and preserve their dignity.

They also work according to the Syrian Architectural Code and consider the field reports to be the strongest reference for them, in addition to their understanding of the country's culture.

The interviewed expert also evaluated the emergency humanitarian response in the event of a frequent flood disaster in the Idlib camps as "quick, but it does not fully cover the need", therefore, it is necessary to respond better and develop solutions to reduce the impact of the flood, and not just replace the tent, such as repairing roads, rain drainage, and sewage channels, and raising and isolating tents from the ground. Moreover, camps in the locations where floods occur are also known so these camps must be closed and their residents moved to better sites, in addition to repair and construction solutions, but donors do not encourage this type of strategy that needs a long-term approach to implementation.

In talking about demographic change, Amr said: "We cannot work with the same standards that we work with in building an apartment in Gaziantep, for example. In the displacement areas, we build residential blocks that are 10 to 15 years old, but in Gaziantep, we build for 50-75 years because long-term construction will affect the demographic change that may affect the country and the city, the buildings that we build do not have sidewalks to protect the housing unit and increase the life of the building, and this is the only way we have been able to convince donors to build in Syria." I think that that this is a problem that is being promoted under the name of demographic change to put conditions on the benefits that the displaced in the NW Syrian camps get. The most logical solution, after more than 10 years, in my opinion, is to move people from tents to housing units, but the problem of demographic change places conditions and limits on this type of project, on the other hand, when I asked the displaced community in the NW Syrian camps about their desire to stay in the areas of displacement or return to their original areas after the war, more than 86% of them chose to return (Figure 4-11), therefore, we should not let this idea affect the provision of the service because it will affect the quality and thus the impact of the project on the ground.

ALTERNATIVE SOLUTIONS COMPARISON AMONG EXPERTS

Table 3: Alternative solutions comparison among experts

#	Solution	Evaluation (Applicable /Not applicable)			Cost Evaluation (Very High/High/Medium/Low/Very Low)		
		Expert A	Expert B	Expert C	Expert A	Expert B	Expert C
1	Infrastructure repair and development in all camps	A	A	A	VH	VH	VH
2	Establishing recycling stations in the area to collect rainwater, recycle and reuse it	NA	NA	A	VH	VH	VH
3	Training camp residents on the mechanisms of dealing with the flood disaster and providing them with the necessary equipment	A	A	A	M	M	M
4	Replacing all tents with mud houses, in addition to building the necessary facilities	NA	NA	NA	VH	M	M
5	Replacing all tents with caravans, in addition to building the necessary facilities	A	NA	NA	VH	VH	VH
6	Replacing all tents with housing units, in addition to building the necessary facilities	A	A	A	M	VH	VH

7	Replacing all tents with a multi-story building, in addition to building the necessary facilities	A	A	A	VH	VH	VH
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The experts agreed that the solution to repair and develop the infrastructure in all the camps in NW Syria is definitely an applicable solution, but it requires cooperation and coordination between all organizations and bodies working in the region. Perhaps the cost of a project of this type will be very high, but it will be for one time only, and it will be less than being divided into separate projects in terms of administrative expenses and operational costs, and the cost will be lower compared to the costs of repair and annual maintenance of dilapidated sewage networks, which have reached almost non-existent condition as mentioned by the population in the community survey. Besides, the training of camp residents and their involvement in the construction and maintenance process will benefit the displaced and the organizations, as the camps include IDPs with technical backgrounds, engineers and talents, and their contribution to these activities (Cash For Work) will restore their self-confidence and give them a source of income to support them under the harsh living conditions, which will ease the burden of funding spent on distributing food baskets to the camp residents, so directing people to action is more important than directing them to wait for aid every month. This strategy needs a long-term approach, but implementation can be done gradually.

Moreover, solutions as replacing tents with built housing units, whether they are independent units of one floor or apartments within multi-story buildings, these solutions are what the community prefers and what the experts unanimously agreed on in the interviews, and solutions of this type contribute to protecting the family, especially children and women from risks and threats in terms of protection, such as access to privacy services and facilities such as the toilet, bathroom, and kitchen, which are usually shared facilities in the camps and people are forced to leave their tents to use them.

COMMUNITY PARTICIPATION

CHARACTERISTICS OF THE TARGETED SAMPLE

- 384 interviews were conducted with the residents of the northwest Syrian camps for 4 days, distributed over 12 districts and 40 camps (Figure 16, Figure 17).

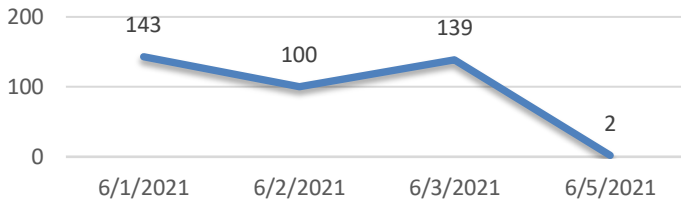


Figure 16: Interviews number per day - Community Survey

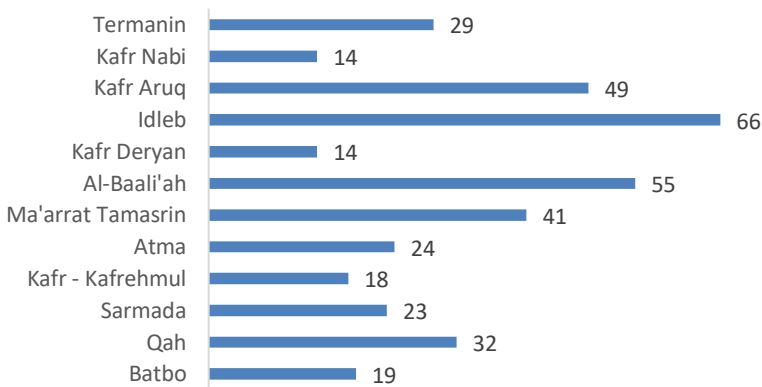


Figure 17: Interviews number per district - Community Survey

- The percentage of males interviewed was 78%, whereas the females interviewed was 22% (Figure 18).

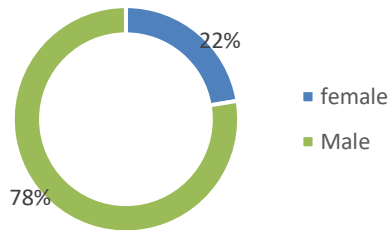


Figure 18: *Gender of the respondents - Community Survey*

- More than 93% of them have been living in the camps for more than a year and less than 5 years (Figure 19).

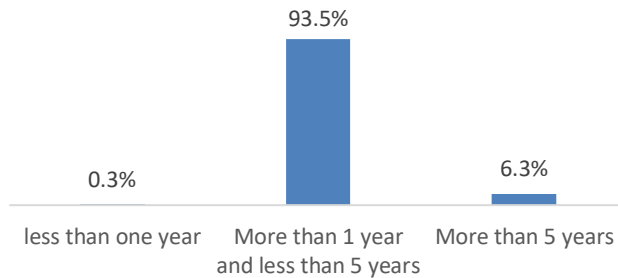


Figure 19: *How many years have you lived in the camps?- Community Survey*

FINDINGS

- All camps are considered safe areas.
- In 92% of the interviews, camps were considered as an unsafe area from a health point of view (Figure 20).

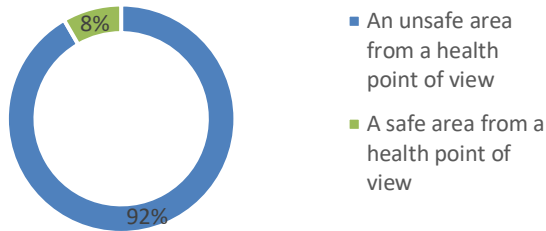


Figure 20: *Is the camp considered as safe?- Community Survey*

- All interviewees were affected by floods caused by heavy rains in the camps of northwest Syria.
- 56% of respondents their tents completely damaged, and 14% of them their tents become uninhabitable (Figure 21).

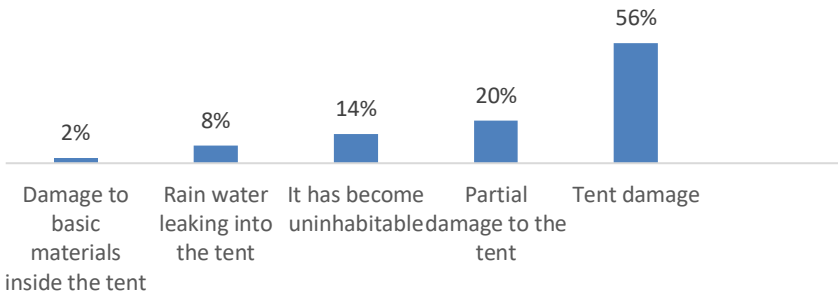


Figure 21: *What was the fate of your tent after this disaster? - Community Survey*

- 46% of the respondents suffer from water leakage into the tent in the winter, and 41% of them suffer from severe cold (Figure 22).

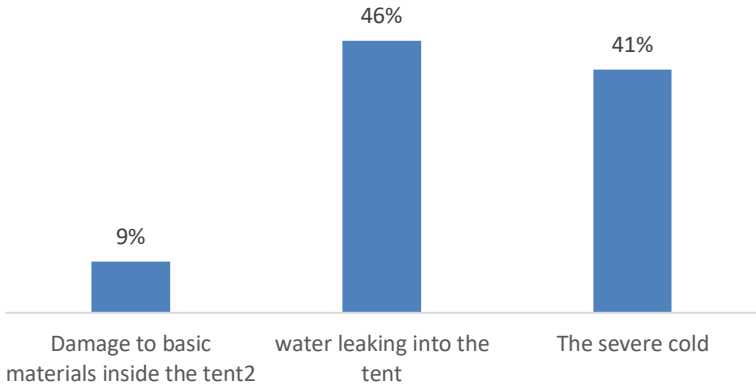


Figure 22: *What problems do you usually facing in winter in your tent? - Community Survey*

- The respondents suggested a set of solutions to solve the problems they face in the winter in their tents, as 29% of them stressed the importance of isolating tents, and 45% of them mentioned the importance of replacing the tent with other alternative shelters (Figure 23).

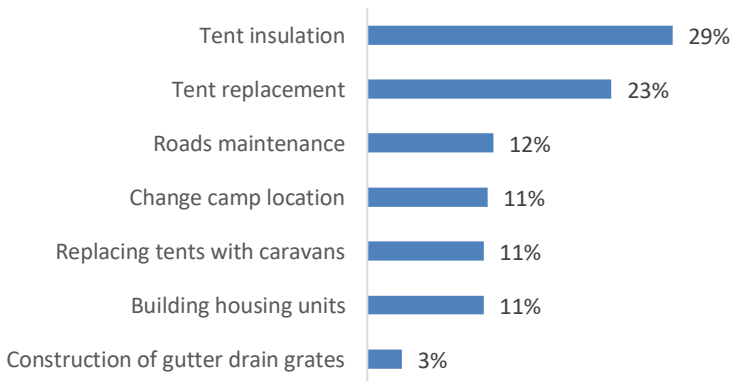


Figure 23: *What are your suggestions for solving problems regarding winter in your tent? - Community Survey*

- Moreover, 79% of them suffer from the lack of effective sewage systems in the camps, which leads to rainwater remaining above the ground and thus leaking into the tents and causing them to sink and damage them (Figure 24).

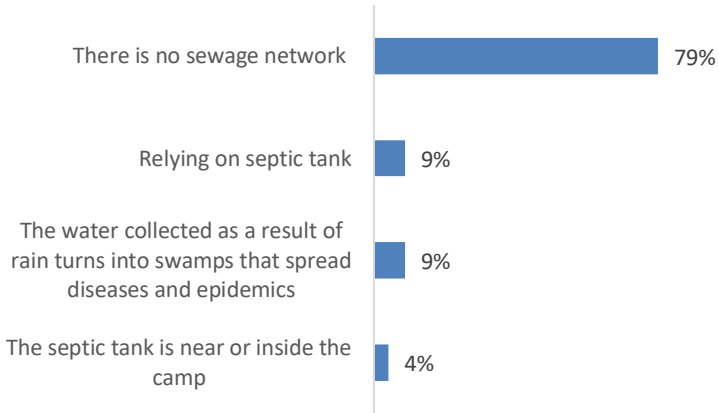


Figure 24: What are the problems you are currently facing in your tent in terms of sanitary installations and the sewage system? - Community Survey

- Also, 58% of the camp residents who were interviewed indicate the need to Construct a sewage network to get rid of problems related to sewage systems (Figure 25).

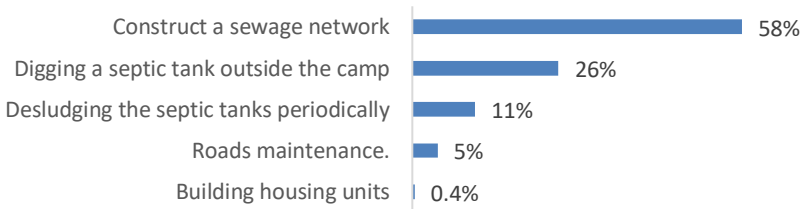


Figure 25 What are your suggestions to solve these problems?2- Community Survey

Figure 25: What are your suggestions to solve the problems regarding sanitary installations and the sewage system? - Community Survey

- In 19% of the interviews, respondents rated the humanitarian response to the winter flood disaster in camps on NW Syria as bad, while another 69% rated it as a medium.
- The highest percentage of suggestions for improving intervention strategies in the winter flood/heavy rain disaster from the population's point of view was Construction of concrete housing units (46%) and maintaining roads inside camps (29%). This indicates people's dissatisfaction with the conditions in which they live and their hope for better conditions (Figure 26).

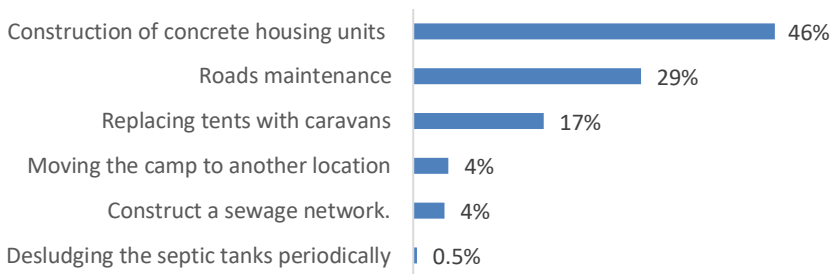


Figure 26: *What are your suggestions for a better response to the winter flood/heavy rain disaster? - Community Survey*

- More than 86% of the respondents confirmed their desire to return to their cities and homes in the event of the end of the war (Figure 27).

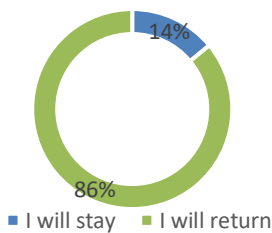


Figure 27: *If the war ends, would you rather stay in the camp or your current place of residence, or return to your home city? - Community Survey*

DISCUSSION

It is noted from the feedback and suggestions of the affected population that they want a change in their living conditions, as they want to replace the tents with caravans, or built housing units that protect them from the weather and preserve their dignity. In addition to their need for heating fuel in the winter. It is also clear that they need to replace, insulate and install damaged tents at least after every storm, which frequently wastes resources. Therefore, it is necessary to think of long-term strategic alternative solutions that cover the needs of the displaced and reduce the waste process. Long-term solutions may be more expensive, but they will be one-time, such as establishing and extending a sewage network in camps that do not have one, and digging and transferring septic tank outside the camp and that it is periodically dislodged and cleaned, and the transfer of flood-prone camps to other locations, in addition to preparing an emergency plan in advance with the organizations working in the area in order to obtain a quick and good response in the event of floods.

Also, all the construction solutions that will be implemented to solve the problem of the displaced will remain an endowment for organizations in the event of the end of the war and can be used in other projects and provide various services and benefits to the host community through them after the stability of the region.

RESULTS AND DISCUSSION

By following the mentioned steps above an Inductive Analytical on the problem of winter floods on the camps of NW Syria has been done and results was obtained as listed below:

- i. Observation:
 - Aggravation of the need: The Syrian crisis has been going on for more than 10 years, in addition to the occurrence of emergency events such as the continuous waves of displacement until today as a result of the continuous bombing and instability of the region, and other disasters that affect the displaced such as fires and floods in the camps, and this is what makes the need increased year after year.
 - Inadequate response: The recurrence of the flood disaster year after year indicates that the humanitarian response that took place in the previous year did not contribute to solving the underlying problem.
 - Beginnings enthusiasm and dwindling motivation over time: The occurrence of the disaster, its size, and dimensions make governments

and actors enthusiastic and motivated to develop long-term action plans and strategies to prevent the disaster from happening again or at least mitigate its impact, however, the immediate emergency response and erasing the effects of the disaster at the time, make these parties forget the problem, the preparedness, and the solution and wait for it to occur again to respond as the previous time.

- Waste of resources: The distribution, isolation, installation, and replacement of tents by organizations on an annual basis, wastes a large part of the funding allocated to respond to the displaced people of the Syrian crisis because we know in advance the fate of this tent after a year or less from the date of distribution. Moreover the flood disaster also causes other needs, such as the need for food items, non-food items, and hygiene items, which could have been avoided through prior preparation for this disaster.

ii. Experts Feedback:

- Inadequate shelter: To this day, the tent is still the best solution in emergency cases but considering it a suitable shelter for the displaced after all this period is considered unacceptable, so it is necessary to seek alternative solutions gradually to protect them and ensure their safety and integration into the new society.
- Shelter compatible with the culture of the displaced family and the society sensitivity: Since the beginning of the crisis, the organizations have responded to the need, and as a result of their communication and interaction with the displaced on the ground, they have developed designs and plans that correspond to their needs, cultures and the sensitivity of the society around them so that they do not feel isolated in the host community.
- Stable shelter contributes to economic empowerment: After all these years, the displaced are accustomed to waiting for the aid that is distributed periodically, however, one of the criteria for distributing this aid (food baskets, ready-to-eat baskets, non-food items, etc.) is that the family is displaced and lives in a tent, accordingly, transferring of the displaced to housing units within the new residential complexes that contain markets and shops, as we noted in the designs above, will reduce fund for aid distribution projects, and

will contribute to the economic empowerment of families through their work in these markets or outside them.

- A big gap in infrastructure and sewage systems: The sewage systems were established in the area before 2011 for a certain number of users, so today, after the influx of huge numbers of displaced people, it became out of service in many areas, in addition to the presence of camps in agricultural lands that do not have sewage systems at all, which increases the impact of floods when they occur.
- Donors between conditional service and unconditional service: It was observed through interviews of experts that the implementation mechanism in projects varies according to the donor, as some donors impose conditions and restrictions on implementation, and some of them do not accept construction projects for many reasons, some of which are authorized, such as fear of demographic change and others that are unclear and incomprehensible. On the other hand, the experts stated that dealing With individual donors who do not follow specific governments, organizations, bodies, and etc, always allows them to be comfortable and flexible in their work.
- Demographic change is not a goal of working in the region: Working to protect people and their health and psychological safety is the most important, for example: In the gathering of Atma camps, more than 50% of the tents have been converted into housing units, and most of the transformation took place at the hands of the displaced, not in the hands of the organizations (CCCM CLUSTER, 2021). So, since these actions inevitably happen, we must intervene and respond to the needs of the displaced in an organized and more effective. With this systematic transformation, we do not encourage demographic change, but the displaced are forced to change, so we must stand by them and support them. The length of the Syrian war has caused problems for the displaced, the supporters and the cities of displacement, so the best solution is always to return people to their original homes, but now, we must strive to preserve their dignity and empower them economically in their places of displacement.

iii. Community Feedback:

- Camps are an unsafe area from a health point of view: This is due to the very high summer temperatures which the canvas tent cannot

protect the displaced from, the spread of swamps and polluted water in the camps as a result of heavy winter rains, digging the septic tanks inside the camps, and the lack of interest in desludging them periodically.

- All camp residents suffer in the winter: The suffering of the displaced in the tent varies between the destruction of the tent as a result of heavy rains, torrential rains, and strong winds, severe cold, and leaking of rainwater into the tent.
- The displaced need a safe environment: The needs and suggestions of the displaced during the interviews were based on two main elements, the first is to replace the tents with another kind of shelter that provide them protection, privacy, and stability, and the second is the repair and maintenance of infrastructure and sanitation systems to prevent diseases and epidemics.

CONCLUSION AND FUTURE WORK

CONCLUSION

According to the findings and discussion of the literature review, case studies, and the population's participation in this project, the current findings confirm the need to change implementation and intervention strategies in response to the flood disaster caused by heavy rains in northwest Syria, where the reasons for the need for this change were explained above.

Ideally, these results should be adopted and replicated in future studies and projects that contribute to improving the living conditions of the displaced in these camps. In addition, these results provide additional information about the situation in general due to the in-depth research and involve diverse stakeholders in the study.

The analysis also leads to the following conclusions, the response to the aforementioned disaster still needs further development in several areas, starting from assessing the need before designing the project and ending with respecting the real need and providing a full service to the beneficiary, most organizations work separately, which increases the operational value of all projects. Based on this, we conclude that advocacy to work for the best result is an applicable strategy in the camps of northwest Syria because it will benefit all stakeholders, by working on strategic projects sponsored by major

donors and implemented by multiple organizations and in multiple sectors and under the supervision of one body coordinates, supervises and manages work. This study adds to a growing body of studies that attempt to improve the living conditions of the displaced and provides a basis for future research.

RECOMMENDATIONS

Displaced people in NW Syria face many challenges that hinder their stability. Construction housing units alone are not sufficient to address these barriers. Although there is an urgent need to transfer displaced people from tents to residential housing units. However, a balance must be struck between this urgent need and fair and effective long-term planning as much as possible.

By identifying the various stakeholders involved in projects of this type, namely IDPs, host community, landowners, organizations active in the area, local councils, and donors, intervention strategies can be identified more effectively, and accordingly, the following recommendations can be suggested:

- Starting to deal with the disaster from the perspective of long-term strategies rather than applying an emergency response.
- Advocacy in order to convince donors of the importance of these projects and their success on the ground by publishing successful experiences and encouraging donors to visit campsites and built project sites to notice the difference in the living conditions, and constantly develop work mechanisms.
- Develop a long-term intervention strategy that includes multiple sectors (shelter, WASH, Early Recovery and Livelihoods) in which roles are distributed among multiple organizations according to their experiences, where it is implemented according to a gradual time frame in order to achieve balance and not cause shock to the displaced and host communities. This strategy will also include:
 - i. Fully equipping the infrastructure and digging the septic tanks away from the housing sites.
 - ii. Constructing residential complexes that contain residential units and complete service facilities.
 - iii. Starting with selecting the camps located in the mouths of rivers and torrents, which are considered the most vulnerable to the risk of flooding in the winter, and transferring their residents to built housing units, and closing these camps completely.

- iv. Moving to camps in which the degree of danger is hierarchically lower than most dangerous to least.
- v. Including livelihood activities in the implementation, such as establishing commercial markets in the complexes that are being built and training the displaced in vocational in which they can work, earn their livelihood, and preserve their dignity, and include Cash-for-Work (CFW) activities in construction, maintenance, and other activities to engage the experienced and talented IDPs.
- vi. The establishment and support of health points and schools will provide many job opportunities for the displaced and the host community, which will create a state of intimacy and effective communication between them.
- vii. Establishing, mosques and gardens within the complexes will also contribute to the integration of the displaced into the host community and not isolate them.
- Implement similar studies to support implementation strategies and implementing agencies and contribute to the continuation of progress towards development.

FUTURE WORK

- Livelihood strategies and activities can be studied thoroughly and in detail for inclusion in future projects, as they must be based on an assessment of the real needs of the population.
- Analytical studies can be conducted for the opinions of donors and the basis on which they place restrictions and conditions while donating to a project.
- Future research could take into account the opinions of the host community and their participation in the process.
- Apply this project in at least one camp gathering and study the effects, results, and impact, for example: targeting the entire Atma or Ma'arrat Tamasrin gathering and providing full service in it.

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